

# Modification and investment intention in the consumer-possession relationship: A love story

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# Material possession “love”

- “Deeply charged emotional bonds between consumers and their possessions” (Lastovicka and Sirianni, 2011, p. 323) developed through a process of psychological appropriation or attachment
  - Different from “brand love” (Batra, Ahuvia, and Bagozzi, 2012)
- Veryzer (1999, p. 498) remarked that “... objects are held to generate feelings as they are experienced ...”
  - Love, however, is more than a feeling
    - Passion (Lastovicka and Sirianni, 2011)
      - Relentless drive; hot emotion
    - Intimacy (Lastovicka and Sirianni, 2011)
      - Closeness and connectedness; physical and intellectual knowledge
    - Commitment (Lastovicka and Sirianni, 2011)
      - Decision to be in an enduring relationship; devotion to the beloved possession

# Quality (or, “relationship status”)

- Instrumental quality
  - Reliability is “the probability that a product or system will perform its intended function under encountered operating conditions, for a specified period of time which measures the quality level of the product or system over a period of time” (Boman, 2005, p. 567).
- Aesthetic quality/“sex appeal”
  - Derived from the Greek term “aisthetikos;” sense perceptions
    - Even though “experts” can claim to define “good” taste, it is largely subjective (Hoyer and Stokburger-Sauer, 2012)
      - “For a product to be successful, its sensory characteristics must strike a responsive chord in target consumers” (Bloch, 1995, p. 18).
- Social quality
  - Appraisal or evaluative perception of reference group others (e.g., friends, etc.) and the resulting status effects
- Quality, or “relationship status,” and relationship investment intentions
  - “Nurturing” behaviors by “love-smitten consumers” (Lastovicka and Sirianni, 2011, p. 324)

# Working definition

Vehicle modification refers to the actions taken by a user or owner of a vehicle to differentiate the structural, 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.

Separate from:

- Features installed by vehicle manufacturer
- Modifications made by a prior owner
- Repairs made to restore vehicle to proper operating condition (e.g., brake pads, etc.)



# Modifications – Framework and examples

Placement	Permanence	
	Fixed / durable	Removable / consumable
Exterior	<p><u>Examples</u>      <b>“A”</b></p> <p>Sticker or decal; side window deflectors; spoiler; bug deflector; window tinting; images or letters painted on the vehicle; suspension system; custom paint job</p>	<p><u>Examples</u>      <b>“B”</b></p> <p>Antenna “topper;” personalized license plate; holiday ornaments (e.g., reindeer antlers) or similar items (e.g., eyelashes)</p>
<u>Interior</u> Cabin space	<p><u>Examples</u>      <b>“C”</b></p> <p>Bluetooth or similar system; upgrade to leather, etc., seats; entertainment system; radio system</p>	<p><u>Examples</u>      <b>“D”</b></p> <p>Air freshener; rubber floor mats; rearview mirror ornament; seat covers; child safety seats; portable DVD player</p>
<u>Interior</u> Internal components	<p><u>Examples</u>      <b>“E”</b></p> <p>Engine and engine computer upgrades; fuel system upgrades; exhaust system</p>	<p><u>Examples</u>      <b>“F”</b></p> <p>Brake pads; air filter</p>

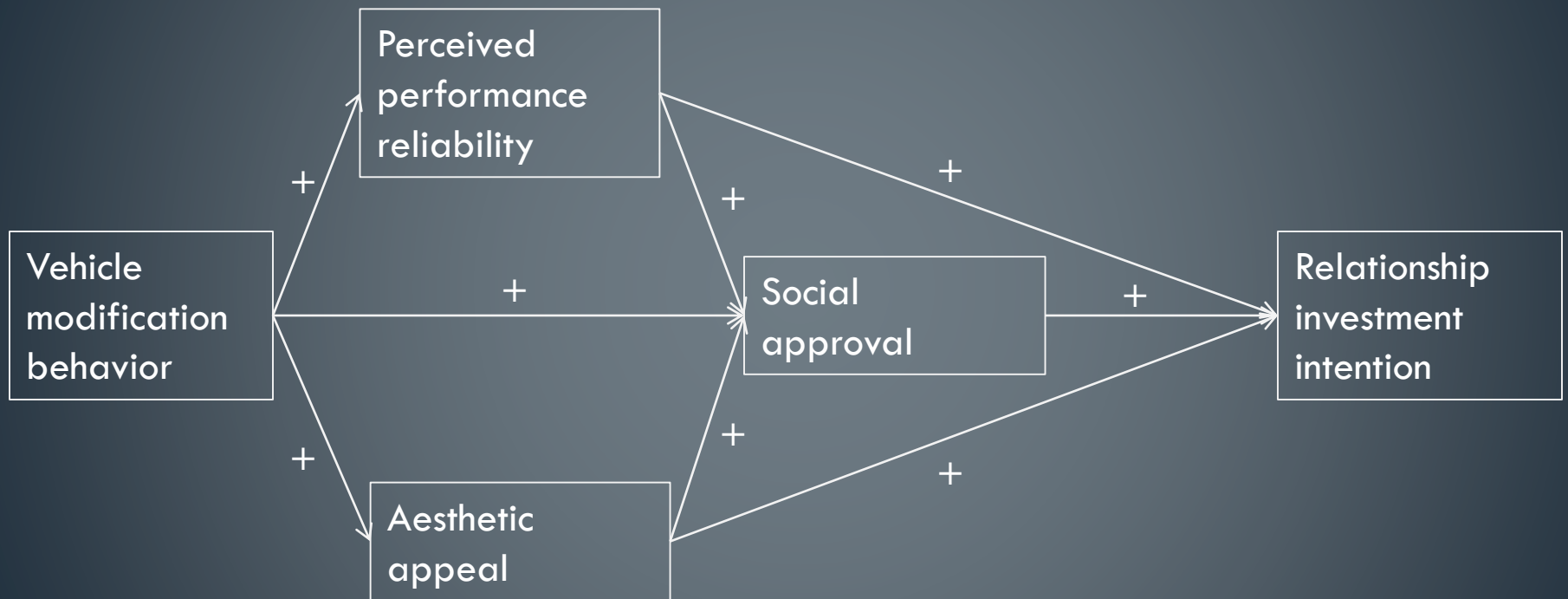
# Modifications – Multiple motivations

- Functionality
  - “Enhance performance.”
- Aesthetics
  - “... done for looks and rarely for performance.”
- Psychological benefits
  - “... to better suit the personality of the owner.”
- Social consequences: The good and the bad
  - “... motivations for permanent modifications to the exterior is usually rooted in status.”
  - “... I know of people who have placed rims on their cars to make them appear nicer than they are.”
  - To a considerable extent, vehicle modifications that cannot be seen on the outside of the vehicle can still impact people outside the vehicle.
    - Stereo system upgrades (e.g., speakers, “amps,” and “sub woofers”)
      - Communicate identity (“To make a statement to others about whom you are.”)
      - Signal or enhance social standing (“It could also be seen as a status symbol within certain social groups.”)
      - Attract attention (“I think people are motivated to do this to look cool and show off their vehicle.”)

# Vehicle modification, consumer-possession relationship status, and investment intention

- Research questions
  - Can relationship investment intention be successfully predicted by the status of the consumer-possession relationship?
    - Consumer-possession relationship status: Performance reliability, aesthetic appeal, and social approval
  - Can the status of the consumer-possession relationship be successfully predicted by the extent to which the driver has modified the vehicle?
  - Can relationship investment intention be successfully predicted by the extent to which the driver has modified the vehicle?

# Overall research model





# Research method

- Unlike Lastovicka and Sirianni (2011), sampling was not specifically designed to seek out automobile enthusiasts
  - Instead, survey of consumers above the age of 18 years and who self-reported as having access to a four-wheeled passenger vehicle for personal use
    - Telephone survey
      - Shout out to Eric Hanby
    - $N = 146$ 
      - Male consumers (62.5%)
      - 50.7% between ages of 25 and 44
      - Vehicle ownership status
        - Outright ownership (62.3%), versus financed, leasing, etc.
    - Except for categorical variables (e.g., sex, brand, etc.), items were assessed on seven-point Likert scales
      - Higher values indicate stronger agreement

# Vehicle descriptive statistics - Modifications

- Relatively common vehicle modifications
  - Installation of air freshener (41.8%)
  - Application of sticker, decal, window cling (39.3%)
  - Installation of rubber floor mats (37.7%)
- Relatively uncommon vehicle modifications
  - Raised or lowered suspension (2.5%)
  - Modification to engine computer (1.6%)
  - Installation of spoiler (.8%)
- Although respondent anonymity was guaranteed, bias may remain
  - E.g., N.C. *Motor Vehicle Act*; fickleness of insurance companies

# Measures

- Relationship investment intention ( $M = 3.93$ ,  $S.D. = 1.52$ ; Cronbach alpha = .86)
  - Comparable to nurturing measures (Lastovicka and Sirianni, 2011)
    - Willingness to:
      - Pay for a completely optional repair that would extend the life of the vehicle ( $M = 4.01$ ,  $S.D. = 1.84$ )
      - Use an optional product that would make your vehicle last longer ( $M = 4.19$ ,  $S.D. = 1.76$ )
      - Use fluids that would make it easier for your vehicle to operate, even if the fluids were more expensive than ordinary ones ( $M = 4.17$ ,  $S.D. = 1.84$ )
      - Alter your regular travel patterns to reduce stress on your vehicle (e.g., avoiding potholes and stop-and-go traffic, etc.), even if doing so extended your travelling time ( $M = 3.37$ ,  $S.D. = 1.81$ )
- Perceived performance reliability ( $M = 6.05$ ,  $S.D. = 1.18$ ; Cronbach alpha = .93)
  - Rely to always work properly; depend on to get where you need; count on it to never break down; trust to start the first time
- Aesthetic appeal ( $M = 3.70$ ,  $S.D. = 1.63$ ; Cronbach alpha = .91)
  - Vehicle is attractive; vehicle has seductive look; nice curves and lines; really appealing look; visually appealing
- Social approval ( $M = 2.67$ ,  $S.D. = 1.32$ ; Cronbach alpha = .86)
  - You are known for your vehicle; people respect you for your vehicle; vehicle says good things about you; people look up to you for your vehicle; friends like your vehicle

# Vehicle modifications and model constructs

Vehicle modifications	Range	Skew.	Perceived performance reliability	Aesthetic appeal	Social approval	Relationship investment intention
Types			Pearson Correlation Coefficients ( <i>r</i> )			
A	7	2.62	.05	.25**	.27***	.29***
B	2	2.35	-.11	.04	.13	.11
C	3	2.18	.01	.22**	.14	.30***
D	4	.79	-.11	.01	.28***	.02
E	5	4.86	.05	.11	.03	.19*
F	1	1.02	-.16*	-.31***	-.17*	-.17*
All mod's.	20	2.12	-.03	.12	.27***	.22**

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

All Skewness estimates are sig.

# Analytical approach

- Exploratory factor analysis (Principal components; “Varimax” rotation)
  - Two items removed due to cross loading
  - Results
    - Kaiser-Meyer-Olkin M.S.A. = .84
    - Eigenvalues > 1.00
    - Total variance explained = 78.9%
- Then, confirmatory factor analysis
  - $\chi^2 = 276.28, p < .001$
  - CFI = .92
  - RMSEA = .08
- And after that, analysis of the structural model

**Rotated Component Matrix<sup>a</sup>**

	Component		
	1	2	3
Reliability1	.934		
Reliability2	.946		
Reliability3	.862		
Reliability4	.882		
SocQual1			.730
SocQual2			.921
SocQual3			.773
SocQual4			.890
Aesth1		.737	
Aesth3		.836	
Aesth4		.900	
Aesth5		.885	

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.



# Structural model results

Independent variables	Dependent variables							
	Reliability		Aesthetic appeal		Social approval		Relationship investment intention	
	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$	$\beta$	$t$
Vehicle modifications	-.01	-.09	.13	1.45	.22	2.60**	-	-
Reliability					.12	1.34	.10	1.10
Aesthetic appeal					.40	3.92***	.32	2.90**
Social approval							.21	1.99*
$R^2$	.00		.02		.25		.22	

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

# Limitations and future research

- Sample size
  - Additional data collection
- Intervening effect of material possession love
  - Passion ( $M = 2.08$ ,  $S.D. = 1.13$ ; Skewness = 1.09)
  - Intimacy ( $M = 3.67$ ,  $S.D. = 1.37$ ; Skewness = .46)
  - Commitment ( $M = 2.77$ ,  $S.D. = 1.44$ ; Skewness = .58)
- Material possession love versus brand love
- Trust intentions, disposal intentions, and expected selling price (against [Kelley Blue Book value](#))

**Thank you!**