

Moderating Role of Willingness to Pay More in the Effect of Perceived Control on Psychological Ownership: A Study on Mercedes Brand Automobile Owners

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Extensive Summary

Introduction

Individuals' feelings of psychologically strong bond to tangible or intangible objects even though they do not have legal ownership of the objects was first put forward as psychological ownership in the related academic literature by Pierce, Kostova and Dirks (2001). People have possessed a variety of objects since the dawn of time and this ownership has been the cornerstone of societies. Considering the psychological dimension of ownership rather than legal ownership enables individuals to feel and perceive the target object as their own beyond legal rights related to the object which are acquired by individuals. Therefore, "the feeling of possessing the object as theirs" emerges in psychological ownership even though it may not emerge in legal ownership. With this regard, this concept was considered to be effective in individuals' behaviours and attitudes and especially studied on organization employees (Hulland, Thompson ve Smith, 2015; Jussila ve Diğ., 2015; Karahanna, Xu ve Zhang, 2015; Zhao, Chen and Wang, 2016; Alkaya ve Devrani, 2018). In time, researchers started to tackle the concept of psychological ownership in marketing literature (Hulland, Thompson and Smith, 2015; Jussila et al., 2015; Karahanna et al., 2015; Zhao et al., 2016). In this study, psychological bond developed by consumers towards Mercedes brand was investigated following personal observations of the researcher herself in a focus group study.

The main aim of this study is to tackle the effect of perceived control of consumers of Mercedes brand on psychological ownership, and to investigate the role of willingness to pay more in this effect. One of the main contributions of the study to the literature is investigating the effect of perceived control on psychological ownership developed towards the brand by consumers who have legal ownership as well as investigating moderating role of willingness to pay more in this effect. The study is composed of three parts. In the first part, concepts related to the study were defined. In the second part, analyses of the hypotheses were conducted to determine the effect of perceived control on psychological ownership and the mediating role of willingness to

pay more in this effect, and then the findings were presented. In the last part, results of the study were discussed and recommendations for future studies were provided.

Design and Method

This study aimed to investigate the effect of customers' perceived control over Mercedes brand on psychological ownership which refers to feeling as if the brand belonged to them, and to analyse moderating role of customers' willingness to pay more in this effect. Data gathered through a survey were tested with a model developed on the basis of theoretical background to reveal whether the model was supported with the data. In this section, sampling procedure, data collection method, survey form development, scales used in the study and data analysis method were described in detail, respectively.

In the first part of the survey which was composed of three parts, respondents were asked whether they used Mercedes brand automobile, if not, the survey was finalized for them. In the second part, items were presented in order to gather information about respondents' Mercedes brand automobile preferences and their socio-demographic characteristics. The last part of the survey included items related to variables of the study namely perceived control, willingness to pay more, psychological ownership which measured the effect of the variables on Mercedes brand automobile owners. Validity and reliability of items presented in the scales were already tested and verified in previous studies, and these scales were adapted after a thorough review of the related literature. Validity of the scales were tested through translation-back translation procedure, expert panel and a pilot study, and scale items were presented to respondents in a five point Likert scale [(1) Strongly disagree...(5) Strongly agree]. Perceived control scale composed of 3 items and a single factor which was developed by Agarwal and Karahanna (2000, p. 693) to measure individuals' control over targeted objects was used in the study. Willingness to pay more scale which was developed by Zhao, Chen and Wang (2016, p. 970) was utilized to measure the highest level of price which customers are willing to pay for a good or service. This scale also consisted of 3 items and a single dimension. Psychological ownership scale composed of 4 items and a single factor which was developed by de Lee and Chen (2011, p. 287) was used to measure individual ownership and belonging for targeted objects even though there is no legal ownership.

The sample of the study was composed of Mercedes brand automobile owners in Turkey. Two separate focus group studies were conducted in order to decide which brand of automobile would be chosen within the scope of the study. By using judgmental and snowball sampling methods, each of invited participants to the focus group was owner of different automobile brands and both groups included 10 different participants. Automobile owners were reached thanks to *2017 January-December Retail Sales Market Report of Automotive Distributors' Association* and individuals who would be included in the groups were determined according to total sale numbers of domestic and exported automobile brands. In the first group, interviews were carried out with owners of top ten automobile brands (Renault, Volkswagen, Fiat, Hyundai, Opel, Dacia, Toyota, Ford, Nissan, and Peugeot), in the second focus group study, interviews were carried out with owners of next top ten automobile brands (Honda, Mercedes, Skoda, Audi, BMW, Seat, Citroen, Kia, Volvo, Suzuki). Following the interviews, collected data were analysed with the support of two competent academicians in the field of marketing. As a result of the analysis of two focus group studies, Mercedes was

chosen as the brand to be used in this study. As a result of cross and multidimensional analysis of participants' tendency in perception, opinions, attitudes and behaviours, it was found that among owners of all other automobile brands, Mercedes owners developed by far larger sense of belonging to the brand and showed a high degree of ownership compared to other automobile owners. It was revealed that the brand Mercedes meant more than just an automobile brand for Mercedes owners compared to others, and Mercedes owners considered it a passion to drive their automobiles. It was also found that most of the time Mercedes owners did not like other automobiles and would not prefer to have another brand of car other than Mercedes in the future. Such psychological ownership factors confirmed the reason why the brand Mercedes was chosen for this study. Therefore, it was believed that in a study on psychological ownership, it would be appropriate to have Mercedes owners as the sample of the study. Within this scope, Mercedes brand automobile owners were included in the study as respondents. Data were collected via an online survey between the dates of 29.01.2018 and 16.05.2018. After the elimination of data which had missing and incorrect data points, a total of 402 final surveys were used to test the hypotheses of the study.

Findings

SPSS 24.0 and AMOS 23.0 software programmes were used in the analysis and evaluation of the data. Exploratory Factor Analysis (EFA) was carried out in order to test structural validity and unidirectionality of the scales. The fact that Barlett's Test of Sphericity was significant for each variable ($p < 0.001$) showed that the study was appropriate for factor analysis. It was found that KMO (Kaiser-Meyer-Olkin) values of perceived control, willingness to pay more and psychological ownership variables were 0.668, 0.735 and 0.824, respectively. This shows that this sample size meets the necessary condition for factor analysis (KMO values equal or above 0.60) (Gürbüz and Şahin, 2016, p. 311). Abovementioned variables had Cronbach's Alpha coefficient values of 0.870, 0.866 and 0.905, respectively, showing that each scale was highly reliable (Kayış, 2006, p. 405).

After Exploratory Factor Analysis, with the aim of testing measurement model, Confirmatory Factor Analysis (CFA) was applied in order to show that collected data confirm with the scales. Three main variables, namely "perceived control, willingness to pay more and psychological ownership" each of which included three items and a single dimension were used in the study. Considering the variables within the scope of CFA, factorial structure and composite reliability of three dimensions (*perceived control, willingness to pay more and psychological ownership*) constituting the measurement model were tested and collected data showed that scales complied with theoretical background. Following the confirmation of the measurement model, correlation analysis was conducted to show the relation between the scales thus the hypotheses of the study were tested.

First of all, Simple Regression Analysis was carried out to test the hypotheses of the study, and with the regression model, the effect of perceived control (PC) over brand of Mercedes on psychological ownership (PO) referring to Mercedes owners' strong commitment to the brand was investigated (H1). The result of simple regression analysis showed that there was a positive and significant relation between perceived control and psychological ownership ($\beta = 0.585$, $p < 0.001$). It was revealed that perceived control explained 34% of the variance of psychological ownership developed by Mercedes customers towards the brand. Based on this finding, H1 hypothesis was

supported. Therefore, it was concluded that customers' effect/control on Mercedes brand had a positive effect on showing ownership of the brand.

In order to test moderating effect, perceived control was added to Hierarchical Regression Analysis as an independent variable, psychological ownership was added as a dependent variable, and willingness to pay more was included to the model as a moderating variable. In the first model, results of Hierarchical Regression Analysis of moderating role of willingness to pay more showed that variables of perceived control and willingness to pay more had significant contributions to the regression model [$F(2,399)=123.880$, $p<0.001$]. Adjusted R^2 value was 0.380. This result showed that variables of Mercedes owners' control over the brand and willingness to pay more explained 38% of variance in feeling of ownership developed by Mercedes brand automobile owners. In the second model, interaction effect was included in the regression and this explained additional 2% of variance and this change in R^2 was found to be significant [$F(3,398)=12.190$, $p<0.001$]. When all variables were included in the regression model, it was found that perceived control ($B=0.526$, $p<0.001$) and willingness to pay more ($B=0.260$, $p<0.001$) had significant effects on psychological ownership. Furthermore, the results revealed that perceived control and willingness to pay more had significant interaction effect on psychological ownership ($B=0.129$, $p<0.001$). In line with this finding, H2 hypothesis of the study was supported. In other words, it is understood that the relation between perceived control and psychological ownership is moderated by Mercedes brand automobile owners' willingness to pay more. It is seen that the effect of perceived control on psychological ownership increases when the willingness to pay more is high, and if this willingness is low, this relation is not affected much. As a whole, it can be stated that as the perceived control of customers who are more willing to pay more increases, their psychological ownership level also increases. It was found that tolerance value was above 0.2 and VIF value was below 10 (Gürbüz and Şahin, 2016, p. 273). In this case, it can be said that there is no multicollinearity problem.

Conclusion and Discussion

This study is believed to greatly contribute to the literature by tackling psychological ownership within the framework of consumer behaviour. An empirical study was conducted on Mercedes brand automobile owners in Turkey and the study investigated the effect of perceived control on psychological ownership of Mercedes owners as well as the moderating role of willingness to pay more in this effect. Accordingly, effects between the variables were analysed with hierarchical regression analysis and a number of findings have been found regarding the relation between perceived control and psychological ownership.

Based on analysis results, it was concluded that there was a significant relation between perceived control and psychological ownership and perceived control had a positive effect on increase in psychological ownership. It is seen that this finding is consistent with similar studies in the literature (Pierce, Kostova and Dirks (2001, 2003); Zhao, Chen and Wang, 2016, p. 967; Lee and Chen, 2011, p. 292; Uçar, 2016, p. 52). It was expected that perceived control would have positive and high level effect on psychological ownership to be developed by automobile owners towards Mercedes brand because perceived control primarily relies on having control over the object. Willingness to pay more is also considered to be a variable which affects consumer behaviour. Therefore, this study investigated moderating role of willingness to pay more

in the effect of perceived control on psychological ownership. The findings showed that willingness to pay more had a moderating role in the effect of perceived control on psychological ownership. It has been expected that there would be stronger relation between perceived control and psychological ownership in individuals who were more willing to pay more compared to those who were less willing to pay more, and analysis results revealed that the findings were in line with this expectation. Therefore, it has been concluded that the relation between perceived control and psychological ownership was stronger in individuals who were more willing to pay more to have a Mercedes brand automobile.