

Modification and Investment Intention in the Consumer-Possession Relationship

James D. Doyle, james.doyle@uncp.edu

Abstract

The present-day automobile is at once a source of physical transportation, of course, but also an extension of self, a potential platform for self-expression and image enhancement, a source of social approval as well as psychological and physiological stimulation, and, perhaps, an object of beauty. This study examines motivations and antecedents of various vehicle-directed consumer behaviors, including modification and the intention of consumers to invest in their relationship with their vehicle. In this study, vehicle modification refers to the voluntary actions taken by a user or owner of a vehicle to differentiate the functional or aesthetic characteristics or performance of a vehicle from other vehicles of the same make, model, year, option package, usage level, and mechanical and cosmetic condition. Investment intention, predicted in this research to derive from the perceived status of the consumer-possession relationship (i.e., how the consumer perceives the reliability and aesthetic appeal of the vehicle and the extent to which the vehicle receives the approval of important others), refers to the willingness of consumers to treat their vehicle as a special possession and invest in the longevity of the possession and consumption relationship.

Myriad options are available to consumers interested in vehicle modification. In four-wheeled passenger vehicles, the vehicle type of main interest to this study, modifications can be made to the exterior of the vehicle, interior of the vehicle (i.e., cabin area), or to the internal components of the vehicle that contribute to its structure and operation. Many modifications can be plainly seen when looking at the exterior of a vehicle (e.g., a custom paint job, bumper sticker, after-market rims, spoiler), but others are hidden from exterior view or just cannot be experienced except by drivers and others who gain admission into the cabin space of the vehicle (e.g., air fresheners, mementos hanging from the rearview mirror, after-market seat covers, after-market stereo system). Others still are further hidden, embedded under the hood, in the fuel system, or in some other non-visible area of the vehicle (e.g., computer system, air filtration system). The modifications that consumers make to their vehicles have varying levels of permanence. Whereas some modifications represent permanent structural change to the vehicle (e.g., spoiler), others are temporary in that they may be consumed (e.g., air freshener), removed, or transferred to another vehicle because, instead of being built into or affixed on the vehicle, they may only be placed in the vehicle (e.g., removable seat covers), hung in the vehicle (e.g., rearview mirror accoutrement), or stuck on a part of the

vehicle (e.g., foam or rubber caricature, like Mickey Mouse, perched atop the external antenna). Some modifications may not constitute permanent structural change per se, but for all intents and purposes still represent permanent change because, once they are made, it is not convenient to restore the vehicle to its pre-modification state, (e.g., bumper stickers are affixed by adhesive and the process of removing them can cause damage to the vehicle by harming the paint and, over time, potentially allowing rust to form). Although some vehicle modifications can bring economic benefits (e.g., better fuel efficiency), others can actually make a vehicle difficult to sell on the used market (e.g., a perspective espoused in a bumper sticker may not be universally held) and, in some cases, even have legal consequences (e.g., excessive window tinting is a Class 3 misdemeanor offense in the State of North Carolina, n.d.). Still, there must even be value in the vehicle modifications that seem beyond economic rationality.

This research examines relationships between vehicle modifications and perceptions of consumers of the reliability, aesthetic appeal, and social approval their vehicle receives as well as the intentions of consumers to invest in their relationship with their vehicles. Hypotheses predict that vehicle modification behaviors are positive and significant predictors of perceived vehicle reliability (H1), aesthetic appeal (H2), and social approval (H3); that perceived vehicle reliability and aesthetic appeal are positive and significant predictors of social approval (H4 and H5, respectively); that perceived vehicle reliability, aesthetic appeal, and social approval are positive and significant predictors of the intentions of consumers to invest in their relationship with their vehicles (H6, H7, and H8, respectively).

To test the hypotheses, a telephone survey of 146 consumers located in the Eastern United States was conducted. To participate in the study, it was necessary for consumers to be over the age of 18 and to have access to a four-wheeled passenger vehicle for their personal use. To focus respondents on a specific consumer-possession relationship, respondents were instructed to indicate their agreement with items assessed on seven-point Likert scales on which high values indicate high levels of agreement with respect to a specific vehicle instead of the vehicles they have access to generally. Vehicle modification behaviors were assessed as nominal variables; for a wide range of modifications (e.g., applying a bumper sticker, installing a “spoiler,” etc.), respondents were requested to indicate if they had or had not made the modifications to the particular vehicle. In order to minimize the risk of bias in the vehicle modification data, respondents were guaranteed anonymity by the researcher. Investment intention, vehicle reliability, aesthetic appeal, and social approval were all assessed using multi-item scales which have been employed in previous research although it was necessary to amend certain items for the research context (e.g., Lastovicka & Sirianni 2011). Internal consistency was assessed for each variable, and no Cronbach alpha estimate was below 0.85 (Hair et al. 2005). Descriptive statistics indicate that the relatively popular modifications that consumers make to their vehicles include the

installation of an air freshener (41.8% of all vehicles represented in the dataset), application of a sticker, decal, or window cling (39.3%), and the installation of rubber floor mats (37.7%). Relatively uncommon modifications, on the other hand, include raising or lowering the suspension (2.5%), modifying the engine computer (1.6%), and installing a spoiler (0.8%). On positively worded seven-point scales, vehicle reliability, aesthetic appeal, social approval, and investment intention were moderate-to-high (M s were 6.05, 3.70, 2.67, and 3.93, respectively).

Correlation coefficients reveal that vehicle reliability is unrelated to all types of vehicle modifications except modifications involving consumable internal components (e.g., air filter; $r = -.16$, $p < .05$). Whereas consumable internal components may tend to be remedial in nature, it would appear that modifications generally are made in order to achieve a non-functional result. In contrast, aesthetic appeal is positively correlated with exterior fixed modifications (e.g., stickers, spoilers, bug deflectors, etc.; $r = .25$, $p < .01$) and interior fixed modifications (e.g., upgraded seating material, sound system improvements, etc.; $r = .22$, $p < .01$). However, aesthetic appeal is negatively correlated with consumable internal components ($r = -.31$, $p < .001$). Social approval, assessed as the extent to which respondents perceive their vehicle to say good things about them and to help them gain respect from others, was observed to positively relate to both exterior fixed modifications ($r = .27$, $p < .001$) and consumable internal components (e.g., air freshener, seat covers, etc.; $r = .28$, $p < .001$). As with reliability and aesthetic appeal, social approval was also negatively related to consumable internal components ($r = -.17$, $p < .05$). Relationship investment intention was observed to positively relate to fixed exterior modifications ($r = .29$, $p < .001$), fixed interior cabin modifications ($r = .30$, $p < .001$), and fixed internal components modifications ($r = .19$, $p < .05$). Similar to other perceptions, relationship investment intention was observed to negatively relate to consumable internal components ($r = -.17$, $p < .05$).

Confirmatory factor analysis revealed satisfactory model fit (CFI = .92; RMSEA = .08), although X^2 was significant ($X^2 = 276.28$, $p < .001$) (Hair et al. 2005). Structural equation modeling was employed to test Hypotheses 1-8; R^2 for social approval was .25 and for relationship investment intention was .22. Overall vehicle modification was calculated by summing the modifications to the vehicle which the respondent indicated making. Although H1 and H2 were not supported by the analysis of the structural model (H1: $\beta = -.01$, $t = -.09$, $p > .05$; H2: $\beta = .13$, $t = 1.45$, $p > .05$), it was observed that vehicle modifications are significant and positive predictors of the extent to which a consumer obtains respect from others through his or her vehicle (H3: $\beta = .22$, $t = 2.60$, $p < .01$). Contrary to H4, it was not observed that the perceived reliability of a vehicle significantly predicts the level of social approval the consumer receives for the vehicle (H4: $\beta = .12$, $t = 1.34$, $p > .05$). Consistent with H5, the perceived aesthetic appeal of a vehicle significantly predicts the social approval the consumer receives for the vehicle (H5: $\beta = .40$, $t = 3.92$, $p < .001$), suggesting the relevance of emotional value to vehicles (Hoyer & Stokburger

2012). Contrary to H6, the perceived reliability of a vehicle does not predict the extent to which a consumer is willing to make an investment in the consumer-possession relationship (H6: $\beta = .10$, $t = 1.10$, $p > .05$). Consistent with H7 and H8, relationship investment intention was observed to significantly relate to both aesthetic appeal (H7: $\beta = .32$, $t = 2.90$, $p < .01$) and social approval (H8: $\beta = .21$, $t = 1.99$, $p < .05$). Taken collectively, it is apparent that the consumer-possession relationship, at least in the context studied here, involves than mere functional performance. Indeed, marketers must recognize that the consumer-possession relationship is multi-faceted and derives significantly from the extent to which the possession is visually attractively and a source of social approval.

References

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Keywords: automobile modification, relationship investment intention, reliability, aesthetic appeal, social approval.

Relevance to Marketing Educators, Researchers and Practitioners:

Marketers must recognize that the consumer-possession relationship is multi-faceted and derives significantly from the extent to which the possession is visually attractively and a source of social approval.

Author Information: James D. Doyle is Assistant Professor of Marketing in the School of Business at The University of North Carolina at Pembroke.

TRACK: Consumer Behavior / Marketing Research