

**RESEARCH ARTICLE**

# Preventing shoplifting: Exploring online comments to propose a model

Pradeep K. Korgaonkar<sup>1</sup> | John T. Gironda<sup>2</sup> | Maria Petrescu<sup>3,4</sup> | Anjala S. Krishen<sup>5</sup>  | Tamara F. Mangleburg<sup>1</sup>

<sup>1</sup>Department of Marketing, Florida Atlantic University, Boca Raton, Florida

<sup>2</sup>Huizenga College of Business and Entrepreneurship, Department of Marketing, Nova Southeastern University, Fort Lauderdale, Florida

<sup>3</sup>CEREFIGE Laboratory, Department of Marketing, ICN Business School Artem, Nancy, France

<sup>4</sup>Department of Marketing, Colorado State University Global, Aurora, Colorado

<sup>5</sup>Department of Marketing and International Business, University of Nevada, Las Vegas, Nevada

**Correspondence**

Anjala S. Krishen, Department of Marketing and International Business, University of Nevada, 4505 Maryland Parkway, Las Vegas, NV 89154.

Email: anjala.krishen@unlv.edu

**Abstract**

In recent years, the marketing literature has expended considerable effort to understand and theorize consumer misbehavior. However, scant research theoretically explores shoplifting. This is surprising, as currently, the annual cost of shoplifting is close to \$50 billion in the United States. Utilizing a mixed-methods approach, we conduct two studies. Study 1 is a qualitative content analysis of online consumer discussions with regard to shoplifting. Study 2 is an empirical examination that uses a US national sample of  $n = 1,001$  consumers; it is designed to test specific hypotheses regarding antecedents to consumers' intentions to shoplift using an interdisciplinary theoretical framework from criminology, psychology, and marketing. The model integrates research from these different disciplines to improve our understanding of shoplifting by offering avenues to tackle it that supersede traditional security measures in retail. The integrated conceptual framework extends the theory of planned behavior and routine activity theory in understanding the behavioral intentions behind shoplifting. The results show that the suitability of shoplifting targets, offender motivation, and the absence of capable guardians affect potential offenders' attitudes, subjective norms, and confidence in their ability to shoplift, which, in turn, all influence the intention to shoplift. The results contribute to our understanding of shoplifting and provide implications for retail practitioners over and above merely augmenting store security.

**KEYWORDS**

consumer misbehavior, consumer psychology, consumer theft, criminology, retail theft, shoplifting, theory of planned behavior

**1 | INTRODUCTION**

Each year, individuals shoplift billions of dollars' worth of products in the United States. The National Retail Security Survey, which is conducted annually by the National Retail Federation trade group, found that the loss of inventory from stores due shoplifting and employee theft cost the US retail industry almost \$50 billion in 2016, with the trade group estimating an average cost per shoplifting incident of \$800 (Reilly, 2017). Potdar, Guthrie, and Gnoth (2018) also indicate that supermarkets experience shrinkage and face

substantial financial losses caused by shoplifting, despite investing in formal security measures. Therefore, traditional security measures alone are not sufficient to prevent shoplifting.

Furthermore, as per the National Association for Shoplifting Prevention (NASP), one out of 11 consumers in the nation is a shoplifter. According to the Global Retail Theft Barometer, the cost of total global shrinkage in the years 2014 and 2015 was \$123.4 billion, and shoplifting accounted for 38%, or \$47 billion, of that (Deyle, 2015). Shoplifting is a crime that affects society as a whole. It decreases the profitability of affected stores and may threaten the

survival of many of them. Moreover, NASP (2019) studies indicate that shoplifters steal from all types of retail venues, such as department stores, drug stores, supermarkets, and small shops. Thus, each of these types of merchants has a vested interest in curbing shoplifting.

Shoplifting not only affects the offender, but it also adds costs for consumers, as retailers raise prices to cover their expenses, and communities lose revenues due to reductions in sales taxes. Additionally, there are also costs related to law enforcement, such as the police and the court system. The NASP (2019) studies also revealed that this cost is around \$13 billion. Additionally, in most cases, shoplifters steal for personal reasons rather than mental illnesses such as kleptomania (Blum, Odlaug, Redden, & Grant, 2018). Moreover, only a small percentage (3%) of shoplifters are professionals, who are termed “boosters” and steal for profit. Therefore, most shoplifters are not career criminals. So naturally, the question arises as to why average decent citizens, who do not have a history of illegal behavior, engage in shoplifting.

In many retail establishments, there are warnings posted to prevent shoplifting, such as hidden cameras and undercover security personnel. Despite these actions by retailers, the level of shoplifting continues to grow. As there is no demographic profile of a typical shoplifter, it is hard to prevent these activities. Most shoplifters fit the profile of the community where the store is located.

The current article focuses on understanding consumers' intentions to shoplift. Surprisingly, though considerable research over the years in marketing and other areas has focused on understanding desirable consumer behavior, it has devoted far less attention to understanding undesirable behavior, such as shoplifting (e.g., Vermeir, de Bock, & van Kenhove, 2017). Additionally, although a number of published studies address the topics of consumer misbehavior, consumer dysfunctional behavior, and deviant consumer behavior (Dootson, Lings, Beatson, & Johnston, 2017; Fukukawa, Zaharie, & Romonti-Maniu, 2018; Yaprak & Price, 2019; Yang, Algesheimer, & Dholakia, 2017), only a few research articles in marketing have focused on understanding consumers' intention to shoplift (e.g., Babin & Babin, 1996; D. Cox, Cox, & Moschis, 1990; Vermeir et al., 2017). This is surprising as dollar-wise shoplifting occupies the largest and most significant part of consumer misbehavior. Thirty percent of shoppers engage in some form of shoplifting (Bai, Wu, & Cheung, 2019). In comparison, many studies devoted to consumer misbehavior focus on issues such as embarrassment during service encounters, rudeness of customers, keeping too much change, and other issues that are less damaging to the economy than shoplifting. Moreover, not only are the studies on shoplifting, few and most of them now dated, many are based on ad hoc theoretical and conceptual underpinnings that limit their contributions to the understanding as well as possible prevention of shoplifting. Studies also show the complexity of these types of consumption-related crimes, including psychological, moral, and financial aspects. Therefore, the purpose of this study is to provide a conceptual framework that identifies the antecedents to behavioral intentions to shoplift.

Our study design is derived from two key theories, namely routine activity theory (RAT) and the theory of planned behavior (TPB). RAT posits that crime is the result of ordinary, everyday (i.e., routine) activities and comes from the criminology literature (Cohen & Felson, 1979). The three main foci of RAT are (a) the presence of suitable targets, (b) the absence of capable guardians, and (c) motivated offenders. The central premise of RAT is that crime occurs when a motivated offender is presented with a suitable target in an environment where there is an absence of capable guardians. The other main theoretical lens for our study is the TPB, which originates from the psychology literature (Ajzen, 1985). The TPB has three main constructs that influence an individual's intention to engage in a behavior. Those constructs are (a) attitude, (b) subjective norms, and (c) perceived behavioral control. Both of these theories are applicable to shoplifting as their respective constructs help explain the decision-making behind it.

Our framework represents an extension of the TPB by integrating it with RAT to develop a better understanding of shoplifting. This integration should be beneficial as the RAT constructs serve as hypothesized antecedents to the TPB constructs in our framework. Further, this integration not only helps with an examination of the effect of shoplifting attitudes, perceived behavioral control, and subjective norms on shoplifting intentions, but also provides a deeper understanding of shoplifting, as hypothesized antecedents to these constructs will also be examined. Our model contributes to both theory and practice, as we demonstrate concepts that can be used to affect the various constructs in the TPB that ultimately reduce or mitigate shoplifting intentions. Additionally, we test whether the TPB constructs serve as mediators between the RAT variables and shoplifting intentions, which represents another contribution of our study. This conceptual framework was initially developed from a qualitative study (Study 1) and then tested via an empirical quantitative study (Study 2). Further details on this conceptual framework and both of these studies will be discussed in subsequent sections.

The remainder of the paper is organized as follows. First, we start with an exploratory qualitative analysis study of consumer discussions regarding shoplifting. Next, we provide a short overview of the conceptual framework and then present hypotheses related to RAT and TPB. We then review and integrate past published research as it relates to the current study. Additionally, given the small number of past studies on shoplifting, we have also incorporated research from the consumer misbehavior literature as we develop our study's hypotheses. This is followed by a partial least squares (PLS) structural equation modeling analysis, a discussion of the results, their implications, and conclusions.

## 2 | QUALITATIVE STUDY 1

We first performed an exploratory netnographic qualitative analysis study that uses consumer discussions about shoplifting from the “legal advice” section of the social media site Reddit. Reddit is a social news aggregation, web content-rating and discussion website, where millions

of people around the world use it to post, vote, and comment in communities organized around their interests. According to [www.reddit.com](http://www.reddit.com) (2019), it has approximately 330 million active monthly users and is ranked among the top five most visited websites in the United States. We downloaded and analyzed 100 consumer posts asking for advice from their peers regarding problems with shoplifting. We also downloaded approximately 1,500 comments related to these posts. The consumer posts and advice were analyzed via a lexical co-occurrence content analysis using the Leximancer software program. Leximancer uses a relatively new method for transforming lexical co-occurrence information from natural language into semantic patterns in an unsupervised manner. It is an unguided content analysis emulator that replaces manual coding procedures with algorithms, machine learning, and statistical processes (Krishen, Berezan, & Raab, 2019; Smith & Humphreys, 2006).

The results of this analysis show that the central concepts present in the discussions arose after the initial post was published. Reddit users focused not only on the legal side of shoplifting but also discussed the relation between acts and consequences. The findings of this netnographic study indicate three essential concepts: lawyer, guilty, and police. The most significant major theme, lawyer, is linked with other key concepts such as advice, work, criminal, and court. This theme appears to tie into the idea that shoplifters may be capable of hiring a lawyer, an action they can control, and potentially avoid a criminal record. The next major one is guilty, which connects to concepts such as community, worth, and jail. This theme encompasses a feeling that is related to the self, hence the concept of worth, which is semantically connected. The last major theme is police, which also coexists with pay; this theme represents the systems and subcultures within which individuals live their daily lives and the norms of behavior that are instilled by groups such as the police.

Overall, the findings of the qualitative study emphasize a focus by consumers on elements from both the criminology area (RAT) and the consumer behavior side (TPB), such as the issues of guardianship, attitudes, legal and financial penalties, control, and subjective norms related to family and friends. In particular, the guilty theme ties into the individual attitude, the lawyer theme relates to the control that the shoplifter can exert on his/her situation, and the police theme relates to normative behavior or subjective norms. These three elements tie into the consumer behavior perspective through the TPB (Smith et al., 2008; Tonglet, 2002) to offer a broader and more complex framework of the shoplifting phenomenon. Given these results, both RAT and the TPB are appropriate theoretical frameworks for further use in our follow-up empirical model for Study 2.

### 3 | CONCEPTUAL FRAMEWORK

In this section, we build our conceptual framework based on RAT and the TPB. In recent years, there has been an increased interest in studying consumer misbehavior, although not explicitly shoplifting, from either a psychological or a criminological perspective, or as consumer behavior (Daunt & Greer, 2017; Moschis, 2017). As such, the

present study combines the criminology perspective, by using RAT (Cohen & Felson, 1979), with TPB. Additionally, to further examine the combination of RAT and TPB, our conceptual framework also tests for the presence of mediation between the TPB constructs (attitude, subjective norms, and perceived behavioral control) and the RAT constructs (suitable targets, capable guardians, and motivated offenders) respective relationships with shoplifting intentions. The findings from the marketing literature are integrated into the framework as well. The broad elements of the proposed conceptual framework were validated in Study 1, the qualitative exploratory analysis.

#### 3.1 | Routine activity theory

Cohen and Felson (1979) developed the RAT to explain why criminals engage in unlawful conduct. A fundamental aspect of RAT is that crime is examined as a routine activity that occurs when likely offenders are presented with available opportunities in their environment. The central premise of the RAT explanation revolves around the presence of suitable targets, the absence of capable guardians, and a highly motivated offender. The following sections explain these constructs in further detail and provide research hypotheses for our framework. Cohen and Felson (1979) developed the RAT to explain why criminals engage in unlawful conduct. A fundamental aspect of RAT is that crime is examined as a routine activity that occurs when likely offenders are presented with available opportunities in their environment. The central premise of the RAT explanation revolves around the presence of suitable targets, the absence of capable guardians, and a highly motivated offender. The following sections explain these constructs in further detail and provide research hypotheses for our framework.

#### 3.2 | Presence of suitable targets

Suitable targets have been defined in different ways, focusing on the target's value, such as individuals possessing money or other attractive goods for criminals. The current study extends this concept to the selection of certain types of retail outlets instead of individuals inviting the attention of offenders. As noted by Cohen and Felson (1979), spaces in the sale of consumer goods could lead to criminal opportunities. It reflects the notion of physical space articulated by the RAT theory. Shoplifters steal from all types of stores, but they mainly target those where the products they desire are available as well as those in which the chances of their getting caught are relatively lower. In retail settings, the suitable targets for shoplifting would also be stores that lack adequate security, stores that are open during the wee hours of the night, and stores with a minimum number of employees.

Many retailers try to curtail stealing by investing in security hardware such as closed-circuit televisions, motion detector devices, and surveillance cameras. However, without the presence of such visible and conspicuous actions, a prospective shoplifter may perceive that stealing from these establishments is easy as they provide the shoplifter with more potential opportunities to do so (Kajalo & Lindblom, 2010). The attitudes of recent shoplifters are also

related to perceptions that shoplifting is a crime with many opportunities, which contributes to their motivations (Tonglet, 2002). Therefore, this increase in perceptions of shoplifting opportunities should serve to enhance the suitability of potential shoplifting targets, which in turn should increase attitudes, subjective norms, and perceived behavioral control concerning shoplifting.

**H1a:** *Higher target suitability leads to higher attitudes toward shoplifting.*

**H1b:** *Higher target suitability leads to higher perceived subjective norms toward shoplifting.*

**H1c:** *Higher target suitability leads to higher perceived behavioral control of shoplifting.*

### 3.3 | Absence of capable guardians

According to RAT, capable guardians include persons and different factors able to prevent crime from happening, either by being present or by other forms of action (Cohen & Felson, 1979). The lack of capable guardians can include the absence of parents, family members, or law enforcement that can prevent criminal acts (Dilmeri, King, & Dennis, 2017; Mangleburg, Doney, & Bristol, 2004; Pratt & Cullen, 2005). Studies have emphasized various social factors that undermine the countermeasures of shoplifting, such as a general acceptance of rule-breaking and lack of police interest in pursuing this kind of crime. Also, there are differences in the shoplifting attitudes among retailers, which leads to the use of different prevention measures.

In the retail environment, permissive parents and friends may be tolerant of criminal behavior. Additionally, this lack of capable guardianship could lead individuals to fall in with a dangerous crowd, which studies argue relates to an increase in deviant behaviors (Kaplan, Johnson, & Bailey, 1987; Sampson & Laub, 1997). Given these circumstances and the RAT framework, we hypothesize that consumers who are in an environment with lower guardianship capabilities will have higher levels of positive attitudes, higher perceived subjective norms, and higher perceived control towards shoplifting.

**H2a:** *Lower guardianship capability leads to higher consumer attitudes toward shoplifting.*

**H2b:** *Lower guardianship capability leads to higher perceived subjective norms toward shoplifting.*

**H2c:** *Lower guardianship capability leads to higher perceived control of shoplifting.*

### 3.4 | Motivated offenders

In RAT, a motivated offender is an individual with a desire to commit a crime (Cohen & Felson, 1979). In many instances, the offenders are

looking to steal so-called hot products, as there is a secondary market in which to sell these goods (Clarke & Webb, 1999). Clarke and Webb indicate common features of hot products that shoplifters target as those that are (a) easy to conceal, (b) easy to remove from a shelf, (c) readily available, (d) valuable, (e) enjoyable, and (f) disposable. A retail entity offering such choices may increase the motivation for a shoplifter to steal. Therefore, in this case, shoplifting serves as an outlet for dealing with day-to-day frustrations of wanting products and being denied the ownership of them. Under such circumstances, offenders believe they have no choice but to shoplift, thus increasing their motivation to do so. Although they know shoplifting is wrong, they justify it by convincing themselves that they will never be caught. According to statistics published by NASP (2019), shoplifters believe they are caught an average of only once in every 48 times they steal and are rarely charged even after being apprehended. The study by A. D. Cox, Cox, Anderson, and Moschis (1993) reported thrill-seeking as one of the essential motives for shoplifting, as did the study by Babin and Babin (1996), that documented the influence of fear and power motivations. Thus, economic and noneconomic motives serve to affect attitudes, subjective norms, and perceived behavioral control concerning shoplifting.

**H3a:** *Higher motivation to steal leads to higher attitudes toward shoplifting.*

**H3b:** *Higher motivation to steal leads to higher perceived subjective norms toward shoplifting.*

**H3c:** *Higher motivation to steal leads to higher perceived behavioral control of shoplifting.*

### 3.5 | The theory of planned behavior

TPB is based on the premise that behavioral decisions are not spontaneous but are the result of a reasoned process that influences behavior, even indirectly, through attitudes, subjective norms, and perceptions of control over the behavior (Ajzen, 1985; Smith et al., 2008). The TPB contends that a person's behavior is rational, and the factors that influence the intentions will provide an understanding of the action. Thus, the theory is compatible with rational choice theories of crime. By investigating RAT, a rational choice theory, with the TPB, it will further improve our understanding of individuals' intentions to shoplift.

### 3.6 | Consumer attitudes

In the shoplifting context, a pioneering study by Wilkes (1978) reported attitudes toward fraudulent activities and the degree of participation by consumers. The study investigated 15 different fraudulent shoplifting situations and found a relationship between attitude and involvement in shoplifting activities. Research also found that psychological obstructionism and disaffection with service are significantly associated with the severity of deliberately dysfunctional

customer acts (Reynolds & Harris, 2009). On the basis of previous research studies that examined the relationship between attitudes and behavior in the social psychology literature, we hypothesize that individuals who view the behavior of shoplifting more positively will also be more likely to engage in it. In addition, we also hypothesize that attitudes toward shoplifting will serve to mediate the relationship between the RAT constructs and shoplifting intentions.

**H4a:** *Positive attitudes toward shoplifting lead to higher intentions to shoplift.*

**H4b:** *Positive attitudes toward shoplifting mediate the relationship between suitable targets and intentions to shoplift.*

**H4c:** *Positive attitudes toward shoplifting mediate the relationship between guardianship capability and intentions to shoplift.*

**H4d:** *Positive attitudes toward shoplifting mediate the relationship between motivated offenders and intentions to shoplift.*

### 3.7 | Subjective norms

The second variable in the TPB model is the social factor of subjective norms. Subjective norms capture the perceived social pressure to engage or not to engage in shoplifting. The subjective norms component of the TPB is an injunctive norm because it is based on perceived social pressures from reference groups such as family or friends to perform a specific behavior, with potential rewards and punishments for engagement or nonengagement in that behavior (Dilmeri et al., 2017; Smith et al., 2008).

In the Babin and Babin (1996) study, shoplifting intentions are higher when individuals perceive shoplifting to be more culturally acceptable or equitable. In addition, many shoplifters (89%), especially younger ones, report that they not only know other shoplifters but that they (66%) associated with them (NASP, 2019). Thus, the simple presence of friends who also shoplift could offer an incentive or perceived permission for individuals to engage in shoplifting. Moreover, a shoplifting study of adolescents reports that the influence of friends is one of four critical motivating factors of young shoplifters (D. Cox et al., 1990). A subsequent study confirms the influence of friends as well as the effect of family members on the shoplifting behavior of adolescent consumers (A. D. Cox et al., 1993). Beck and Ajzen (1991), in their analysis that predicts dishonest action, using the TPB, consider the influence of people relevant to the individual in measuring subjective norms and find it to be significant in predicting fraudulent behavior.

**H5a:** *Positive subjective norms toward shoplifting lead to higher intentions to shoplift.*

**H5b:** *Subjective norms mediate the relationship between suitable targets and intentions to shoplift.*

**H5c:** *Subjective norms mediate the relationship between guardianship capability and intentions to shoplift.*

**H5d:** *Subjective norms mediate the relationship between motivated offenders and intentions to shoplift.*

### 3.8 | Perceived behavioral control

Perceived behavioral control refers to an individual's perceived ease or difficulty in carrying out a behavior in question (Ajzen, 1985). For instance, individuals may be highly motivated to engage in a particular behavior but may lack the faith in their own abilities to successfully perform those behaviors, thus lowering their intentions to do so. In shoplifting situations, individuals are generally aware of the assessment of their own abilities to carry out the behavior as well as the potential consequences of being caught. Shoplifting, as opposed to robbery, requires a low level of skill and has a low likelihood of being caught (one in 11 chance; NASP, 2019).

Thus, the low likelihood of getting caught may lead shoplifters to believe that they have more behavioral control over their shoplifting abilities. Situations in which individuals perceive a lower chance of being caught should lead to increased perceived control over the stealing behavior. Furthermore, the perception of the ease with regard to engaging in shoplifting should lead to higher shoplifting intentions. For example, items left on a retail shelf should be perceived as easier to steal than ones locked inside a display case, which may then lead an individual to believe they have a higher degree of perceived behavioral control (i.e., skills and abilities) with regard to shoplifting. Therefore, we hypothesize that perceived behavioral control will be positively related to shoplifting intentions and will also serve to mediate the relationship between the three RAT constructs and shoplifting intentions.

**H6a:** *Higher perceived behavioral control of shoplifting lead to higher intentions to shoplift.*

**H6b:** *Perceived behavioral control mediates the relationship between suitable targets and intentions to shoplift.*

**H6c:** *Perceived behavioral control mediates the relationship between guardianship capability and intentions to shoplift.*

**H6d:** *Perceived behavioral control mediates the relationship between motivated offenders and intentions to shoplift.*

## 4 | QUANTITATIVE STUDY 2

### 4.1 | Measurement scale development and pretests

A preliminary survey instrument was created by consulting with the previously discussed Leximancer findings as well as the established literature in the criminology, psychology, and marketing areas. There was no precedent for published scale items specific to the

measurement of the three constructs from RAT that applied specifically to shoplifting. Therefore, the following procedures were undertaken in accordance with recommended guidelines for appropriate scale development processes by Hinkin (1998) and Churchill (1979). First, the items were developed perusing the literature on RAT and using items from established measurement scales applied in many other settings such as cyberstalking (Reyns, Henson, & Fisher, 2011), malware activities (Bossler & Holt, 2009), software piracy (Petrescu, Gironda & Korgaonkar, 2018; Tan, 2002), and robbery (Spano & Nagy, 2005). These were adapted to reflect the shoplifting context of our study. *Attitude toward shoplifting* was measured using a three-item scale adapted from previous studies (Babin & Babin, 1996). *Subjective norms* were assessed with a three-item scale adapted from previous studies (Beck & Ajzen, 1991). *Perceived behavioral control* was measured with four items also adapted from previous studies (Beck & Ajzen, 1991). All items were measured using five-point Likert type scales with descriptive anchors such as (1) "Strongly disagree" to (5) "Strongly agree." Finally, *shoplifting intention* was measured using a six-item scale that captures six activities adapted from its legal definition (Kallis & Vanier, 1985). This definition covers willfully concealing or taking possession of items being offered for sale without paying the rightful owner (typically the store) the purchase price. The six items were measured using a scale of (1) "Extremely unlikely" to (5) "Extremely likely."

Next, a pretest focus group was conducted with 30 college students to review our preliminary survey instrument's items for clarity, modify any poorly written questions, and add further items to the initial survey before the pilot study. Following those modifications, a pilot study was conducted to further assess the quality of our measurement scales and ensure that participants could complete the survey in a timely manner. This pilot study was administered to a different sample of  $n = 144$  students enrolled in various undergraduate and graduate programs at two urban universities in the southeastern part of the United States. Following the pretest and pilot studies, an exploratory factor analysis (EFA) was conducted using principal component analysis and varimax rotation, the results of which showed that the items loaded onto their respective constructs as expected. The scales that made up our final questionnaire are in the appendix. After establishing the validity and reliabilities of the pretested instrument, the final survey was administered to a national panel sample of 1,001 adults in the United States obtained from Qualtrics. Table 1 displays the descriptive characteristics of the study's sample.

## 4.2 | Research design and procedure

Data for this study were collected via a self-administered online questionnaire that was available for participants to fill out on their own time and required no more than 15 min to complete. Several precautions were taken to improve the data quality and reduce the problems of respondent inattention, response bias, and common method variance. These included notifying participants that their privacy and anonymity would be ensured, that there were no right or

wrong answers, using established scales, presenting items in random order, and using reversely coded items (Chang, van Witteloostuijn, & Eden, 2010). Also, attention filters were used to eliminate surveys in which it seemed that participants were not paying attention to their responses. Questions were also presented in groups that took up a minimal amount of screen space and did not require additional scrolling. Furthermore, as previously mentioned, we conducted both a pretest and a pilot study to ensure that participants could complete the survey promptly, assess the initial quality of our instrument scales, and make any refinements as needed (MacKenzie & Podsakoff, 2012).

To improve the validity and honesty of answers given the sensitive nature of the topic, several precautions were taken. Subjects were given an introduction to the study and asked to indicate if they or a person they may be acquainted with had the opportunity to participate in one or more activities related to shoplifting. Only those who responded affirmatively to at least one of these activities proceeded to fill out the survey. This way, the study captured only those individuals who had shoplifted themselves or knew an acquaintance who had shoplifted in the past. In addition, as the nature of our study's topic was sensitive, items for certain constructs were phrased in the form of third-person statements (i.e., "Shoplifters") rather than in first person (i.e., "I"). Research has shown that this type of framing regarding potentially sensitive issues helps to obtain the most honest responses possible and reduces social desirability bias, as individuals do not have to admit to anything themselves to answer the questions (cf. Dickel & Graeff, 2018).

**TABLE 1** Sample characteristics

	Frequency	Percentage
Gender		
Male	531	53.05
Female	464	46.35
Chose not to disclose	6	0.60
Age (years)		
18–24	215	21.49
25–34	331	33.07
35–44	187	18.69
45–54	116	11.60
55–64	107	10.70
≥65	45	0.45
Income (\$)		
<30,000	336	33.56
30,000–49,999	238	23.78
50,000–79,999	244	24.38
79,999–99,999	81	8.09
≥100,000	102	10.19
Education		
≤12th grade	30	3.00
High school graduate	239	23.88
Some college	316	31.57
Associate's degree	109	10.89
Bachelor's degree	238	23.78
Master's degree	61	6.09
Doctoral degree	8	0.80

**TABLE 2** Measurement model statistics

	Cronbach's $\alpha$	Composite reliability	Average variance extracted (AVE)
Guardianship capability	0.582	0.775	0.537
Shoplifting attitude	0.836	0.898	0.745
Shoplifting intentions	0.922	0.939	0.721
Motivated offender	0.789	0.857	0.547
Perceived behavioral control	0.727	0.830	0.550
Subjective norms	0.809	0.887	0.723
Suitable targets	0.821	0.875	0.584

Third-person techniques help reduce the psychological barriers of respondents and help minimize refusal to answer and desirability bias, by framing the questions in an impersonal way (Mitchell, Balabanis, Schlegelmilch, & Cornwell, 2009). Finally, given that the study topic might cause concern for some participants, they were also informed that their privacy, confidentiality, and anonymity would be ensured, that the study was for academic purposes only, and were given the name of the university, as well as the telephone number of the IRB coordinator. These precautions plus a national sample give high validity to the study's findings.

### 4.3 | Measurement model evaluation

The primary method of data analysis for our study's proposed research model was carried out using the SmartPLS software package via PLS structural equation modeling. We employed PLS because of its causal-predictive approach to structural equation modeling (SEM), as well as PLSpredict, that is a holdout sample-based procedure that generates case-level predictions on an item or a construct level (Shmueli et al., 2019). Following another EFA, we used the two-step model building approach recommended by Anderson and Gerbing (1988). Therefore, before testing the structural model with the hypothesized relationships between latent constructs, the measurement model was first analyzed via confirmatory factor analysis (CFA). During this measurement model, evaluation examinations were conducted to assess (a) convergent validity, (b) discriminant validity, and (c) model fit. Convergent validity was assessed by examining (a) the significance of the loadings between observed variables and their corresponding latent constructs, (b) the reliability of each of the measurement scales, and (c) the average variance extracted (AVE) by each construct.

The results of the convergent validity assessment provided support for the measurement model. All indicators significantly loaded onto their respective latent constructs at the 0.01 level of significance. Additionally, all standardized factor loadings exceeded the recommended 0.60 value (Hair, Hult, Ringle, Sarstedt, & Thiele, 2017). Next, as shown in Table 2, the reliability analysis of each of the measurement scales demonstrated that all scales except for guardianship capability generated a Cronbach's  $\alpha$  coefficient greater than the generally agreed-upon value of .70 (Hair, Black, Babin, & Anderson, 2010). Though the guardianship capability scale's

Cronbach's  $\alpha$  was under .70, considering the early stages of the research on combining these theories and the number of items, it is also acceptable, especially in convergence with an acceptable composite reliability value (Hair et al., 2017). The composite reliability of each construct was assessed and found to exceed the suggested acceptable benchmark of above .70 (Barclay, Higgins, & Thompson, 1995). Further, the AVE values for each construct were all above the recommended 0.50 level (Hair et al., 2017).

Table 3 displays the correlations between each of the constructs. To assess discriminant validity, the square root of AVE is reported in the diagonal elements. As shown in the table, when we compare the diagonal and nondiagonal elements, we see that the square root of the average variance extracted for any particular construct is higher than the correlation between that construct and any other construct, thus providing evidence of discriminant validity.

The heterotrait–monotrait ratio presented in Table 4, representing correlations of the indicators across constructs measuring different phenomena, also showed the proper measures of discriminant validity among the variables of interest in the study (Hair et al., 2017).

The goodness-of-fit statistics for the measurement model were also quite favorable. The  $\chi^2$  to degrees of freedom ratio of 2.74 was under the suggested benchmark of <3.0 (Carmines & McIver, 1981). Furthermore, the normed fit index (NFI), non-normed fit index (NNFI), and comparative fit index (CFI) values were all greater than the recommended benchmark of 0.95 or higher (Hu & Bentler, 1999).

**TABLE 3** Correlation matrix

	1	2	3	4	5	6	7
1. INT	<b>0.85</b>						
2. ST	0.08	<b>0.76</b>					
3. GC	0.02	0.41	<b>0.73</b>				
4. MO	0.08	0.42	0.51	<b>0.74</b>			
5. ATT	0.25	-0.11	-0.21	-0.15	<b>0.86</b>		
6. SN	0.29	-0.15	-0.16	-0.15	0.50	<b>0.85</b>	
7. PBC	0.07	0.47	0.38	0.53	-0.13	-0.11	<b>0.74</b>

Note: The numbers in bold in the diagonal of the table represent the square root of the average variance extracted (AVE) calculation. Abbreviations: ATT, shoplifting attitude; GC, guardianship capability; INT, shoplifting intention; MO, motivated offender; PBC, perceived behavioral control; SN, subjective norms; ST, suitable targets.

**TABLE 4** Heterotrait–monotrait ratio

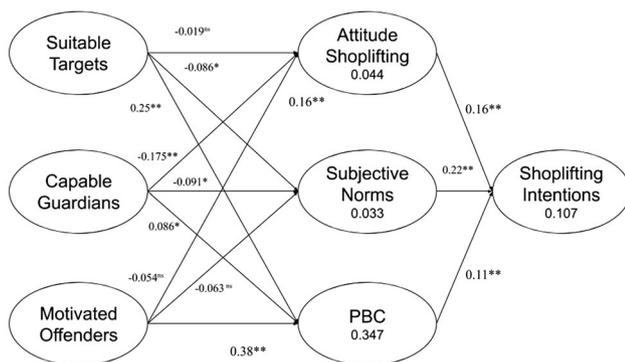
	Guardians	Shoplifting Attitude	Shoplifting Intentions	Motivated Offender	Perceived behavioral control	Subjective Norms
Guardianship capability						
Shoplifting attitude	0.267					
Shoplifting intentions	0.083	0.276				
Motivated offender	0.731	0.166	0.097			
Perceived behavioral control	0.559	0.164	0.099	0.698		
Subjective norms	0.230	0.592	0.317	0.181	0.140	
Suitable targets	0.592	0.128	0.096	0.512	0.568	0.182

Furthermore, the root mean square error of approximation for the model was 0.041 and the standardized root mean residual (SRMR) was 0.035, both of which were stronger than the recommended cutoffs of <0.10 (Browne & Cudeck, 1993) and <0.08 (Hu & Bentler, 1999) respectively. The SRMR for the model was 0.079, stronger than the recommended cutoff of <0.08. Given these results, we continued the analysis by using these measures in a PLS–SEM study.

#### 4.4 | Structural model and hypotheses testing

We employed the measures tested in the CFA in a PLS–SEM procedure. The results of the PLS model are presented in Figure 1 and Table 5. To test our study's hypotheses, we examined the significance of each path coefficient in the structural model.

The results of the PLS–SEM analysis showed an SRMR of 0.079 for the model, which was less than the recommended cutoff of <0.08 (Hu & Bentler, 1999). The rms  $\theta$ , another model fit index in PLS, for the model was 0.13, which was also within accepted limits (Henseler et al., 2014). Moreover, the predictive relevance indices RMSE, MAE, and MAPE, as well as  $Q^2$ , obtained in PLSpredict (Shmueli, 2019), are presented in Table 6, and shows lower values for the PLS model versus the latent Markov (LM) model, and values for  $Q^2$  that are higher than zero, which emphasizes good predictive power. Regarding each of the hypotheses, the results presented in Table 5 show support for almost all the hypothesized relationships, except for H1a,

**FIGURE 1** Study 2 PLS structural model results. PBC, perceived behavioral control; PLS, partial least squares

H3a, and H3b. Overall, the results show a significant relationship between the RAT variables and the TPB variables, with a subsequent effect on shoplifting intentions.

To test the hypothesized mediated effects, we performed an analysis of the specific and total indirect effects, as shown in Table 7. The results underline the role of each of the TPB variables as mediators between the criminology-related RAT and shoplifting intentions. The strongest mediated effect is presented by the absence of capable guardians variable on shoplifting intentions. At the same time, perceived behavioral control mediates the effect of all three RAT variables on behavioral intentions. The results are further discussed in the next section.

## 5 | DISCUSSION

### 5.1 | Key research findings and implications

The results reported above show a significant fit of the proposed conceptual model that confirms the applicability of combining RAT with TPB to explain behavioral intentions to shoplift, as nine of the main hypothesized direct effects were significantly supported by the national data. Also, the indirect effects show a significant role for the TPB variables as mediators. The main aim of this study was to understand and prevent shoplifting by building a conceptual model that integrates literature from marketing, criminology, and psychology through RAT, which had not yet been applied to study shoplifting. Additionally, the TPB constructs as mediators is again a new way of improving the understanding of shoplifting behavior. Largely, the study's results support the conceptual framework. The study also theoretically extends the TPB model and updates the RAT to the domain of the modern retail market.

The effect of shoplifting measured in terms of the loss of sales, loss of taxes, and higher prices for consumers is significant. The findings of this study generate several implications for retail management and paths toward reducing and curtailing shoplifting incidents. Many retailers already implement some of the suggestions related to store security issues encouraged by the presence of suitable targets. Thus, our discussion focuses on the findings not reported, investigated, or implemented yet.

**TABLE 5** PLS structural model results

	Relationship	Path Coef.	$f^2$	t Value	p Value
H1a	Suitable targets→Attitude Shoplift	-0.019	0.001	0.489	0.625
H1b	Suitable targets→Subjective Norms	<b>-0.086</b>	<b>0.006</b>	<b>2.152</b>	<b>0.032</b>
H1c	Suitable targets→PBC	<b>0.251</b>	<b>0.075</b>	<b>6.793</b>	<b>0.001</b>
H2a	Guardianship→Attitude shoplifting	<b>-0.175</b>	<b>0.022</b>	<b>4.276</b>	<b>0.001</b>
H2b	Guardianship→PBC	<b>0.086</b>	<b>0.008</b>	<b>2.524</b>	<b>0.012</b>
H2c	Guardianship→Subjective norms	<b>-0.091</b>	<b>0.006</b>	<b>2.181</b>	<b>0.029</b>
H3a	Motivated offenders→Attitude shoplift	-0.054	0.002	1.387	0.166
H3b	Motivated offenders→Subjective norms	-0.063	0.003	1.464	0.144
H3c	Motivated offenders→PBC	<b>0.383</b>	<b>0.154</b>	<b>10.591</b>	<b>0.001</b>
H4a	Attitude shoplift→Intentions shoplift	<b>0.161</b>	<b>0.022</b>	<b>4.146</b>	<b>0.001</b>
H5a	Subjective norms→Intentions Shoplift	<b>0.217</b>	<b>0.040</b>	<b>6.026</b>	<b>0.001</b>
H6a	PBC→Intentions shoplift	<b>0.110</b>	<b>0.013</b>	<b>3.760</b>	<b>0.001</b>

Note: Significant relationships are represented in bold.

Abbreviations: PBC, perceived behavioral control; PLS, partial least squares.

First, in many situations, security deterrents become ineffective as potential shoplifters can conduct surveillance of these systems to avoid detection (Johns, Hayes, Scicchitano, & Grottini, 2017). Second, there is also a possible negative side to store security measures as suggested in this study as well as a couple of other studies, similar to findings by Esmark, Noble, and Breazeale (2017) who found that an employee watching a customer in a store can cause an innocent customer to leave the store without making a purchase. Additionally, as the current study shows, one of the reasons for shoplifters to engage in criminal behavior is the feeling that punishment is easy to escape. This is also manifested in casing out stores that are easy targets because of inadequate security personnel or deficiencies in

training and protection strategies. Poorly trained security personnel and law enforcement officers could not only lead to increased theft, but also to false shoplifting accusations and criminal charges. A study reported by the Institute of Criminal Justice Training Reform (2016) finds that many states have undertrained officers. Hence, the mere presence of them does not deter shoplifters from committing the crime. This not only complicates the potential legal issue but also could lead to creating a “motivated shoplifter” in response to wrongful accusations and creating a community issue not unlike witnessed in recent media coverage of shoplifting accusations in St. Louis, MO (Haag, 2018). Because of situations like this one, a legal trend exists of customers filing a lawsuit against a retail store

**TABLE 6** Predictive relevance

	RMSE PLS	RMSE LM	MAE PLS	MAE LM	MAPE PLS	MAPE LM	Q2
Attitude1	1.093	1.091	0.875	0.865	33.198	32.613	0.074
Attitude3	0.828	0.835	0.544	0.554	20.279	20.584	0.018
Attitude2	0.831	0.832	0.557	0.568	20.100	20.323	0.008
Intentions5	1.233	1.235	0.993	0.995	41.390	41.102	0.000
Intentions2	1.311	1.316	1.085	1.093	46.237	46.207	0.002
Intentions4	1.307	1.313	1.076	1.091	45.816	45.909	0.001
Intentions1	1.309	1.315	1.096	1.111	45.459	45.671	0.004
Intentions6	1.226	1.231	1.006	1.011	40.025	39.958	0.001
Intentions3	1.397	1.402	1.265	1.262	54.822	54.425	0.002
PBC3	0.855	0.854	0.632	0.625	38.195	37.454	0.219
PBC4	0.823	0.824	0.620	0.617	37.299	36.907	0.206
PBC2	0.804	0.802	0.613	0.605	40.344	39.699	0.147
PBC1	0.856	0.860	0.631	0.633	41.625	41.682	0.132
Norms1	0.807	0.807	0.587	0.583	18.774	18.601	0.024
Norms2	0.807	0.809	0.601	0.599	18.881	18.741	0.027
Norms3	0.970	0.969	0.761	0.757	25.629	25.358	0.019

Abbreviations: MAE, mean absolute error; MAPE, mean absolute percentage error; PBC, perceived behavioral control; PLS, partial least squares; RMSE, root mean squared error.

**TABLE 7** Specific and total indirect effects

Relation	Means	SD	T statistic	p Value
Absence guardians→Intentions shoplift	-0.039	0.016	2.365	.018*
Absence guardians→Attitude shoplift→Intentions shoplift	-0.029	0.011	2.646	.008**
Absence guardians→PBC→Intentions shoplift	0.010	0.005	2.049	.041*
Absence guardians→Subjective norms→Intentions shoplift	-0.020	0.010	2.035	.042*
Motivated offenders→Intentions shoplift	0.019	0.018	1.081	.280
Motivated offenders→Attitude shoplift→Intentions shoplift	-0.009	0.007	1.266	.206
Motivated offenders→PBC→Intentions shoplift	0.042	0.012	3.556	.000**
Motivated offenders→Subjective norms→Intentions shoplift	-0.014	0.010	1.393	.164
Suitable targets→Intentions shoplift	0.006	0.016	0.365	.715
Suitable targets→Attitude shoplift→Intentions shoplift	-0.003	0.007	0.469	.639
Suitable targets→PBC→Intentions shoplift	0.028	0.009	3.118	.002**
Suitable targets→Subjective norms→Intentions shoplift	-0.019	0.010	1.948	.052

Note: Abbreviations: PBC, perceived behavioral control; SD, standard deviation.

\*Path is significant at  $p < .05$

\*\*Path is significant at  $p < 0.01$

because of being wrongfully accused of shoplifting. Although the statistics on wrongful accusations of innocent shoppers are hard to document, anecdotal evidence in the news media suggests it is a significant issue. The situation is especially relevant when many of the falsely accused individuals tend to be poor and/or ethnic minorities. This prejudice occurs despite all the empirical evidence suggesting that there is no universal or local demographic profile of shoplifters (NASP, 2019).

The current study asserts that retailers need to think out of the box and look at additional ways to consider the influence of other factors (such as the absence of capable guardians, perceived behavioral control, subjective norms, and motivated offenders) to reduce shoplifting. These measures should supplement existing store security measures. For example, the effect of subjective norms on behavioral intentions indicates that the retail industry may benefit from pursuing promotional strategies and tactics similar to those adopted by public service announcements for antismoking, anti-drinking and driving, and healthy lifestyle campaigns (e.g., Bui & Krishen, 2015). The well-known and successful promotional campaigns such as, “say no to drugs,” “friends don’t let friends drive drunk,” and the “Truth” antismoking campaign, could provide prototypes aimed at persuading shoppers to express their resentments to those among their friends or families who engage in shoplifting. A recent study shows the success of an experiment that uses antishoplifting fear appeals aimed at adolescents (Vermeir et al., 2017).

The absence of capable guardians factor suggests that stores may also consider offering financial or other types of psychological, intrinsic “incentives” to shoppers who assist in preventing shoplifting behavior. The current popular refrain “If you see something, say something,” could be easily adapted to fit into a store’s antishoplifting activities.

Finally, this study also suggests public policy issues related to how retailers could be challenged to get involved in improving the social responsibility profile of their presence in the local community. The recent steps taken by businesses such as Starbucks in providing antibias training to store employees and Walmart in offering tuition

assistance should serve to create more positive attitudes toward these retailers. These types of initiatives, in turn, can positively influence and discourage antisocial and/or criminal acts aimed at these companies. This way of thinking is in line with the recommendation made by Potdar et al. (2018) for preventing employee theft. By implementing excellent relations with customers as well as the community, businesses can create goodwill, which acts as an additional and positive deterrent. These are just a few examples of suggestions stemming from the results of our study that could be implemented to deter shoplifting before it happens. As stated earlier, it is more effective and less expensive to prevent shoplifting as opposed to prosecuting shoplifters.

## 5.2 | Limitations and directions for future research

Although a number of implications can be drawn from this study, its limitations should also be noted. For instance, further research should determine additional factors that could work with and enhance the ability of the TPB in predicting shoplifting intentions. In addition, as the study’s sample consisted of US residents only, the generalization of the findings to other countries is inappropriate. Therefore, the proposed model could be tested in a cross-cultural context to further understand its potential relevance (e.g., Fukukawa et al., 2018; Krishen & Hu, 2018). Furthermore, in terms of age and income levels of the study’s participants, Generation-X and low-income individuals were more heavily represented than other groups. This representation could affect the generalizability of the study’s results and thus, replication of the study with a diverse sample is recommended.

## 6 | CONTRIBUTIONS AND CONCLUSIONS

In conclusion, our study emphasizes that focusing on shoppers’ behavioral intentions and understanding the reasons for them, in

combination with criminology-related aspects, such as practices of prevention and deterrence, and target suitability increases the chances that shoplifting countermeasures will be more likely to work. The conclusions of our analysis emphasize the psychological and social aspects of shoplifting, which represents an overriding moral issue. Our findings show that RAT provides a simple and valuable insight into bolstering the usefulness of TPB. The three variables were significantly related to one or more of the explanatory variables proposed by the TPB in predicting shoplifting intentions. Furthermore, though research has proven that the RAT is applicable in explaining criminal attitudes in many minor and severe criminal situations; this study updates RAT as an additional set of explanatory variables to understand behavioral intentions indirectly via attitudes, perceived behavioral control, and subjective norms. Overall, this study contributes to the marketing and especially, the retailing research and practice by underlining the best theoretical and practical factors to consider regarding retail theft and potential preventative measures that stores can use in connection with consumers' routine activities.

The findings of the study also expand the attention from not only the shoplifter, but to their environment as well, including their targets (e.g., stores) and guardians (e.g., parents, family, and security personnel). On a practical level, in an era of weekly announcements of store closings by national retailers such as Sears, J.C. Penny, Macy's, lowering business costs caused by shoplifting could be a fruitful strategy for retailers to improve their profitability.

## ACKNOWLEDGMENT

The authors would like to thank Dr. Dhruv Grewal, Babson College, for his insightful feedback and suggestions on earlier versions of this manuscript.

## ORCID

Anjala S. Krishen  <http://orcid.org/0000-0002-4749-5130>

## REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *From cognition to behavior* (pp. 11–39). Heidelberg, Germany: Springer.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
- Babin, B. J., & Babin, L. A. (1996). Effects of moral cognitions and consumer emotions on shoplifting intentions. *Psychology and Marketing*, 13(8), 785–802.
- Bai, Yin, Wu, W.-P., & Cheung, M. F. Y. (2019). How personality traits, employee incompetence and consumer similarity influence shoplifting behavior. *Journal of Consumer Marketing*, 36(3), 379–392.
- Barclay, D., Higgins, C., & Thompson, R. (1995). The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology studies*, 2(2), 285–309.
- Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, 25(3), 285–301.
- Blum, A. W., Orlaug, B. L., Redden, S. A., & Grant, J. E. (2018). Stealing behavior and impulsivity in individuals with kleptomania who have been arrested for shoplifting. *Comprehensive Psychiatry*, 80, 186–191.
- Bossler, A. M., & Holt, T. J. (2009). On-line activities, guardianship, and malware infection: An examination of routine activities theory. *International Journal of Cyber Criminology*, 3(1), 400.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models*. Newbury Park, CA: Sage.
- Bui, M., & Krishen, A. S. (2015). So close yet so far away: The moderating effect of regulatory focus orientation on health behavioral intentions. *Psychology & Marketing*, 32(5), 522–531. <https://doi.org/10.1002/mar.20797>
- Carmines, E. G., & McIver, J. P. (1981). Race, intelligence and political efficacy among school children. In G. W. Bohrnstedt & E. F. Borgatta (Eds.), *Social measurement: Current issues* (pp. 436–115). Beverly Hills, CA: Sage Publications, Inc.
- Chang, S.-J., van Witteloostuijn, A., & Eden, L. (2010). From the editors: Common method variance in international business research. *Journal of International Business Studies*, 41(2), 178–184.
- Churchill, G. A., Jr (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73.
- Clarke, R. V. G., & Webb, B. (1999). *Hot products: Understanding, anticipating and reducing demand for stolen goods* (112). London: Great Britain Home Office, Policing and Reducing Crime Unit Research, Development and Statistics Directorate. Retrieved from <https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=179588>
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American sociological review*, 588–608.
- Cox, A. D., Cox, D., Anderson, R. D., & Moschis, G. P. (1993). Research note: Social influences on adolescent shoplifting theory, evidence, and implications for the retail industry. *Journal of Retailing*, 69(2), 234–246.
- Cox, D., Cox, A. D., & Moschis, G. P. (1990). When consumer behavior goes bad: An investigation of adolescent shoplifting. *Journal of Consumer Research*, 17(2), 149–159.
- Daunt, K. L., & Greer, D. A. (2017). The dark side of marketing: Introduction to the special issue. *Journal of Marketing Management*, 33(15–16), 1231–1235.
- Deyle, E. (2015). The global retail theft barometer. Retrieved from [https://www.odesus.gr/images/nea/eidhseis/2015/3.Global-Retail-Theft-Barometer-2015/GRTB%202015\\_web.pdf](https://www.odesus.gr/images/nea/eidhseis/2015/3.Global-Retail-Theft-Barometer-2015/GRTB%202015_web.pdf)
- Dickel, P., & Graeff, P. (2018). Entrepreneurs' propensity for corruption: A vignette-based factorial survey. *Journal of Business Research*, 89, 77–86. <https://doi.org/10.1016/j.jbusres.2018.03.036>
- Dilmeri, A., King, T., & Dennis, C. (2017). Toward a framework for identifying attitudes and intentions to music acquisition from legal and illegal channels. *Psychology & Marketing*, 34(4), 428–447.
- Dootson, P., Lings, I., Beatson, A., & Johnston, K. A. (2017). Deterring deviant consumer behaviour: When 'it's wrong, don't do it' doesn't work. *Journal of Marketing Management*, 33(15–16), 1355–1383.
- Esmark, C. L., Noble, S. M., & Breazeale, M. J. (2017). I'll be watching you: Shoppers' reactions to perceptions of being watched by employees. *Journal of Retailing*, 93(3), 336–349.
- Fukukawa, K., Zaharie, M.-M., & Romonti-Maniu (2018). Neutralization techniques as a moderating mechanism: Ethically questionable behavior in the Romanian consumer context. *Psychology & Marketing*, 36(2), 138–149.
- Haag, M. (2018, May 8). Nordstrom rack apologizes to black teenagers falsely accused of stealing. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/05/08/business/nordstrom-black-men-profiling-shopping.html>

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: A comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616–632.
- Hair, J. F., Jr, Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). *Advanced issues in partial least squares structural equation modeling*. Sage Publications.
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., & Straub, D. W. (2014). Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182–209.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1(1), 104–121.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- Institute of Criminal Justice Training Reform (2016). Police training: State data. Retrieved from <https://www.trainingreform.org/state-data-map/>
- Johns, T. L., Hayes, R., Scicchitano, M. J., & Grottini, K. (2017). Testing the effectiveness of two retail theft control approaches: An experimental research design. *Journal of Experimental Criminology*, 13(2), 267–273.
- Kajalo, S., & Lindblom, A. (2010). How retail entrepreneurs perceive the link between surveillance, feeling of security, and competitiveness of the retail store? A structural model approach. *Journal of Retailing and Consumer Services*, 17(4), 300–305.
- Kallis, M. J., & Vanier, D. J. (1985). Consumer shoplifting: Orientations and deterrents. *Journal of Criminal Justice*, 13(5), 459–473.
- Kaplan, H. B., Johnson, R. J., & Bailey, C. A. (1987). Deviant peers and deviant behavior: Further elaboration of a model. *Social Psychology Quarterly*, 50(3), 277–284.
- Krishen, A. S., Berezan, O., & Raab, C. (2019). Feelings and functionality in social networking communities: A regulatory focus perspective. *Psychology & Marketing*, 36(7), 675–686. <https://doi.org/10.1002/mar.21204>
- Krishen, A. S., & Hu, H. F. (2018). Will they pitch or will they switch? Comparing Chinese and American consumers. *Psychology & Marketing*, 35(3), 210–219.
- MacKenzie, S. B., & Podsakoff, P. M. (2012). Common method bias in marketing: Causes, mechanisms, and procedural remedies. *Journal of Retailing*, 88(4), 542–555.
- Mangleburg, T. F., Doney, P. M., & Bristol, T. (2004). Shopping with friends and teens' susceptibility to peer influence. *Journal of Retailing*, 80(2), 101–116.
- Mitchell, V.-W., Balabanis, G., Schlegelmilch, B. B., & Cornwell, T. B. (2009). Measuring unethical consumer behavior across four countries. *Journal of Business Ethics*, 88(2), 395–412.
- Moschis, G. P. (2017). Research frontiers on the dark side of consumer behaviour: The case of materialism and compulsive buying. *Journal of Marketing Management*, 33, 1384–1401. <https://doi.org/10.1080/0267257X.2017.1347341>
- National Association for Shoplifting Prevention (NASP). (2019). Shoplifting statistics. Retrieved from <http://www.shopliftingprevention.org/what-we-do/learning-resource-center/statistics/>
- Petrescu, M., Gironde, J. T., & Korgaonkar, P. K. (2018). Online piracy in the context of routine activities and subjective norms. *Journal of Marketing Management*, 34(3-4), 314–346. <https://doi.org/10.1080/0267257X.2018.1452278>
- Potdar, B., Guthrie, J., & Gnoth, J. (2018). Encouraging shoplifting prevention with quality relationships: A theory of planned behaviour perspective. *International Journal of Retail & Distribution Management*, 46(1), 49–69.
- Pratt, T. C., & Cullen, F. T. (2005). Assessing macro-level predictors and theories of crime: A meta-analysis. *Crime and Justice*, 32, 373–450.
- Reilly, K. (2017). Shoplifting and other fraud cost retailers nearly \$50 billion last year. Retrieved from <http://time.com/money/4829684/shoplifting-fraud-retail-survey>
- Reynolds, K. L., & Harris, L. C. (2009). Dysfunctional customer behavior severity: An empirical examination. *Journal of Retailing*, 85(3), 321–335.
- Reyns, B. W., Henson, B., & Fisher, B. S. (2011). Being pursued online: Applying cyber lifestyle routine activities theory to cyberstalking victimization. *Criminal Justice and Behavior*, 38(11), 1149–1169.
- Sampson, R. J., & Laub, J. H. (1997). A life-course theory of cumulative disadvantage and the stability of delinquency. In T. P. Thornberry (Ed.), *Developmental theories of crime and delinquency* (pp. 133–161). New Brunswick, NJ: Transaction Publishing.
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, 53, 2322–2347. <https://doi.org/10.1108/EJM-02-2019-0189>
- Smith, A. E., & Humphreys, M. S. (2006). Evaluation of unsupervised semantic mapping of natural language with Leximancer concept mapping. *Behavior Research Methods*, 38(2), 262–279.
- Smith, J. R., Terry, D. J., Manstead, A. S. R., Louis, W. R., Kotterman, D., & Wolfs, J. (2008). The attitude-behavior relationship in consumer conduct: The role of norms, past behavior, and self-identity. *The Journal of Social Psychology*, 148(3), 311–334.
- Spano, R., & Nagy, S. (2005). Social guardianship and social isolation: An application and extension of lifestyle/routine activities theory to rural adolescents. *Rural Sociology*, 70(3), 414–437.
- Tan, B. (2002). Understanding consumer ethical decision making with respect to purchase of pirated software. *Journal of Consumer Marketing*, 19, 96–111. <https://doi.org/10.1108/07363760210420531>
- Tonglet, M. (2002). Consumer misbehaviour: An exploratory study of shoplifting. *Journal of Consumer Behaviour*, 1(4), 336–354.
- Vermeir, I., de Bock, T., & van Kenhove, P. (2017). The effectiveness of fear appeals featuring fines versus social disapproval in preventing shoplifting among adolescents. *Psychology & Marketing*, 34(3), 264–274.
- Wilkes, R. E. (1978). Fraudulent behavior by consumers. *Journal of Marketing*, 42(4), 67–75.
- Yang, Z., Algesheimer, R., & Dholakia, U. (2017). When ethical transgressions of customers have beneficial long-term effects in retailing: An empirical investigation. *Journal of Retailing*, 93(4), 420–439.
- Yaprak, A., & Price (2019). Consumer morality and moral consumption behavior: Literature domains, current contributions, and future research questions. *Journal of Consumer Marketing*, 36(3), 349–355.

**How to cite this article:** Korgaonkar PK, Gironde JT, Petrescu M, Krishen AS, Mangleburg TF. Preventing shoplifting: Exploring online comments to propose a model. *Psychol Mark*. 2020;37:141–153. <https://doi.org/10.1002/mar.21290>

## APPENDIX: MEASUREMENT ITEMS

### Perceived behavioral control

1. Shoplifters don't believe they will get caught
2. Shoplifters want to see if they could get away with it
3. Shoplifters think it is very easy to shoplift and get away with it
4. Shoplifters think there are plenty of shoplifting opportunities easily available

a. (1 for *Strongly disagree* to 5 for *Strongly agree*)

### Subjective norms

1. If I shoplifted, people who are important to me will be angry with me (R)
2. If I shoplifted, my friends will disapprove of my behavior (R)
3. If I shoplifted my family will look down on me (R)

a. (R) Indicates the reversely coded item

### Attitude towards shoplifting

1. I think shoplifting is bad (R)
2. I think shoplifting is wrong (R)
3. I think shoplifting hurts everyone (R)

a. (R) Indicates the reversely coded item

### Motivated offender

1. Shoplifters believe they deserve a free item
2. I think shoplifters enjoy stealing

3. Shoplifters find it exciting to steal
4. Shoplifters steal because it makes them feel strong
5. Shoplifters think it is "cool" to steal

### Absence of capable guardians

1. Shoplifters don't worry about their family not approving their criminality
2. It is unlikely shoplifters participate in community or volunteer work
3. Shoplifter believes s/he has total control over shoplifting activities

### Suitable targets

1. Shoplifters choose to steal from conveniently located stores
2. Shoplifters find it easy to steal from self-service establishments
3. Shoplifters choose to steal from stores with minimum in-store employees
4. Shoplifters choose to steal from stores open late at night
5. Shoplifters choose to steal from stores with minimum security

### Shoplifting intentions

If you or a person you may be acquainted with have the opportunity to participate in one or more of the following activities in the future, how likely will you be or will they be to engage in:

1. Taking an item without paying for it
2. Concealing an item with an intent to steal
3. Sampling an item without authorization from store personnel
4. Switching price labels of items to pay a lower price
5. Putting goods into different packaging to avoid paying a high price
6. Manipulating merchandise to avoid paying a full price