

Optional and Mandatory Surcharges and Consumer Choice

Jim Blair and Stephen Atlas PhD

University of Rhode Island

| blairj4@my.uri.edu | satlas@uri.edu |

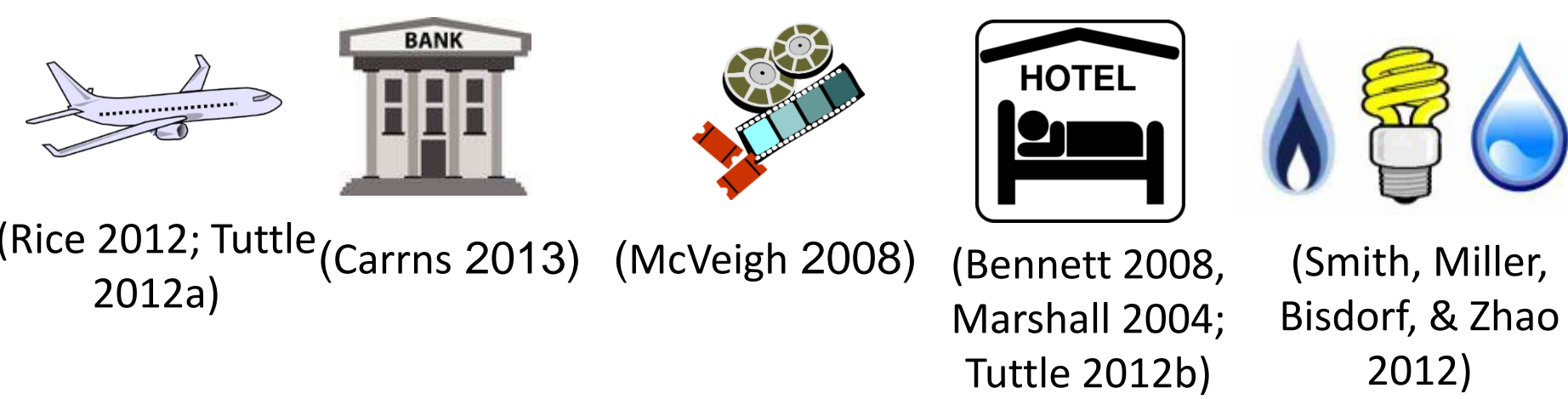
Abstract

This research examines how consumers respond differently to surcharges that are optional or mandatory. We find in a controlled experiment that consumers are willing to pay more and have higher satisfaction levels when surcharges are framed as optional rather than mandatory. We find violations of choice dominance indicating that consumers derive value from optionality in surcharges. We further find that individual reactance has a moderating effect on the relationship. In study two, the researchers plan to use a conjoint analysis to determine how much consumers value optionality.

Background

Partitioned Pricing

Total price of a product divided into a base price and one or more mandatory surcharges (Morwitz, Greenleaf, Shalev, & Johnson 2011). Surcharges are common in many industries.



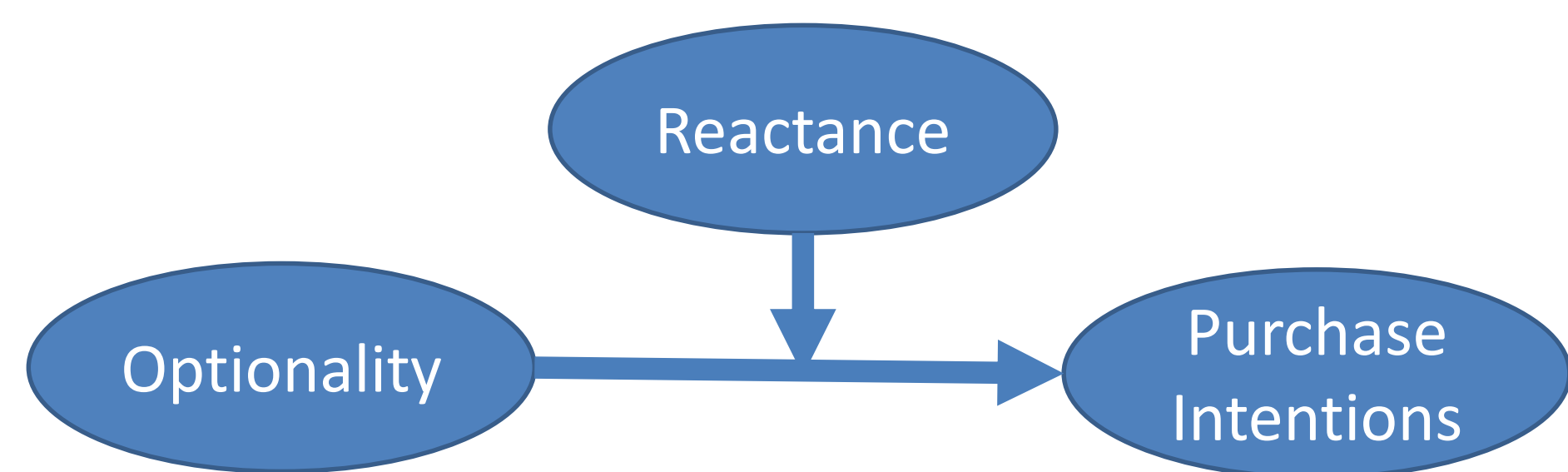
Reactance

A motivational state when freedom is threatened (Brehm 1966; Brehm 1981). According to psychological reactance theory, people assume a sense of freedom over their behaviors and treat any threats to their freedom with reactance (motivational state). This can result in avoidance behaviors (Tang, Zhang, and Wu 2015) and includes four parameters: (1) expectation of freedom, (2) importance of freedom threatened, (3) strength of the threat, and (4) implications for other freedoms (Wortman and Brehm 1975).

Choice

Participants disliked making difficult decisions and also resented relinquishing their option to choose (Botti, Orfali, Iyengar 2009). There can be costs and benefits when giving consumers a choice (Botti and Iyengar 2004).

Model



Hypotheses

H1: Participants will have a higher purchase intentions for optional surcharges than mandatory surcharges.

H2: Reactance moderates the relationship between both optionality and purchase likelihood and optionality and satisfaction.

Study 1: Benefits of Optionality & The Moderating Role of Reactance

Experimental Design: Between Subject 2 (Surcharge: Mandatory, Optional) x 2 (Price: Low, High)
Measured Variables: Purchase Intentions and Reactance

Written Scenario

Imagine you are on an out-of-state family trip and are thinking about renting a car to drive around the city for the week. You would pay out-of-pocket, and the price of the vehicle for the week rental is **\$200/\$220**.

You also see there is a **mandatory/optional** surcharge of \$20 for GPS navigation, **which you must pay if you rent the car/which you can accept or decline if you rent the car**.

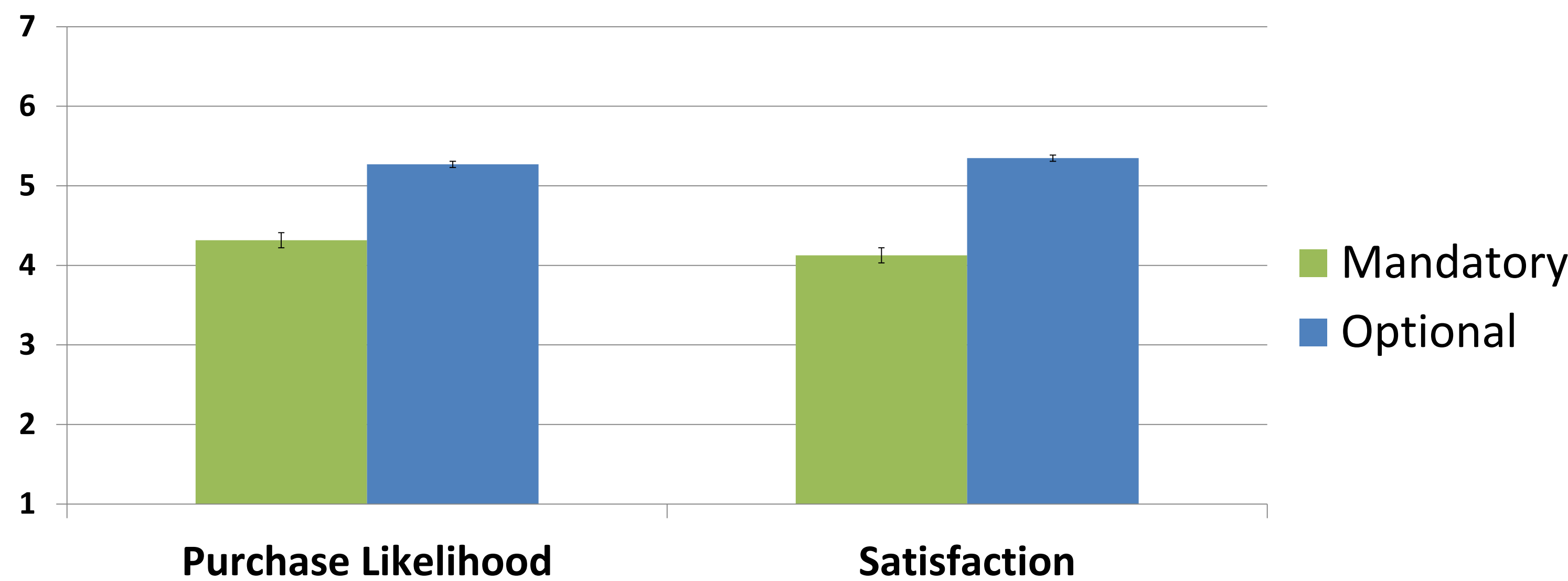
Scenarios of Interest

	Mandatory Surcharge (Rental Car Company A)	Optional Surcharge (Rental Car Company B)
Car Rental	200	220
GPS Mandatory Surcharge	20	20
Total	220	240

Stronger Effect Solves Violation of Dominance

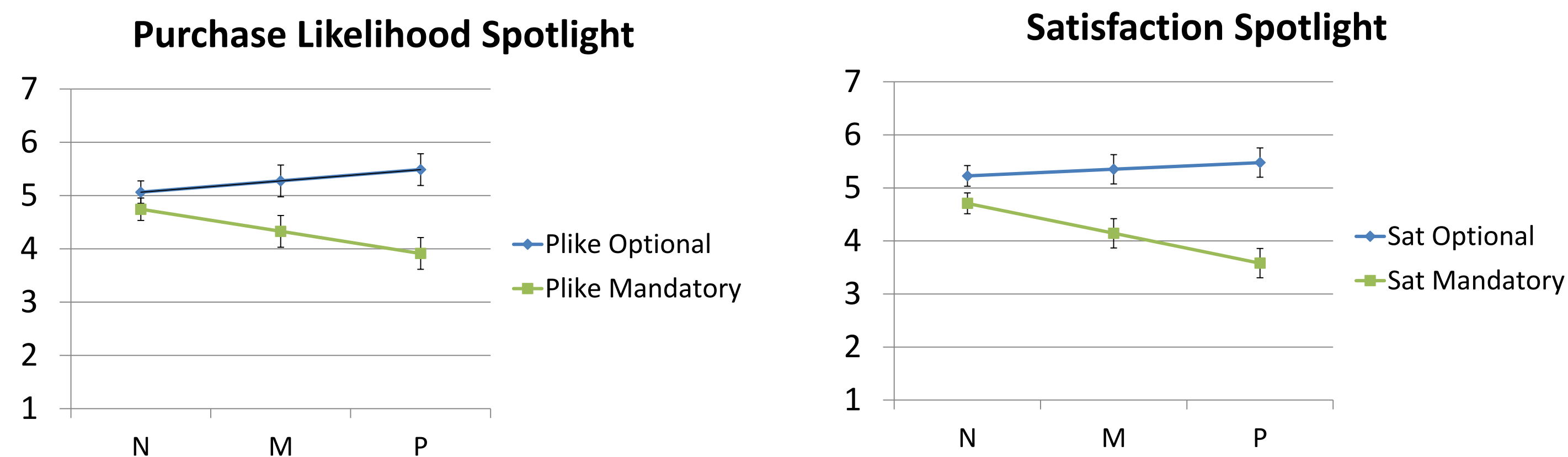
	Mandatory Surcharge	Optional Surcharge	
		Opt-In	Opt-Out
Car Rental	✓	✓	✓
GPS	✓	✓	
Total Price	\$220	\$240	\$220

Consumers have Higher Purchase Intentions when Presented an Optional Surcharge



Significant Result: Participants receiving the optional surcharge frame had significantly higher purchase intentions than consumers receiving the mandatory surcharge frame.

Reactance as a Moderator



Study 2: Conjoint Analysis: How Much Do Consumers Value Choice?

	Cable Package #1	Cable Package #2	Cable Package #3
Channel Variety	325 Channels Types of channels included: FX, OVI, fyi, BBC AMERICA, SUNDBANCE TV	325 Channels Types of channels included: FX, OVI, fyi, BBC AMERICA, SUNDBANCE TV	215 Channels Types of channels included: TNT, ESPN, Syfy
Signal Quality	99.5% Uptime	95% Uptime	95% Uptime
Monthly Price	\$85	\$60	\$85
Installation Surcharge	Optional \$50 Surcharge for Professional Installation	Mandatory \$50 Surcharge for Professional Installation	Optional \$50 Surcharge for Professional Installation

Dependent Variable: Purchase Likelihood (1: Very Likely, 7: Very Unlikely)

Conjoint Equation

$$\text{Purchase Likelihood} = 3.12 - .68*(325 \text{ Channels}) - .66*(435 \text{ Channels}) - .39*(95\% \text{ Signal Quality}) - 1.02*(99.5\% \text{ Signal Quality}) + 1.15*($60 \text{ Per Month}) + 1.96*($85 \text{ Per Month}) + 3.24*($110 \text{ Per Month}) + .08*(\text{Optional Surcharge})$$

Optionality Matters to Consumers Who Opt-In for Optional Surcharges

Optionality: $t(198, 1) = 3.03, p < 0.01$

Contribution

Optionality Matters

Consumers are willing to pay more to receive the same resource or pay the same amount for less of a resource and optional surcharges increase purchase intentions.

Theoretical Implications

Add to the pricing, choice, and reactance literature by showing reactance moderates the relationship between optionality and purchase intentions.

New Pricing Strategy for Managers

Managers have a new way to present prices to consumers which can increase purchase intentions with little to no cost to the firm.

References

Bennett, A. (2008). "How to Avoid Hidden Hotel Charges," *CNN*, (May 23), (accessed September 27, 2013), [available at <http://www.cnn.com/2008/TRAVEL/traveltips/05/22/hotel.charges/index.html>].

Botti, S., Orfali, K., & Iyengar, S. S. (2009). Tragic choices: Autonomy and emotional responses to medical decisions. *Journal of Consumer Research*, 36(3), 337-352.

Brehm, J. W. (1966). A theory of psychological reactance.

Brehm, S. S. (1981). Psychological reactance and the attractiveness of unobtainable objects: Sex differences in children's responses to an elimination of freedom. *Sex Roles*, 7(9), 937-949.

Carrns, A. (2013). "A.T.M. Surcharge Fees on the Rise," *The New York Times*, (April 23) (accessed September 27, 2013), [available at http://bucks.blogs.nytimes.com/2013/04/23/a-t-m-surcharge-fees-on-the-rise/?_r=0].

McVeigh, K. (2008). "Hidden Charges Add 30% to Cost of Seat for Music and Theatre Fans," *The Guardian*, (accessed September 27, 2013), [available at <http://www.theguardian.com/stage/2008/may/29/culture.theatre>].

Marshall, A. (2004). "Technology Fees, Hidden Surcharges Cost Hotels Goodwill," *Hotel and Motel Management*, 219 (12), 8.

Morwitz, V., Greenleaf, E., Shalev, E., & Johnson, E. J. (2011). *The price does not include additional taxes, fees, and surcharges: A review of research on partitioned pricing*. Rochester: Social Science Research Network.

Rice, K. (2012). "Airlines Collect \$22.6 Billion in Ancillary Revenue in 2011," *Travel Weekly*, (July 23), (accessed September 27, 2013), [available at [http://www.travelweekly.com/Travel-News/Airline-News/Airlines-collect-\\$22-6-billion-in-ancillary-revenue-in-2011/](http://www.travelweekly.com/Travel-News/Airline-News/Airlines-collect-$22-6-billion-in-ancillary-revenue-in-2011/)].

Botti, S., & Iyengar, S. S. (2006). The dark side of choice: When choice impairs social welfare. *Journal of Public Policy & Marketing*, 25(1), 24-38.

Smith, R., Tina M., Bisdorf, D., and Zhao, J. (2012). "Increasing Use of Surcharges on Consumer Utility Bills," *AARP Report Vol. 2012: Larkin & Associates, PLLC*.

Tang, J., Zhang, P., & Wu, P. F. (2015). "Categorizing consumer behavioral responses and artifact design features: The case of online advertising." *Information Systems Frontiers*, 17 (3), 513-532.

Tuttle, B. (2012a). "\$22.6 Billion in Airline Fees Last Year - and New Fare Hikes to Boot," *Time*, (accessed Sept 27, 2013), [available at <http://business.time.com/2012/07/25/22-6-billion-in-airline-fees-last-year-and-new-fare-hikes-to-boot/>].

---- (2012b). "It's Not Just Airlines: Hotel Fees on Pace to Reach Record High in 2012," *Time*, (accessed September 27, 2013), [available at <http://business.time.com/2012/09/06/its-not-just-airlines-hotel-fees-on-pace-to-reach-record-high-in-2012/>].

Wortman, C. B., & Brehm, J. W. (1975). "Responses to uncontrollable outcomes: An integration of reactance theory and the learned helplessness model," *Advances in experimental social psychology*, 8, 277-336.