

ONLINE SHOPPING PRE- AND POST-VACCINE AND THE ROLE OF RELATIONSHIPS, TRUST, AND LOYALTY ON SATISFACTION

Randi Priluck, Pace University, USA

ABSTRACT

This research examines online shopping behavior before and after a stressful time in consumers' lives, the COVID-19 pandemic. Prior to the announcement of widespread availability of vaccines in 2021, in-store shopping was risky and people engaged in more online shopping behavior. As a result, the importance of online shopping grew and new online consumers entered the market. This study examines the mediating effects of trust and loyalty on consumer satisfaction and the moderating influence of presence of vaccines on these mediators. A moderated mediation analysis using Hayes Process Model 14 (2017) was assessed in the study. The findings suggest that relationships influence satisfaction through the mediating variables of trust and loyalty and presence of vaccines moderates the mediated relationships. However, trust had a stronger effect on satisfaction when the vaccine was not available and loyalty had a stronger effect on satisfaction post vaccine availability. This research contributes to the satisfaction literature by examining the effect of vaccine availability on online shopping outcomes.

INTRODUCTION

In March of 2020, the global pandemic shut down US cities and retail establishments. During this time there were increased deaths from COVID-19 and fear among members of the population (Campanile 2020) who refrained from shopping in-store even when it was possible to do so. As a result, ecommerce sales grew 32% in 2020 over the prior year (US Census Bureau 2022). Due to the pandemic online retailers invested heavily to improve their online sales operations and brick and mortar stores were forced to build their online offerings (Boudreau, 2021). Reports suggested that the ecommerce shopping trend would continue to grow (CNN 2020). In fact, U.S. total online retail sales increased 17.9% ($\pm 0.5\%$) in 2021 year over year and accounted for 13.2% of total retail sales (US Census Bureau 2022).

Relationship marketing has been studied for over 40 years, but the influence of COVID-19 on shopping behaviors is a novel phenomenon that may influence customer-firm relationships. Steinhoff and Palmatier (2021) suggest that “the developments surrounding the COVID-19 global pandemic have been strongly catalyzing the shift towards online relationships” (p. 111). This research examines the effect of a relationship on satisfaction in online shopping, the mediating influence of trust and loyalty on satisfaction and the moderating effect of vaccine presence in the model. The role of relationships in leading to customer satisfaction is an important concern for marketers who should understand the degree to which they can and should foster online relationships with customers. Future system shocks may lead to increased demand for online shopping and even without a pandemic, stressful times may be ahead and marketers should be prepared.

Though many consumers had experience with online shopping the pandemic forced more shopping online. In 2019 70.5% of US consumers had made an online purchase and this increased to 74.3% of the American population by 2021 (Statista 2022). Global ecommerce represented \$3,351 billion in 2019 and increased to \$5,211 in 2021 (Emarketer 2022), suggesting

significant growth. During the early stages of the pandemic walking into stores became riskier and it was not until vaccines became widely available in 2021 that some risk was reduced. During the time of stress, consumers responded by shifting purchases online and spent more time and money on online shopping (US Census Bureau 2022).

Shopping has been known to be a response to stressful situations and stress influences both panic and hedonic shopping. Shopping has also been shown to be a diversion for stress release (Statista, 2022). Research conducted during the COVID-19 pandemic found that whereas panic purchasing resulted from perceived feelings of insecurity and instability, hedonic purchases may also have been motivated by an attempt to regulate negative emotions, whether the product was needed or not (Crosta et al. 2021). Research conducted on Italian consumers in October of 2020 found that the savings rate increased as a result of fears associated with being out in public, affecting service industries in Italy (Immordino et al. 2022).

Models of consumer satisfaction have examined the role of expectations in forming responses to products and services. Similarly, researchers have suggested that causality, stability and locus influence consumer responses (Erevelles and Leavitt 1992). As such, when stressors hit the marketplace, consumers may have new responses to shopping stimuli that influence satisfaction with the product, retailer and relationship. Therefore it is important to examine consumer behaviors during stressful times.

CONCEPTUAL BACKGROUND

Stress, Fear and Shopping Behavior

According to the Oxford Languages Dictionary, a stressor is something that causes a state of strain or tension (Oxford 2022). Stressors have been categorized as physical, social and psychological and may have an external or internal locus (Anglin, Stuenkel, and Lepisto 1994). Psychological stressors refer to strong emotions, including worry and fear, which may be caused by external or internal factors. Stressors may represent intense or less intense pressures and may be short or long-lived and can lead to negative feelings in consumer situations (Moschis 2007).

Stress represents an imbalance when environmental demands overwhelm a person's ability to cope with those demands (Maes, Vingerhoets, and Van Heck 1987). Pandemics and natural disasters are environmental stressors (Crosta et al. 2021), which may have caused increased stress levels among US residents. The 2020 Stress in America survey found that though people began acclimating to the lockdowns and pandemic, Americans continued to struggle with the disruptions through October 2020, when 78% of adults reported that "the coronavirus pandemic is a significant source of stress in their life" (American Psychological Association 2020). The population reported higher levels of stress negatively affecting their behaviors resulting in more bodily tension (49%), anger (20%), mood swings (20%) and yelling at loved ones (17%) (American Psychological Association 2020). By contrast, in July 2022 only 25% of Americans said they were concerned about a major outbreak of COVID-19, down from 30% in January of 2022 (Funk et al. 2022).

Stress has been examined as an antecedent to shopping behaviors since the early 1990's with Celuch and Showers (1991) calling for examination of stress, the influence it has on avoidance behaviors and stress-reduced attention to optimizing end-goals. Under stress consumers may be more likely to engage in "satisficing," accepting results from a search that are acceptable, but not optimal (Caplin, Dean, and Martin 2011). In addition, consumers may

evaluate choice criteria differently, utilizing more non-compensatory strategies when examining search, experience and credence attributes. Similarly, Sneath (1995) suggests that stress leads to both impulsive and compulsive shopping behaviors and stress also may influence price sensitivity and an increased desire for comparison shopping (Anglin et al. 1994).

In stressful times consumers seek out methods to assuage their discomfort. When engaging in online shopping customers may want more security or signals that the company values them and their business. Consumers may engage in coping behaviors when feeling stress and these may include solving the problem or using emotional mechanisms. Relationship marketing may help consumers cope by meeting some emotional needs (Folkman and Lazarus 1988) as people seek out social support (Carver, Scheier, and Weintraub 1989).

Researchers have also examined vulnerable consumers defined as those with lower power in a relationship with a marketer and generally found satisfaction levels to be higher than for those with more power. In the case of the pandemic many types of consumers may have felt vulnerable. These consumers are more likely to have experienced negative shopping outcomes and are less likely to believe their complaints would be addressed by marketers (Andreasen and Manning 2022).

Shopping Under Fear Conditions

Another emotion that may be present during a natural disaster or pandemic is fear. Fear has been found to affect perceptions, thoughts and behaviors with those experiencing fear attempting to minimize those feelings. Fear leads to defensive responses because the individual may view the situation as threatening and under conditions of fear people are more suspicious of the motives of others. Fear appeals have been widely studied in the literature, but there is no definitive evidence that fear appeals are effective in changing behavior. Fear appeals do lead to increased attention to messages, but people tend to become defensive (Ruiter et al. 2014), which may not benefit marketers. Regardless, individuals adapt their behaviors as a response to shifting environmental stimuli and a pandemic may induce fear responses. Research also suggests that fear may lead to unusual shopping behaviors. During the early pandemic, Laato et al. (2020) found that Finnish consumers who self-isolated were also more likely to hoard products. Fear can lead to negative emotions and has been found to influence levels of satisfaction (Krishnan and Olshavsky 1995).

During disasters people still shop, but may use shopping to ameliorate negative emotions (Larson and Shin 2018). Consumers engage in utilitarian shopping as a result of fear that supplies may be limited. However, consumers also engage in hedonic shopping to restore control over their environment when feeling sad (Rick, Pereira, and Burson 2014). Fear has also been found to lead to hedonic shopping (Rooney, Krolkowska, and Bruce 2021) to mitigate the negative feeling. Some researchers have found differences in responses to sadness versus anxiety, with anxiety fostering the goal of reducing uncertainty and sadness leading to high risk, high reward behaviors (Raghunathan and Pham 1999).

A number of studies suggest that perceived risk reduces satisfaction among consumers. Specifically, Tandon et al. (2018) found that perceived risk had a negative influence on customer satisfaction for online shoppers in India. Perceived risk makes the outcomes expectations uncertain in shopping situations and can be caused by a variety of factors including financial risk, product risk and performance risk. Certainly consumers attempt to reduce their risk by engaging in shopping behaviors such as examining reviews, suggesting a preference for lower levels of risk (Srivastava and Kalro 2018).

Relationships Marketing and Online Shopping

The concept of relationship marketing has been discussed in the academic research since 1983 as a strategy to enhance customer acquisition and retention (Agariya and Singh 2011). Relationships with marketers play a key role in creating customer expectations (Evans and Laskin 1994), improving satisfaction and value perceptions (Webster 1992) and growing lifetime value (Payne, Ballantyne, and Christopher 2005). Relationships with marketers may help ease consumers' concerns and increase their positive affect in transactions, particularly when people are under stress.

When consumers enter a retail establishment, they may be approached or engage in some manner with store staff. As a result, a relationship is possible through communications and sharing mutual space. In the case of online shopping the relationship is less obvious, but consumers do form relationships in ecommerce situations. Rooney, Krolikowska and Bruce (2021) suggest that as consumers create their own online shopping experiences with technology they internalize aspects of relationships. Consumers can take advantage when marketers offer multisensory experiences and opportunities for consumers to customize the task as they see fit using the internet of things, robotics, interactive haptics or other emerging technologies.

Relationship marketing is when firms attempt to build meaningful connections with customers to improve customer retention and lifetime value (Lemon and Verhoef, 2016). Factors including satisfaction, loyalty, service quality, customer centricity and engagement influence the customer experience (Lemon et al. 2016) and signal to the customer the degree of the relationship that has formed with the company. A deep analysis of relationship marketing research (Agariya and Singh 2011) found that 19 studies had identified satisfaction as an outcome of relationship marketing and the finding has been validated in online marketing (Verma, Sharma, and Sheth 2016). Similarly, Palmatier (2002) suggested that relationships lead to stronger satisfaction and repurchase intent and Ward & Dagger (2007) found that the length of the relationship, which contributes to trust and loyalty, affects relationship strength and satisfaction.

When consumers perceive a relationship with the marketer they are more likely to be satisfied with the experience (Evans and Laskin 1994). Research has shown that establishing a relationship with an online marketer can lead to increased customer loyalty and higher levels of customer satisfaction. When customers perceived relationships with online marketers they were more likely to repeat purchases and engage in positive word of mouth (Gremler and Brown 1999). Similarly, another study suggested that consumers with a sense of connection in a virtual community may have more positive outcomes such as feelings of membership, connectedness and favorable attitudes (2022). Morgan and Hunt's (1999) seminal paper noted that relationships can be competitive advantages for firms because they lead to loyalty and repeat purchase. In general, consumers feel more satisfaction when they have relationships with marketers even when experiencing negative outcomes (Priluck, 2003). However, the COVID-19 pandemic presented a unique situation for consumers and led to widespread "distress to the majority of the population in the world" (del Castillo 2021) p. e757. The pandemic upended the manner by which many daily tasks were accomplished and individuals altered their shopping behaviors. While under normal circumstances relationships offer security to shoppers, relationships would not likely suffice to ameliorate the negative emotions brought on by COVID-19. As such an examination of the factors that lead to satisfaction is an important contribution to the marketing literature.

Trust and Loyalty in Online Environments

Trust has been examined as an antecedent to customer satisfaction in both retail and online purchasing and has been found to be a key mediator in the relationship between purchase factors and satisfaction in a variety of studies of relationship marketing (Agariya and Singh 2011). Trust is the belief in the credibility, integrity, reliability and benevolence of the entity and (Urban, Amyx, and Lorenzon 2009) is an important element in maintaining relationship continuity in online retailing. Specifically, Papadopoulou et al. (2001) identified the structural elements of trust in an ecommerce business as built on repeated interactions with a marketer in which promises are made, which lead consumers to perceive a relationship and develop beliefs regarding security and privacy. In online environments trust is a determining factor in consumers' intentions to purchase online because trust is the belief that a seller will fulfill its obligations in a transaction and ensure that the product or service purchased meets the consumer's expectations. Chung and Shin (2010) found that both e-commitment and e-trust are important to customer satisfaction in online shopping and Lee and Overby (2022) predicted that satisfaction would lead to loyalty, but it could also be argued that loyalty leads to satisfaction.

Loyalty is defined (Oliver 1980) as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior” p. 460. In some models customer satisfaction predicts loyalty as in Khan et. al. (2022) and Veloutsou (2015). However, customer satisfaction and loyalty may operate in tandem. For example, Bei and Chiao (2022) examined customers of a repair shop and customer satisfaction served as a consequence and also an influence on loyalty. However, relationships have been found to lead to loyalty (Evans and Laskin 1994) and the variable would then serve as a mediator. Loyalty and satisfaction have also been conceptualized as demonstrating a reciprocal relationship; each positively reinforces the other (Shankar, Smith, and Rangaswamy 2003). For example, Srivastava and Rai (2013) examined a service quality model in the insurance industry and found that satisfaction lead to customer loyalty in that context. Yoon (2002) suggests that loyalty in online shopping is influenced by trust, satisfaction, and perceived value. This research examines trust and loyalty as mediators with vaccine presence serving a moderating effect on satisfaction.

In a situation such as a global pandemic individuals may behave in unexpected ways. Normally we predict that higher levels of trust led to satisfaction as do higher levels of loyalty. However, trust is an antecedent to the shopping process that does not necessarily require experience and loyalty is more likely the result of direct experience. As such, presence of vaccine may lead to different outcomes for these variables. Specifically, trust may be more important and lead to higher levels of satisfaction before the vaccine was available with many shopping more online and seeking psychological comfort prior to the purchase. After vaccine availability, individuals had more psychological comfort and therefore vaccine availability may moderate loyalty more at higher levels of satisfaction. The proposed model predicts that trust and loyalty mediate between a relationship with the marketer and satisfaction in an online shopping context (as shown in Figure One) with vaccine availability moderating the relationship between trust and satisfaction and loyalty and satisfaction as follows:

H1. *Relationship with the marketer has a positive relationship with trust.*

H2. *Relationship with the marketer has a positive relationship with loyalty.*

H3. Trust has a positive relationship with satisfaction.

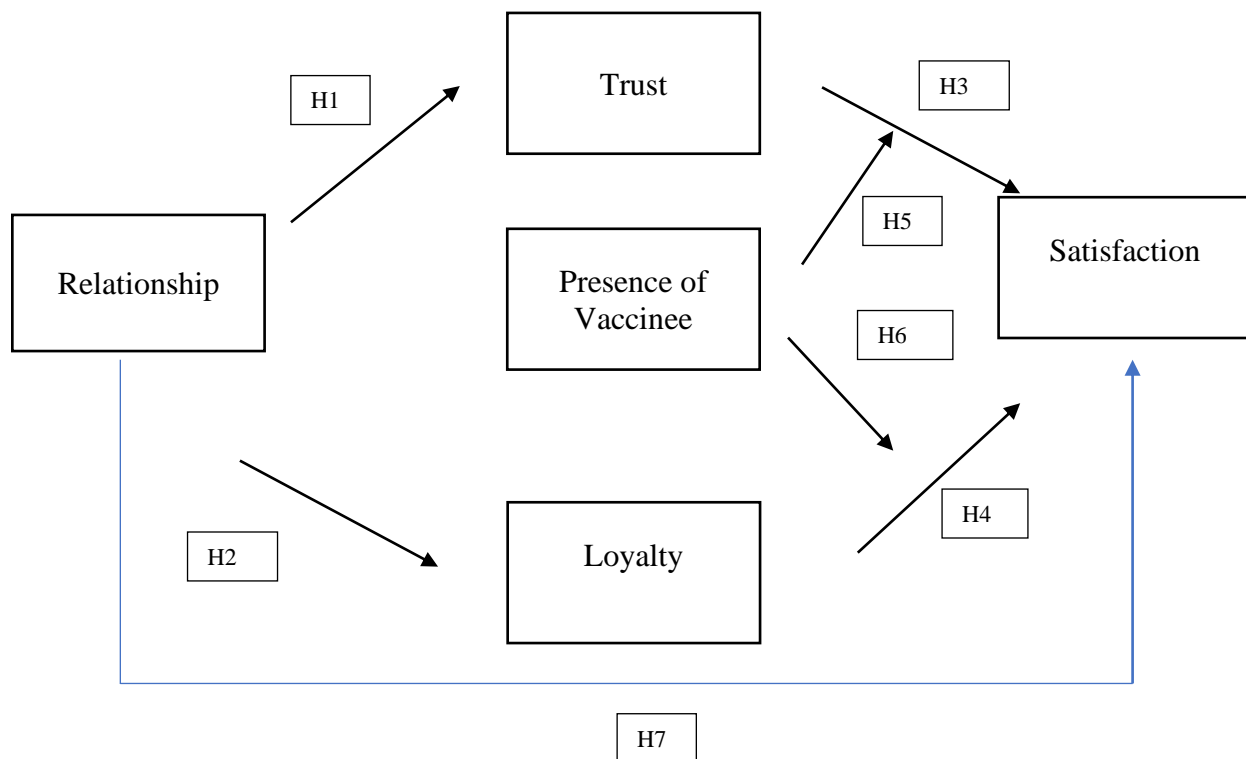
H4. Loyalty has a positive relationship with satisfaction.

H5. Presence of vaccine will moderate the relationship between trust and satisfaction.

H6. Presence of vaccine will moderate the relationship between loyalty and satisfaction.

H7: Relationship with the marketer has a positive relationship with satisfaction.

Figure 1: Regression Path Model



METHOD

Subjects were asked to consider a shopping scenario in which they purchased a t-shirt online and were exposed to images of an online shop with colorful clothing, a process for purchasing and a payment option (see appendices 1 and 2). The treatment subjects were in the relationship condition in which they were told that the website offered personalization, recommendations and shopping tips in addition to 24 hour assistance and a chat function. The control condition demonstrated the same shopping scenario without the additional relational components, as shown in the appendix.

The research was conducted among US consumers online using Qualtrics and represented the shopping experience with pictures of products and the check-out process. Subjects were told they went to the online store to purchase a plain black t-shirt with information about the retail experience, pictures of the shirt, images of the check-out process and a ‘thank you’ page. Further, subjects learned that the shirt arrived 2 days following the online purchase. As a manipulation check the degree to which subjects perceived a relationship with the online retailer using a 10-item semantic differential scale was examined. The researcher then measured satisfaction with the t-shirt, the online store itself and satisfaction with the relationship. Subject were also asked questions about their levels of trust and loyalty for the online marketer.

The research examines an event that took place over the time frame of the study. The event demarcation point is the announcement of the widespread availability of the COVID-19 vaccine for the general public in the US. The specific event that marks the post vaccine availability is President Biden’s announcement on March 3rd 2021 that “every US adult will have access to a COVID-19 vaccine.” Therefore the variable vaccine availability is actually knowledge of immanent vaccine availability for all US adults. Study data collection was as follows:

Pre Vaccine Availability – May 5th, 2020 – December 1, 2020

Post Vaccine Availability– March 16, 2021- December 20, 2021

The COVID-19 vaccine roll out took place over a long period of time. Specifically, the FDA issued an emergency use authorization for the Pfizer vaccine on December 11, 2020. The data collection for the pre-vaccine condition was concluded by December 11th, 2020. The data for the post vaccine condition was collected beginning in March, 2021 after the announcement that every adult would have access to a COVID-19 vaccine and no data were collected in the interim time period.

The dependent variable in the model is satisfaction. According to Larsen and Wright (2021), consumer satisfaction is the most important outcome variable in marketing studies and as a result, many studies examine consumer satisfaction in a variety of marketing environments. Consumer satisfaction has been widely studied and recently Frechette and Wingate (2022) examined the difference between satisfaction with the service provider compared to overall satisfaction. They suggest that there are a variety of measures for satisfaction and the choice depends on the problem at hand. Whereas they examine a service encounter, purchasing a physical product may have somewhat different measures. In this study SERVQUAL would not be appropriate as the item purchased is a t-shirt. In addition, the consumer confirmation-disconfirmation model of satisfaction suggests that when consumers’ needs are met they will be satisfied. However, this research examines the affective measures of satisfaction to a shopping experience to evaluate the hedonic outcomes as per Batra and Ahtola (1991).

In this research subjects completed a Qualtrics questionnaire following exposure to the shopping scenario. First, they responded to a set of questions to determine the degree to which the subjects perceived a relationship with the online store on a 10-item 7-point semantic differential scale (e.g. friendly-unfriendly, fair-unfair, close-distant). Next, subjects were asked their levels of satisfaction with three entities: the t-shirt, online store and relationship with the store. Each consisted of a 5-item 7-point semantic differential scale (e.g., good-bad, pleased-displeased, happy-sad) as per Batra and Ahtola (1991). The measures were highly correlated and

were therefore combined into a single measure of satisfaction. Wirtz and Lee (2003) examined a variety of semantic differential and Likert scales and suggest that semantic differential scales, even those with only one item, can measure satisfaction effectively and Hausknecht (1990) demonstrated use of such scales as well. Interestingly, Frechette and Wingate (2022) measure satisfaction with an overall satisfaction 5-point measure that asks subjects to rate both the lodging and the satisfaction with the apartment owner at the same time with one item and then rate just the apartment owner. In contrast, this research uses 5 items for each individual measure of satisfaction for product, store and relationship without confounding the measures. Trust was measured with a 5-item 5-point Likert scale (e.g. “The site appears to be more trustworthy than other sites I have visited,” “My overall believability of information on this site is high”) (Bart et al. 2005). Loyalty was measured with a 6-item 5-point Likert scale (e.g. “I would purchase an item from this site again and “I would recommend this site to a friend”) (Hsieh 2022). All scales had been used in prior research and are shown in the appendix.

RESULTS

The sample consisted of 143 responses with 71 in the relationship treatment and 72 in the control. A manipulation check demonstrated significant differences ($t = 2.9, p \leq .01$) in the two groups using a 10-item 7-point scale (see appendix 3). The sample consisted of the following: 29% male and 71% female and 26% 25-34 and 74% 18-24. Cronbach’s alpha for the measures were as follows: relationship (.890), satisfaction (.989), trust (.942) and loyalty (.870). Table 1 presents the correlations.

Table 1: Correlations

	<i>Presence of Vaccine</i>	<i>Trust</i>	<i>Loyalty</i>	<i>Satisfaction</i>
<i>Relationship</i>	.014	-.225**	-.212*	.680
<i>Vaccine</i>		.212*	.210*	.242**
<i>Trust</i>			.736**	.718**
<i>Loyalty</i>				.728**

** $p \leq .01$ * $p \leq .05$

The analysis used the PROCESS bootstrapping regression tool, model 14 (Hayes 2017). Results of the regression analysis are presented in Table 2. The relationship condition demonstrated significantly higher levels of trust supporting H1. Similarly, the relationship condition showed significant higher loyalty supporting H2. Both trust and commitment had significant influence on satisfaction supporting H3 and H4. Further presence of vaccines, moderated the effect of trust and loyalty on satisfaction providing support for H5 and H6. Table 3 demonstrates the conditional indirect effects of the mediational model. Finally, there was a direct effect of relationship on satisfaction supporting H7.

The regression model and Hayes Process 14 support the hypotheses in the study. Specifically, there is a significant influence of relationships on trust and loyalty and both trust and loyalty are partial mediators in the relationship between the conditions and satisfaction. The mediational effects are demonstrated with a significant direct effect of relationship on satisfaction and both trust and loyalty on satisfaction. Also observed is a significant indirect effect of both trust and loyalty on satisfaction. The moderated mediator effect is significant as

presence of vaccine moderates the relationship between both trust and loyalty and satisfaction as shown in Figure 2.

Table 2: Regression Results PROCESS Model 14

	<i>F</i>	<i>MSE</i>	<i>Sig</i>
<i>Outcome: Trust</i>	7.6033	1.1061	.0066
<i>Outcome: Loyalty</i>	6.6883	1.2963	.0107
	<i>b</i>	<i>SE</i>	<i>Sig.</i>
<i>Outcome: Satisfaction</i>			
<i>Relationship</i>	.5452	.1932	.0055
<i>trust</i>	1.0860	.1821	.0000
<i>loyalty</i>	.3410	.1665	.0425
<i>Presence of vaccine</i>	.2145	.1895	.2596
<i>Trust x presence of vaccine</i>	-.7595	.2540	.0033
<i>Loyalty x presence of vaccine</i>	.7242	.2355	.0025

Table 3: Conditional indirect effects of relationship on trust and loyalty

	<i>LLCI</i>	<i>ULCI</i>	<i>b</i>	<i>SE</i>
<i>Direct effect</i>	.1631	.9273	.5452	.1932
<i>Trust No Vaccine</i>	-1.0313	-.1395	.5249	.2278
<i>Vaccine</i>	-.4971	.0141	-.1578	.1326
<i>Loyalty No Vaccine</i>	-.4444	.0464	-.1674	.1255
<i>Vaccine</i>	-.9847	-.1132	-.5228	.2269

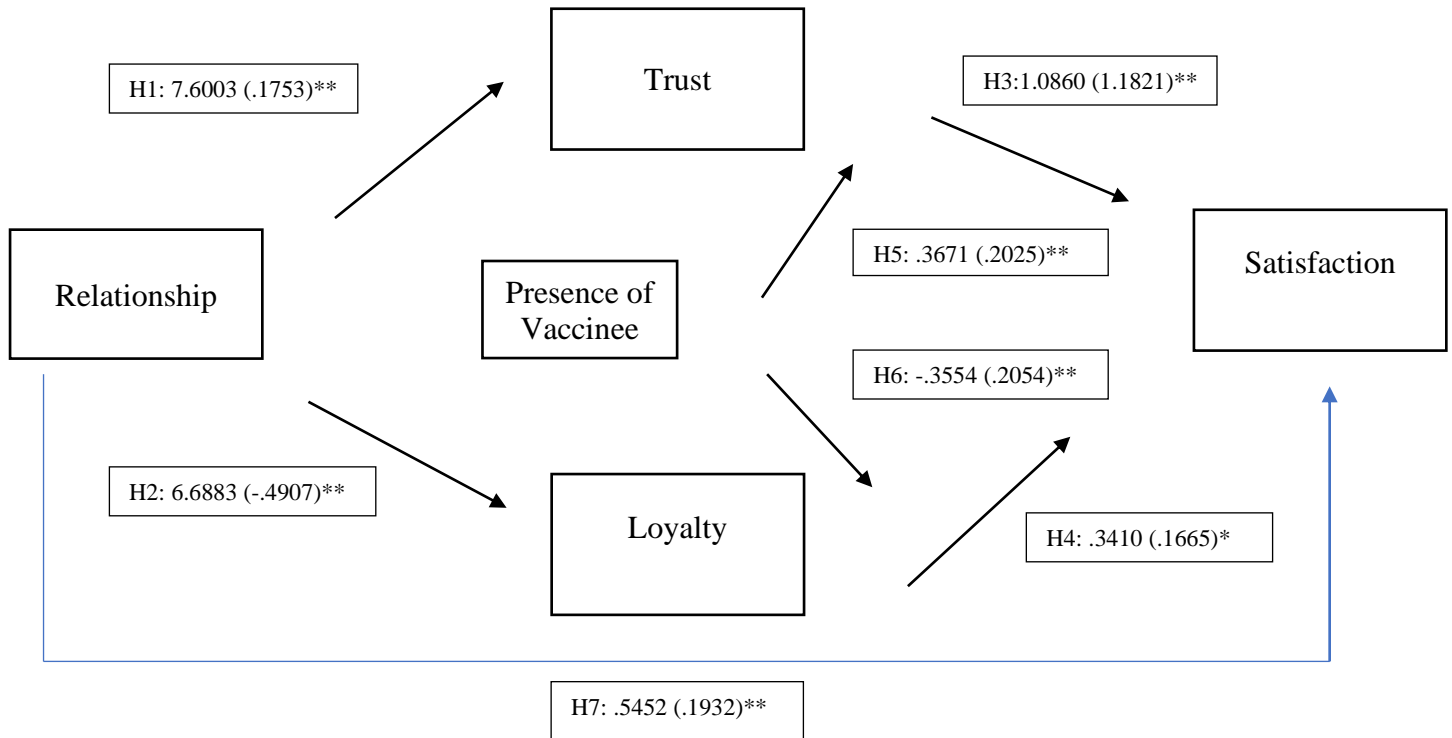
However, the findings suggest different outcomes for the influence of trust and loyalty on satisfaction in the mediated moderation model. For trust, higher levels of trust lead to satisfaction pre-vaccine availability, while for loyalty, higher levels of loyalty lead to satisfaction post presence of the vaccine. The explanation for these findings is that trust serves more often as an antecedent to satisfaction and would be a key indicator of a marketer’s likelihood of service. Pre-vaccine availability, trust would be very important in giving subjects psychological comfort. Trust is dependent on the actions of the marketer and a perception that the marketer will perform. Loyalty is an outcome and is often hypothesized as occurring after satisfaction. Loyalty is also an action that consumers take in response to satisfaction. After the vaccine was available subjects might have felt more comfort in demonstrating loyalty because the situation became more predictable.

LIMITATIONS

There are some limitations to this research. First, the study includes an experimental manipulation that may not accurately reflect real-world shopping experiences. However, the manipulation check did show a significant difference in responses. In addition, our sample does not reflect a wide demographic and is focused on those ages 18-34. In the future it would be interesting to examine older adults. The study was conducted in event format leading to a number of limitations as discussed by Sorescu et. al. (2017). Specifically, it is difficult for

researchers to take into account all the expectations and experiences of individuals during the event time period. As a result there is no assertion of causality.

Figure 2: Regression Path Model with Significant Relationships



IMPLICATIONS

This research reiterates the findings that relationships influence satisfaction through the mediating variables of trust and loyalty. In addition, presence of vaccine was found to moderate the mediational relationship. As demonstrated here, relationships are important to consumers and suggests that people view relationships as more important to their online shopping satisfaction. Subjects who were exposed to the relationship scenario were more likely to rate satisfaction higher and presence of vaccine moderated the relationship between trust and satisfaction more pre-vaccine availability than post vaccine. On the other hand presence of vaccine was moderated the relationship between loyalty and satisfaction more strongly post vaccine availability. Both trust and loyalty have been found to be important aspects of a relationship and have been variables in many studies of both in-store and online exchanges, (Arghashi, Bozbay, and Karami 2021).

Figure 3: Moderated Mediation Effect of Trust

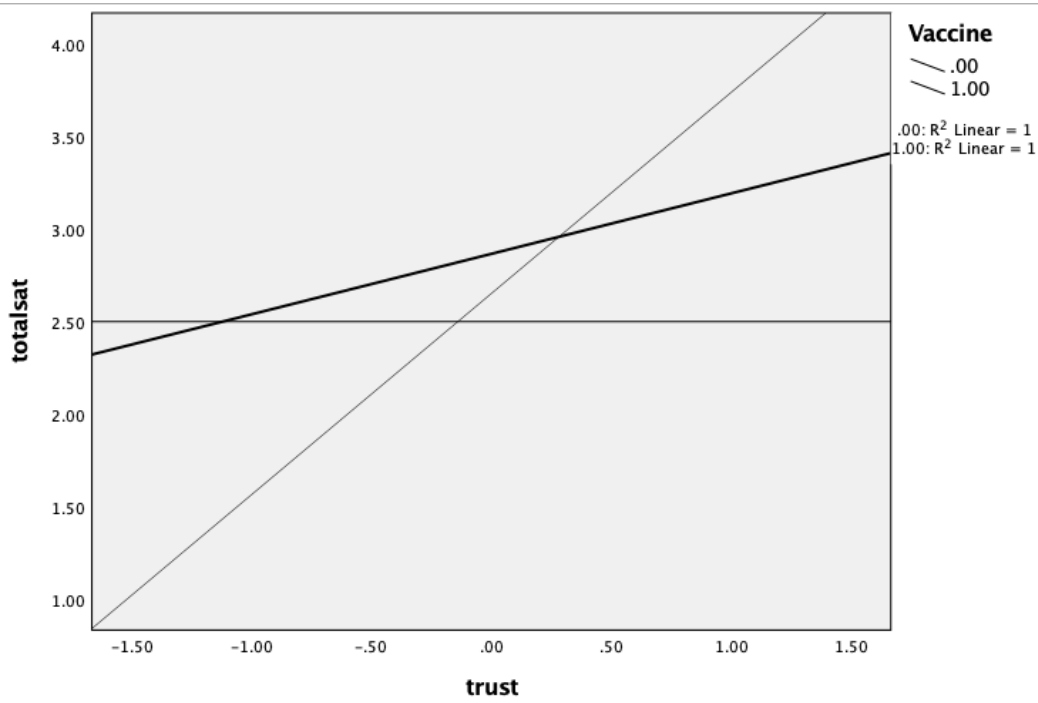
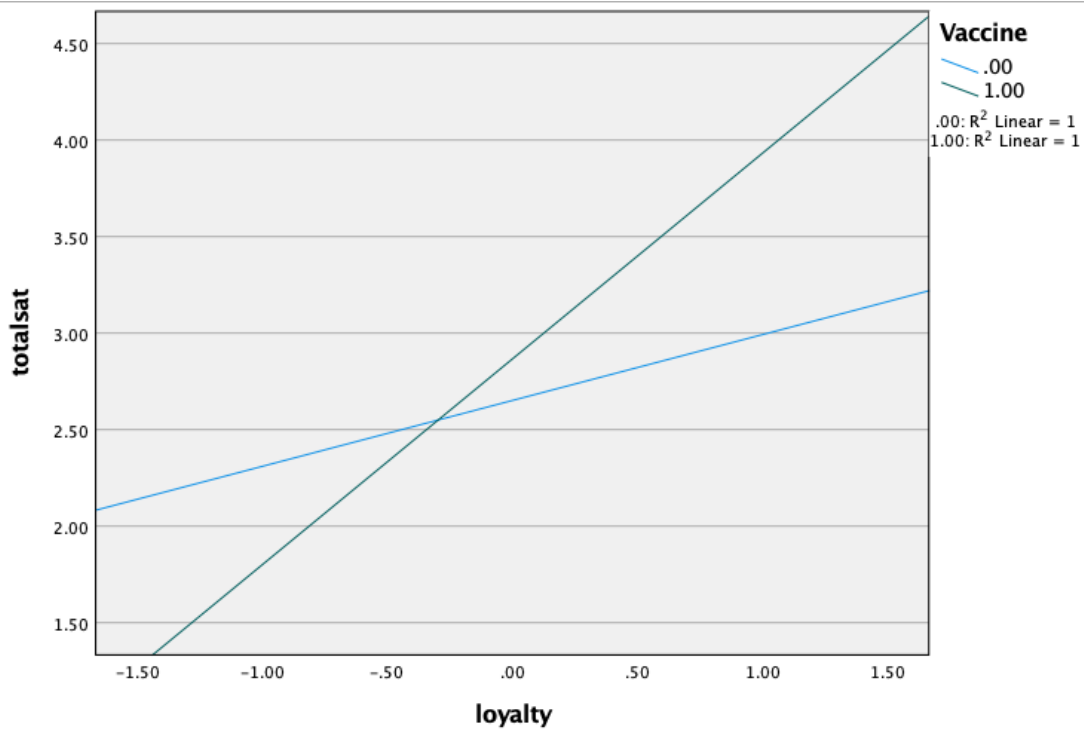


Figure 4: Moderated Mediation Effect of Loyalty



Marketers should be aware that forging relationships with customers is a revenue generating strategy that can lead to increased customer lifetime value because of the ease and psychological comfort in consumer loyalty. That relationships can also be formed in online environments is a factor that online marketers should also seek to foster to enhance returns. Studies have even suggested that loyalty is a more important driver of satisfaction in online environments because of the risk associated with the purchase (Shankar et al. 2003). Trust in online marketing has been shown to be developed in multiple transactions and related to the design of the website as well as the degree to which the company fulfills its promises (Urban et al. 2009). Similarly, Lin et al. (Lin, Miao-Que and Lee, Bruce, C.Y. 2012) found that the website and its interactivity influenced loyalty and trust in online bookstores. Relationships with online retailers have been found to matter more to customers than dependence on the seller or the expertise of the seller in determining outcomes (Steinoff et al., 2019).

Trust and loyalty have also been important in the development of the concept of brand love. Brand love utilizes the romantic love scale to measure degree of yearning for a brand, which goes even further than relationship marketing in describing consumer deep feelings regarding products and services. Brand love is associated with purchase intention, word-of-mouth, and willingness to pay (Wong 2023). The concept is another exemplar of the importance of relationships in consumer marketing. Marketers benefit greatly when consumers perceive relationships because consumers tend to purchase repeatedly from trusted sellers (Dwyer, Schurr, and Oh 1987). The psychological benefit is also accrued to consumers who are more satisfied when they feel trust and loyalty toward marketers. Understanding the role of trust and commitment on relationships and satisfaction during a global may help elucidate consumer response in future stressful situations.

CORRESPONDING AUTHOR

Randi Priluck
Professor of Marketing and Senior Associate Dean
Lubin School of Business
Pace University
Lubin School of Business
One Pace Plaza
New York, NY 10038
E-Mail: rpriluck@pace.edu
Phone: +1-212-618-6451

Submitted: 9 April, 2023

Revised: 17 July, 2023

REFERENCES

- Agariya, Arun Kumar, and Deepali Singh. (2011). "What Really Defines Relationship Marketing? A Review of Definitions and General and Sector-Specific Defining Constructs." *Journal of Relationship Marketing* 10(4):203–37.
<https://doi.org/10.1080/15332667.2011.624905>

- American Psychological Association. (2020). "Stress in America™ 2020: A National Mental Health Crisis." Retrieved April 1, 2022 <https://www.apa.org/news/press/releases/stress/2020/report-october>
- Andreasen, Alan, and Jean Manning. (1990). "The Dissatisfaction and Complaining Behavior of Vulnerable Consumers," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Volume 3, 12-20. <https://www.jcsdcb.com/index.php/JCSDCB/article/view/704>
- Anglin, Linda K., J. Kathleen Stuenkel, and Lawrence R. Lepisto. (1994). "The Effect of Stress on Price Sensitivity and Comparison Shopping." *ACR North American Advances* NA-21. <https://www.acrwebsite.org/volumes/7568/volumes/v21/NA-21>
- Arghashi, Vahideh, Zehra Bozbay, and Azhdar Karami. (2021). "An Integrated Model of Social Media Brand Love: Mediators of Brand Attitude and Consumer Satisfaction." *Journal of Relationship Marketing* 20 (4):319–48. <https://doi.org/10.1080/15332667.2021.1933870>
- Bart, Yakov, Venkatesh Shankar, Fareena Sultan, and Glen L. Urban. (2005). "Are the Drivers and Role of Online Trust the Same for All Web Sites and Consumers? A Large-Scale Exploratory Empirical Study." *Journal of Marketing* 69(4):133–52. <https://doi.org/10.1509/jmkg.2005.69.4.133>
- Batra, Rajeev, and Olli T. Ahtola. (1991). "Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes." *Marketing Letters* 2(2):159–70. <https://doi.org/10.1007/BF00436035>
- Bei, Lien-Ti, and Yu-Ching Chiao. (2001). "An Integrated Model for the Effects of Perceived Product, Perceived Service Quality, and Perceived Price Fairness on Consumer Satisfaction and Loyalty," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Volume 14, 125-140. <https://www.jcsdcb.com/index.php/JCSDCB/article/view/110>
- Boudreau, Catherine. (2021). "Shopping Online Surged during Covid. Now the Environmental Costs Are Becoming Clearer." *Politico*. Retrieved March 31, 2022 <https://www.politico.com/news/2021/11/18/covid-retail-e-commerce-environment-522786>
- Campanile, Carl. (2020). "New Yorkers Fear Second Coronavirus Wave with Worst yet to Come." *New York Post*, July 13. <https://nypost.com/2020/07/13/new-yorkers-fear-another-coronavirus-outbreak-headed-to-nyc/>
- Caplin, Andrew, Mark Dean, and Daniel Martin. (2011). "Search and Satisficing." *American Economic Review* 101(7):2899–2922. <https://www.doi.org/10.1257/aer.101.7.2899>
- Carver, Charles, Michael Scheier, and Jagdish Weintraub. (1989). "Assessing Coping Strategies: A Theoretically Based Approach." *Journal of Personality and Social Psychology* 56:267–83. <https://www.doi.org/10.1037//0022-3514.56.2.267>

- del Castillo, Fides A. (2021). "Self-Actualization towards Positive Well-Being: Combating Despair during the COVID-19 Pandemic." *Journal of Public Health* 43(4):e757–58. <https://www.doi.org/10.1093/pubmed/fdab148>
- Celuch, Kevin G., and Linda S. Showers. (1991). "It's Time to Stress Stress the Stress - Purchase/Consumption Relationship: Suggestions For Research." *ACR North American Advances* NA-18. <https://www.acrwebsite.org/volumes/7174/volumes/v18/NA-18>
- Chung, Ki-Han, and Jae-Ik Shin. (2010). "The Antecedents and Consequents of Relationship Quality in Internet Shopping." *Asia Pacific Journal of Marketing and Logistics* 22(4):473–91. <https://www.doi.org/10.1108/13555851011090510>
- CNN. (2020). "Online Shopping Has Been Supercharged by the Pandemic. There's No Going Back." *CNN*. Retrieved March 31, 2022 <https://www.cnn.com/2020/10/11/investing/stocks-week-ahead/index.html>
- Crosta, Adolfo Di, Irene Ceccato, Daniela Marchetti, Pasquale La Malva, Roberta Maiella, Loreta Cannito, Mario Cipi, Nicola Mammarella, Riccardo Palumbo, Maria Cristina Verrocchio, Rocco Palumbo, and Alberto Di Domenico. (2021). "Psychological Factors and Consumer Behavior during the COVID-19 Pandemic." *PLOS ONE* 16(8):e0256095. <https://www.doi.org/10.1371/journal.pone.0256095>
- Dwyer, F. Robert, Paul H. Schurr, and Sejo Oh. (1987). "Developing Buyer-Seller Relationships." *Journal of Marketing* 51(2):11–27. <https://www.doi.org/10.1177/002224298705100202>
- Emarketer. (2022). "US Ecommerce Forecast 2022." *Insider Intelligence*. <https://www.insiderintelligence.com/insights/us-ecommerce-forecast-2022-report-preview/>
- Erevelles, Sunil, and Clark Leavitt. (1992). "A Comparison of Current Models of Consumer Satisfaction/Dissatisfaction," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Volume 5, 104-114. <https://www.jcsdcb.com/index.php/JCSDCB/article/view/636>
- Evans, Joel R., and Richard L. Laskin. (1994). "The Relationship Marketing Process: A Conceptualization and Application." *Industrial Marketing Management* 23(5):439–52. [https://www.doi.org/10.1016/0019-8501\(94\)90007-8](https://www.doi.org/10.1016/0019-8501(94)90007-8)
- Folkman, Susan, and Richard S. Lazarus. (1988). "Coping as a Mediator of Emotion." *Journal of Personality and Social Psychology* 54(3):466–75. <https://www.doi.org/10.1037/0022-3514.54.3.466>
- Frechette, Michael, and Nikki Wingate. (2022). "Measuring Sharing Economy Satisfaction with Star Ratings: Overall Satisfaction versus Satisfaction with the Service Provider," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 76-98. <https://jcsdcb.com/index.php/JCSDCB/article/view/760>

- Funk, Cary, Alec Tyson, Giancarlo Pasquini, and Alison Spencer. (2022). "Americans Reflect on Nation's COVID-19 Response." *Pew Research Center Science & Society*. Retrieved September 26, 2022. <https://www.pewresearch.org/science/2022/07/07/americans-reflect-on-nations-covid-19-response/>
- Gremler, Dwayne D., and Stephen W. Brown. (1999). "The Loyalty Ripple Effect: Appreciating the Full Value of Customers." *International Journal of Service Industry Management* 10(3):271–93. <https://www.doi.org/10.1108/09564239910276872>
- Hama, Yasuhisa. (2001). "Shopping as a Coping Behavior for Stress." *Japanese Psychological Research* 43(4):218–24. <https://www.doi.org/10.1111/1468-5884.00179>
- Hausknecht, Douglas. (1990). "Measurement Scales in Consumer Satisfaction/Dissatisfaction." *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, Volume 3. <https://www.jcsdcb.com/index.php/JCSDCB/article/view/703>
- Hayes, Andrew. (2017). *Introduction to Mediation, Moderation and Conditional Process Analysis: A Regression-Based Approach*. Second. New York: Guilford Publications.
- Hsieh, Hsin-Jung. (2022). "Empirical Investigation of Website Design Affecting E-Loyalty." *Management Studies* 10(1). <https://www.doi.org/10.17265/2328-2185/2022.01.002>
- Immordino, Giovanni, Tullio Jappelli, Tommaso Oliviero, and Alberto Zazzaro. (2022). "Fear of COVID-19 Contagion and Consumption: Evidence from a Survey of Italian Households." *Health Economics* 31(3):496–507. <https://www.doi.org/10.1002/hec.4464>
- Khan, Rizwan Ullah, Yashar Salamzadeh, Qaisar Iqbal, and Shaohua Yang. (2022). "The Impact of Customer Relationship Management and Company Reputation on Customer Loyalty: The Mediating Role of Customer Satisfaction." *Journal of Relationship Marketing* 21(1):1–26. <https://www.doi.org/10.1080/15332667.2020.1840904>
- Krishnan, H. Shanker, and Richard W. Olshavsky. (1995). "The Dual Role of Emotions in Consumer Satisfaction/Dissatisfaction." *ACR North American Advances* NA-22. <https://www.acrwebsite.org/volumes/7788>
- Laato, Samuli, A. K. M. Najmul Islam, Ali Farooq, and Amandeep Dhir. (2020). "Unusual Purchasing Behavior during the Early Stages of the COVID-19 Pandemic: The Stimulus-Organism-Response Approach." *Journal of Retailing and Consumer Services* 57:102224. <https://www.doi.org/10.1016/j.jretconser.2020.102224>
- Larsen, Val, and Newell Wright. (2020). "Aggregate Consumer Satisfaction: The Telos of Marketing," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 63-77. <https://www.jcsdcb.com/index.php/JCSDCB/article/view/361>
- Larson, Lindsay R. L., and Hyunju Shin. (2018). "Fear During Natural Disaster: Its Impact on Perceptions of Shopping Convenience and Shopping Behavior." *Services Marketing Quarterly* 39(4):293–309. <https://www.doi.org/10.1080/15332969.2018.1514795>

- Lee, Eu-Jun, and Jeffrey Overby. (2022). "Creating Value for Online Shoppers: Implications for Satisfaction and Loyalty," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*. <https://jcsdcb.com/index.php/JCSDCB/article/view/62>
- Lin, Miao-Que and Lee, Bruce, C.Y. (2012). "The Influence of Website Environment On Brand Loyalty: Brand Trust and Brand Affect as Mediators." *International Journal of Electronic Business Management* 10(4):308–21.
- Maes, S., A. Vingerhoets, and G. Van Heck. (1987). "The Study of Stress and Disease: Some Developments and Requirements." *Social Science & Medicine* 25(6):567–78. [https://www.doi.org/10.1016/0277-9536\(87\)90081-5](https://www.doi.org/10.1016/0277-9536(87)90081-5)
- Morgan, Robert M., and Shelby Hunt. (1999). "Relationships-Based Competitive Advantage: The Role of Relationship Marketing in Marketing Strategy." *Journal of Business Research* 46(3):281–90. [https://www.doi.org/10.1016/S0148-2963\(98\)00035-6](https://www.doi.org/10.1016/S0148-2963(98)00035-6)
- Moschis, George P. (2007). "Stress and Consumer Behavior." *Journal of the Academy of Marketing Science* 35(3):430–44. <https://www.doi.org/10.1007/s11747-007-0035-3>
- Oliver, Richard L. (1980). "A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions." *Journal of Marketing Research* 17(4):460–69. <https://www.doi.org/10.2307/3150499>
- Oxford. (2022). "Oxford Languages and Google - English | Oxford Languages." Retrieved March 31, 2022. <https://languages.oup.com/google-dictionary-en/>
- Papadopoulou, Panagiota, Panagiotis Kanellis, and Drakoulis Martakos. (2001). "Investigating the Formation of Trust in ECommerce Relationships." *ECIS 2001 Proceedings*. <https://aisel.aisnet.org/ecis2001/92/>
- Payne, Adrian, David Ballantyne, and Martin Christopher. (2005). "A Stakeholder Approach to Relationship Marketing Strategy: The Development and Use of the 'Six Markets' Model." *European Journal of Marketing* 39(7/8):855–71. <https://www.doi.org/10.1108/03090560510601806>
- Priluck, Randi. (2003). "Relationship Marketing Can Mitigate Product and Service Failures." *Journal of Services Marketing* 17(1):37–52. <https://www.doi.org/10.1108/08876040310461264>
- Raghunathan, Rajagopal, and Michel Tuan Pham. (1999). "All Negative Moods Are Not Equal: Motivational Influences of Anxiety and Sadness on Decision Making." *Organizational Behavior and Human Decision Processes* 79(1):56–77. <https://www.doi.org/10.1006/obhd.1999.2838>
- Rick, Scott, Beatriz Pereira, and Katherine Burson. (2014). "The Benefits of Retail Therapy: Making Purchase Decisions Reduces Residual Sadness." *Journal of Consumer Psychology*. <https://www.doi.org/10.1016/j.jcps.2013.12.004>

- Rooney, Tara, Ewa Krolukowska, and Helen L. Bruce. (2021). "Rethinking Relationship Marketing as Consumer Led and Technology Driven: Propositions for Research and Practice." *Journal of Relationship Marketing* 20(1):42–61. <https://www.doi.org/10.1080/15332667.2020.1717276>
- Ruiter, Robert A. C., Loes T. E. Kessels, Gjalt-Jorn Y. Peters, and Gerjo Kok. (2014). "Sixty Years of Fear Appeal Research: Current State of the Evidence." *International Journal of Psychology* 49(2):63–70. <https://www.doi.org/10.1002/ijop.12042>
- Shankar, Venkatesh, Amy K. Smith, and Arvind Rangaswamy. (2003). "Customer Satisfaction and Loyalty in Online and Offline Environments." *International Journal of Research in Marketing* 20(2):153–75. [https://www.doi.org/10.1016/S0167-8116\(03\)00016-8](https://www.doi.org/10.1016/S0167-8116(03)00016-8)
- Sneath, Julia. (1995). "The Impact of Stressful Life Events on Consumers' Impulsive and Compulsive Buying Behaviors." Ph.D., Georgia State University, United States. <https://www.proquest.com/docview/304238725?pq-origsite=gscholar&fromopenview=true>
- Sorescu, Alina, Warren Nooshin, and Larisa Ertekin. (2017). "Event Study Methodology in the Marketing Literature: An Overview," *Journal of the Academy of Marketing Science*. <https://doi.org/10.1007/s11747-017-0516-y>
- Srivastava, Medha, and Alok Kumar Rai (2013). "Investigating the mediating effect of customer satisfaction in the service quality-customer loyalty relationship." *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior* 26: 95-109. <https://jcsdcb.com/index.php/JCSDCB/article/view/141>
- Srivastava, Vartika, and Arti D. Kalro. (2018). "Motivations and Outcomes of Seeking Online Consumer Reviews: A Literature Synthesis." *Journal of Consumer Satisfaction, Dissatisfaction & Complaining Behavior* 31:138–67. <https://jcsdcb.com/index.php/JCSDCB/article/view/286>.
- Statista. (2022). "U.S.: E-Commerce Number of Users 2018-2027." *Statista*. Retrieved July 12, 2023. <https://www.statista.com/statistics/273957/number-of-digital-buyers-in-the-united-states/>
- Steinhoff, Lena, and Robert W. Palmatier. (2021). "Commentary: Opportunities and Challenges of Technology in Relationship Marketing." *Australasian Marketing Journal* 29(2):111–17. <https://www.doi.org/10.1016/j.ausmj.2020.07.003>
- Tandon, Urvashi, Ravi Kiran, and Ash N. Sah. (2018). "The Influence of Website Functionality, Drivers and Perceived Risk on Customer Satisfaction in Online Shopping: An Emerging Economy Case." *Information Systems and E-Business Management* 16(1):57–91. <https://www.doi.org/10.1007/s10257-017-0341-3>
- Urban, Glen L., Cinda Amyx, and Antonio Lorenzon. (2009). "Online Trust: State of the Art, New Frontiers, and Research Potential." *Journal of Interactive Marketing* 23(2):179–90. <https://www.doi.org/10.1016/j.intmar.2009.03.001>

- US Census Bureau, Advance Monthly Retail. (2022). "US Census Bureau Monthly & Annual Retail Trade." Retrieved March 31, 2022. <https://www.census.gov/retail/index.html#ecommerce>
- Veloutsou, Cleopatra. (2015). "Brand Evaluation, Satisfaction and Trust as Predictors of Brand Loyalty: The Mediator-Moderator Effect of Brand Relationships." *Journal of Consumer Marketing* 32(6):405–21. <https://www.doi.org/10.1108/JCM-02-2014-0878>
- Verma, Varsha, Dheeraj Sharma, and Jagdish Sheth. (2016). "Does Relationship Marketing Matter in Online Retailing? A Meta-Analytic Approach." *Journal of the Academy of Marketing Science* 44(2):206–17. <https://www.doi.org/10.1007/s11747-015-0429-6>
- Ward, Tony, and Tracey S. Dagger. (2007). "The Complexity of Relationship Marketing for Service Customers." *Journal of Services Marketing* 21(4):281–90. <https://www.doi.org/10.1108/08876040710758586>
- Webster, Frederick E. (1992). "The Changing Role of Marketing in the Corporation." *Journal of Marketing* 56(4):1–17 <https://www.doi.org/10.1177/002224299205600402>
- Wirtz, Jochen, and Meng Chung Lee. (2003). "An Examination of the Quality and Context-Specific Applicability of Commonly Used Customer Satisfaction Measures." *Journal of Service Research* 5(4):345–55. <https://www.doi.org/10.1177/1094670503005004006>
- Wong, Amy. (2023). "Understanding Consumer Brand Love, Brand Commitment, and Brand Loyalty." *Journal of Relationship Marketing* 22(2), 87-114. <https://www.doi.org/10.1080/15332667.2023.2173937>
- Yoon, Sung-Joon. (2002). "The Antecedents and Consequences of Trust in Online-Purchase Decisions." *Journal of Interactive Marketing* 16(2):47–63. <https://www.doi.org/10.1002/dir.10008>

Appendix 1. Treatment and Control Conditions

TREATMENT

Imagine that today you decide to buy a T-shirt online.

You decide to buy it from a typical online store. You have purchased a number of items from this store in the past and were satisfied with the process and products.

The site allows you to **personalize** the page and the products displayed. The website makes **good recommendations** to you based on your prior purchases, so it is easy to buy. The store always provides **good shopping and sizing tips** to help you.

It is **easy to navigate** the site and view the items with videos, recommendations and a virtual shopping assistant. The **reviews** of each product are clear and helpful and it is **easy to interact** with other users of this web site.

A **toll-free phone number** is available for assistance 24/7 and the **chat function** always comes up to help you through the process. The company cares about you and your satisfaction.

You turn on your computer and type the website URL into the search bar to open the store's web site. The main page displays men's and women's apparel. The clothing for women includes jackets, blazers, dresses, shirts, T-shirts, knitwear, pants, jeans, skirts, shorts and shoes. The men's clothing section has coats, jackets, blazers, suits, knitwear, pants, jeans, shirts, T-shirts, polos and shoes. You click on the appropriate category to bring down the menu and then on T-shirts to take you to the product page.

The site presents you with options that you like because you have purchased items in the past and the site is personalized for you.

A simple cotton T-shirt appears at the top of the page and you examine the various color options. After choosing the T-shirt style, you pick the color and size and then add it to the shopping cart, which is located on the top right corner of the website.

You check out and enter your shipping details on the form below. You choose delivery in 2-3 business days. You enter your credit card number to pay for the T-shirt. Your information is automatically entered so that your loyalty points are tallied for future free offers and deals. You close the website.

CONTROL

Imagine that today you decide to buy a T-shirt online.

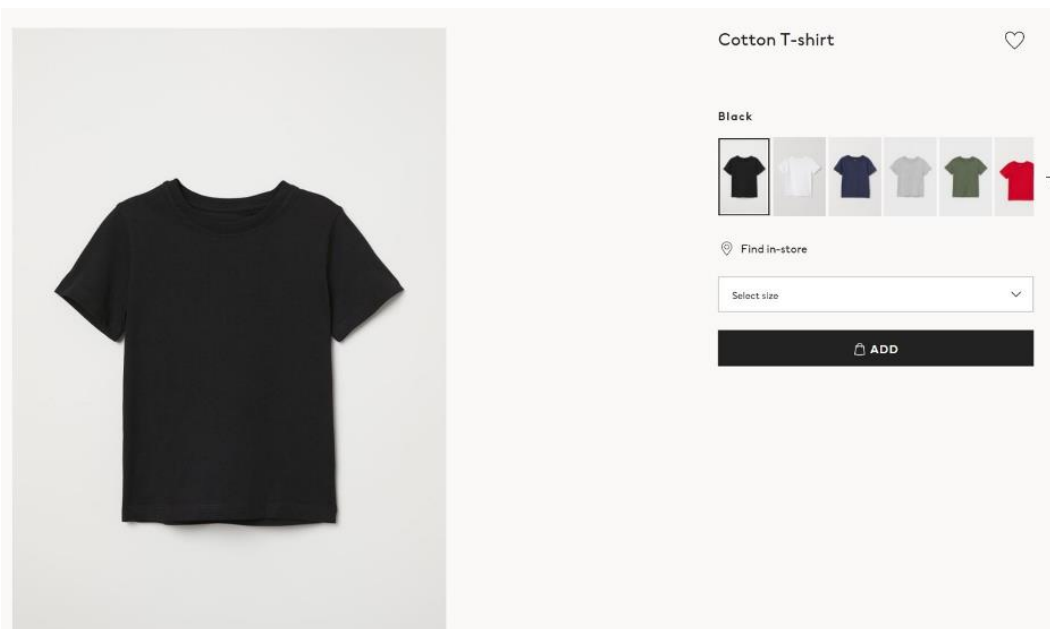
You decide to buy it from a typical online store.

You turn on your computer and type the website URL into the search bar to open the store's web site. The main page displays men's and women's apparel. The clothing for women includes jackets, blazers, dresses, shirts, T-shirts, knitwear, pants, jeans, skirts, shorts and shoes. The men's clothing section has coats, jackets, blazers, suits, knitwear, pants, jeans, shirts, T-shirts, polos and shoes. You click on the appropriate category to bring down the menu and then on T-shirts to take you to the product page.

A simple cotton T-shirt appears at the top of the page and you examine the various color options. After choosing the T-shirt style, you pick the color and size and then add it to the shopping cart, which is located on the top right corner of the website.

You check out and enter your shipping details on the form below. You choose delivery in 2-3 business days. You enter your credit card number to pay for the T-shirt. You close the website.

Appendix 2. Images for Both Conditions



Appendix 3. Measure Items

Relationship Manipulation Check

Friendly-Unfriendly

Fair-Unfair

Unselfish-Selfish

Equal power-Unequal power

Cooperative-Uncooperative

Compatible with my goals-Incompatible with my goals

Formal-Informal

Harmonious-Clashing

Close-Distant

Intense-Superficial

Trust

The site appears to be more trustworthy than other sites I have visited.

The site represents a company or organization that will deliver on promises made.

My overall trust in the site is high.

My overall believability of the information on this site is high.

My overall confidence in the recommendations on this site is high.

Loyalty

I would purchase an item from this store again.

I would recommend this site to a friend.

I am comfortable providing financial and personal information on this site.

I will bring my business to a competitor (neg.)

I would bookmark this site.

I would register at this site.

Satisfaction

“How do you feel about the t-shirt you bought the shirt?”

Good-bad, Pleased-displeased, Happy-sad, Contented-disgusted, Satisfied-dissatisfied

“How do you feel about the company from which you bought the shirt?”

Good-bad, Pleased-displeased, Happy-sad, Contented-disgusted, Satisfied-dissatisfied

“How do you feel about the relationship you have with the company from which you bought the shirt?”

Good-bad, Pleased-displeased, Happy-sad, Contented-disgusted, Satisfied-dissatisfied