



## The Diogenes Effect in retail buyer information processing<sup>☆</sup>

Melvin Prince<sup>a,\*</sup>, Lynn Kwak<sup>b</sup>, Constantinos Vasilios Priporas<sup>c</sup>

<sup>a</sup> Southern Connecticut State University, USA

<sup>b</sup> Southern Connecticut State University, 501 Crescent Street, New Haven, CT, 06515, USA

<sup>c</sup> Middlesex University Burroughs, London NW4, UK



### ARTICLE INFO

#### Keywords:

Diogenes effect  
Elaboration likelihood model  
Retailer buying decision  
Satisfaction  
Expectations  
Information processing

### ABSTRACT

The search for an ethical vendor who is honest and trustworthy in the exchange process is conceptualized as the Diogenes Effect, an innovative concept. In the light of this effect, the theoretical framework of the current study's model involved retail buyer responses to vendor persuasive communications. The model was tested by having a sample of retailer buyers complete a survey of information processing in the search for a product and vendor. This study innovatively links vendor communication effects to retailer buyer decision-making and evaluations by incorporating and integrating elements of Elaboration Likelihood Theory. Contributing to theory-building, it was found that when retailer buyers searched for a vendor with an ethical orientation, the result was intensified central processing of information and decreased peripheral information processing. This was especially salient when retailer buyers had greater longevity of professional experience. The next stage, information processing, led to feedback that enabled assessment of vendor trustworthiness. Finally, the research measured the level of fulfillment in the post-purchase phase. In the end, typical outcomes included the generation of favorable expectations of vendor performance, as well as the positive impact of those heightened favorable expectations on greater satisfaction with the value ultimately received from the vendor.

### 1. Introduction

Retailer decisions involving product and vendor selection are more critical today than ever before. Globalization (Wood et al., 2016), increased sourcing options, cost pressures, supply disruption and risk management, and the constant drive for innovation (Hristov and Reynolds, 2015; Pantano, 2014) place tremendous pressures on retail purchasing buyers. The costs associated with making poor retail product and vendor selections can be monumental.

An important, but neglected, decision criterion for vendor selection is the retail buyer's confidence that exchange will be mutually advantageous and transparent. Such confidence may be bolstered by elicitation of the Diogenes Effect in the vendor search process. The Diogenes Effect is an innovative concept within the realm of the buyer behavior search process, developed especially for this study. The term *Diogenes Effect* has its source in the myth of an ancient Greek philosopher-skeptic, Diogenes, said to practice carrying a lantern in broad daylight looking for an honest man. The definition of Diogenes Effect in this research's context is based on the level of importance that buyers place on vendors' ethics as a key criterion in vendor and product selection.

Ethical behaviors of vendors in relation with retail organizations are expected to result in more satisfactory payoffs, less need for monitoring vendor behavior, greater transparency of communications, and a sense of inter-organizational bonding. A review of B2B research fails to disclose studies involving measurement of buyers seeking ethical business partners in vendor selection modeling (Sen et al., 2008).

The theoretical foundation of the Diogenes Effect is found in transactional need states (Turner and Boyns, 2001). Transactional need states are activated at the outset of interaction, and the course of interaction is shaped by their state and fulfillment. The need states involved in concept formation for this study are shown in Fig. 1. They include (1) needs for positive exchange payoffs, (2) needs for predictability and trust, (3) needs for facticity, and (4) needs for group inclusion. In the retail buying search process, ethical behavior is sought from vendors to satisfy these needs (see Fig. 2).

This criterion of searching for an ethical vendor is in the context of other pressures affecting vendor selection. Retail buyers are required to meet budgetary goals while attempting to make higher level, more complex decisions in an increasingly time-constrained environment (Kim and Takashima, 2016). Understanding retail buyers' purchase decision quality involves avoidance of opportunistic behaviors by their

<sup>☆</sup> This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

\* Corresponding author. Marketing Department, Southern Connecticut State University, 501 Crescent Street, New Haven, CT, USA.

E-mail addresses: [melvinprince@sbcglobal.net](mailto:melvinprince@sbcglobal.net) (M. Prince), [KwakE1@southernct.edu](mailto:KwakE1@southernct.edu) (L. Kwak), [Cpriporas@gmail.com](mailto:Cpriporas@gmail.com) (C.V. Priporas).

<https://doi.org/10.1016/j.jretconser.2019.03.025>

Received 6 March 2019; Received in revised form 22 March 2019; Accepted 27 March 2019

Available online 05 April 2019

0969-6989/ © 2019 Published by Elsevier Ltd.

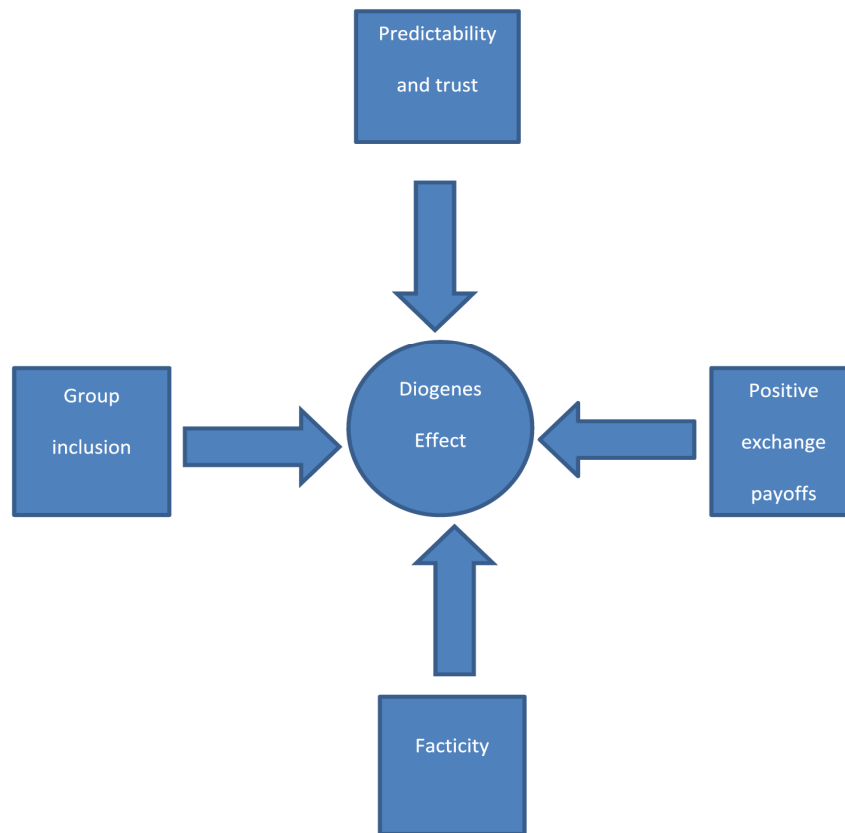


Fig. 1. Transactional needs and the diogenes effect.

vendors. Such decisions are influenced by other factors, including vendors' selling strategies, situational factors (i.e. cultural and contextual), and persuasion processes in search of the potential to improve the quality and efficiency of product and vendor selections.

Retail buyer behavior has been assumed to be rationally calculative and objectively determined (Wagner et al., 1989; Wagner and Benoit, 2015). Vendor selection criteria typically include evaluations of brand name, merchandising support, profit margins, and service. However, retail buyers are undoubtedly influenced by individual emotional and perceptual factors such as vendor's observable characteristics (i.e., physical appearance, and attractiveness) and confidence in exchange relations with the vendor organization. As a result, this study has focused on variables identified in the retail buying literature that may trigger different modes of information processing that, in turn, affect retail buyers' product and vendor selections.

The contribution of this study is twofold. First, this study expands the knowledge of retailers' buying decisions, which has been relatively neglected by researchers, compared to consumers' buying decisions. Alpert et al., 2001) and Kim and Takashima (2016) point out that knowledge of retail buying is still "obscure at best." Furthermore, the retail industry has become more time-pressured and the number of retailers and vendors dwindle (Wagner and Benoit, 2015). Second, this study is the first to employ the Elaboration Likelihood Model (ELM) (Petty and Cacioppo, 1981, 1984) as a theoretical framework in the retail buying setting. Until now, studies focused exclusively on consumers have employed the ELM (e.g., Dotson and Hyatt, 2000; Sher and Lee, 2009; Yang, 2015; Yang et al., 2006).

Elaboration Likelihood Theory is invoked in this study as a central conceptual framework to explain the role of interactive vendor

relationships in retail buyer decision-making. The importance of Elaboration Likelihood Theory is that all decision-making is based on attitude reinforcement or attitude change. The theory emphasizes ways by which attitudes are formed, whether by active thinking or persuasion cues following exposure to communications. Empirical studies on the Elaboration Likelihood persuasion process in the B2B (business-to-business) context are scant or non-existent. To our knowledge, no study to date has employed rigorous scaled quantitative measures of retail buyer decision processes nor shed light on antecedents or consequences of such elaboration likelihood processes. Elaboration Likelihood Theory provides a unique perspective on retailing buyer decisions, and importantly enhances understanding.

## 2. Theoretical framework

### 2.1. Elaboration Likelihood Model

Retail buyer purchase analysis in this study addresses three issues: (1) the determinants of retail vendor choices by retail buyers; (2) the generation of expectations about performance of selected vendors; and (3) retail buyers' vendor expectations as determinants of satisfaction. This research focuses on examining the retail buyer vendor persuasion process using an ELM (Petty and Cacioppo, 1981, 1984). The Elaboration Likelihood Model emphasizes two separate routes for attitude formation and persuasion. The first path, called the central route, occurs when recipients of a message (e.g. a promotional offer) engage in "active thinking" about objective information concerning the message. The second process, called the peripheral route, is not considered thought-provoking, but relies on cues within the persuasion message

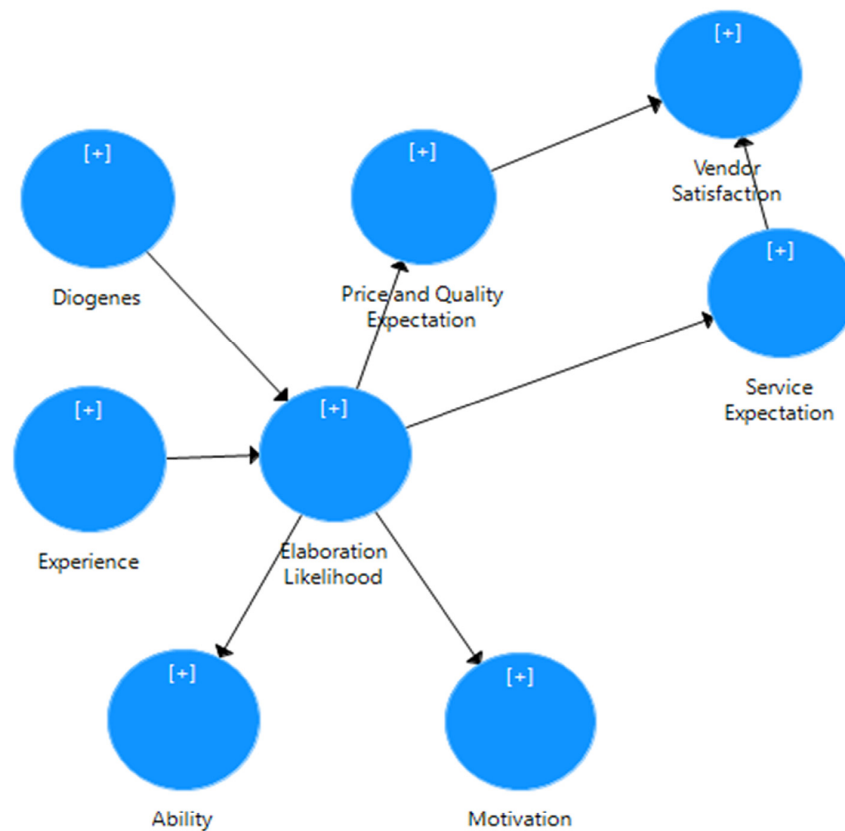


Fig. 2. Elaboration likelihood model of retail buyer decision-making.

that support the initial attitude. The central route to persuasion is dominant when the recipient is both motivated and has the capability to process the message; if these conditions are not met, peripheral processing is dominant (Cacioppo et al., 1986; Kitchen et al., 2014; Petty and Cacioppo, 1981, 1984). Appendix A describes the impact of elaboration likelihood processes on retail buyer information processing and the expectations of vendor relations.

Suppose a vendor provides a retail buyer with product information during a sales visit. If the retail buyer is motivated and capable of fully understanding the product information, central processing will be dominant. If these conditions are not met, the buyer will primarily attend to peripheral cues provided by the sales representative. These peripheral cues could include, but are not limited to, the sales person's attractiveness, their firm's reputation, product information presentation, and the professionalism of the sales representative (e.g., dress and attractiveness). If the buyer processes the product information centrally, rather than peripherally, the attitude formed is expected to be more persistent, resistant to counter-attitudinal information, and predictive of long-term behavior.

Many circumstances may reduce motivation for a buyer, may result in lower buyer decision-making capability, or may cause both. For example, suppose a retail buyer was not closely monitored during the sourcing decision-making process and this lack of oversight is enough to create a low motivation situation for the buyer. In this case, the buyer may attend primarily to peripheral cues. Another common trigger of reliance on peripheral cues is the fast-moving retail business environment of today. This time-pressured environment can have significantly adverse effects on buyer-vendor relationships, because it does not allow buyers enough time to invest in building relationships with vendors. In

addition, when the goods are inexpensive and low-risk, sales tend to be transactional and buyers tend to make quick purchase decisions. Under these conditions, buyers would be more susceptible to peripheral cues. It is not known, however, how central processing versus peripheral processing affects product and vendor selection.

This research will focus on the following questions:

**RQ1.** Why do buyers process product and vendor information centrally versus peripherally, and what is the driving force allowing one processing route to be dominant in a purchasing situation?

**RQ2.** What factors influence buyer motivation and capability, both of which make central processing possible?

**RQ3.** What are the implications of the use of the central processing route for buyer expectations and outcome variables, such as buyer satisfaction?

### 3. Model and hypotheses development

A model has been developed to explain the vendor selection process for retailers' new product purchases (see Fig. 1). The model consists of a major search criterion, the Diogenes Effect, which affects the extent to which information about vendors and their products is processed centrally. It also addresses a moderating effect of retail buyers' years of professional experience to enhance explained variance in their central processing of search information. The elaboration likelihood and vendor decision phase are associated with the formation of expectations (service, as well as price and quality) about vendor performance. In turn, these expectations are predictors of retail buyers' satisfaction with

the choice of vendor.

### 3.1. *Diogenes Effect and ELM*

The retail purchaser's search for a vendor that is ethical (i.e., honest, just, respectful, and trustworthy) is an important source of motivation for vendor selection. This is understandable, since retail buyers face the possibility of misleading vendor practices that include (a) price changes made after orders, (b) vendors not accepting responsibility for their errors, and (c) cancellation of back orders (Arbuthnot, 1997). Such unethical vendor actions can be costly, disruptive, and threatening to the success of a retail operation. Specific examples of unethical vendor practices include padding orders, selling the same merchandise to competitors, withholding return authorization and credit, and overcharging. These difficulties may affect timing, pricing attractiveness, and availability of the right merchandise. The search for an ethical vendor is labeled the *Diogenes Effect*.

**Hypothesis 1:** The Diogenes Effect will be positively related to the use of the central route of the Elaboration Likelihood Model.

### 3.2. *Professional experience and ELM*

People with greater working knowledge can draw upon a large store of attitude-relevant beliefs and experiences, while, on the other hand, people with less knowledge understand information concerning attitude issues ineffectively (Wood et al., 2016). Working knowledge helps buyers to understand vendor messages by increasing attention and comprehension. Professional retail buyer experience reflects working knowledge levels. Retail buyers may be expected to be relatively objective and dispassionate in processing and evaluating information germane to purchase decision-making. Therefore, we propose that more experienced retail buyers will have greater ability and stronger motivation to centrally process message arguments than less experienced retail buyers. Greater knowledge acquired through professional experience leads to specialized information processing expertise. Over time, experienced retail buyers will have more complex organizing structures in memory than will novice retail buyers. This, in turn, promotes the ability to assimilate new relevant information.

Wood et al. (2016) stated that more experienced retail buyers, as compared to less experienced, will have strong affective reactions to marketing communications directed at them. This will lead to higher motivation levels because of increased involvement with the processing and evaluation of information. Past successes in comprehending and evaluating information in similar situations generates positive impressions of self-efficacy and sparks greater motivation to acquire, absorb, and critically ruminate about new knowledge. Finally, experienced retail buyers have superior skills in distinguishing between useful and less useful information with less effort, thereby enhancing motivation to elaborate cognitive processes (Wood et al., 2016).

With greater experience there is a greater tendency to recognize ethical problems associated with vendor actions. This increases tacit knowledge about such matters and should lead to greater scrutiny of vendor characteristics and messages, compared to less experienced retail buyers (Arbuthnot, 1997). In sum, greater retail buying experience enhances ability and motivation in message involvement. Ability and motivation are indicators of the use of central processing in the Elaboration Likelihood Model. Therefore, we advance the following Hypothesis:

**Hypothesis 2:** Professional experience will increase the use of central processing in the elaboration likelihood model.

### 3.3. *ELM and price, quality expectations*

The main characteristics of retail buyers' decisions are speed,

informality, and volume, due to the large number of products presented to them (Insch et al., 2011). These contextual factors are omnipresent and, therefore, are not variables in our study. Furthermore, the literature suggests that the criteria used for vendor selection generated by the retailers to meet their specific needs (Braglia and Petroni, 2000; Luo et al., 2009), and the type of purchasing situation can be different among organizations (Hirschman, 1981; Sheth, 1981; Webster and Wind, 1996). In the organizational buying process, price (Homburg et al., 2014; Wuyts et al., 2009), product quality (Lin and Wu, 2011; Nandonde and Kuada, 2016), and service (Hansen, 2001; Spreng et al., 2009) are strong criteria—traditional factors that seem to influence the buyers' decisions (Chang and Sternquist, 1994; Da Silva et al., 2002; Hansen, 2001; Insch et al., 2011; Lin and Wu, 2011; Perry and Kyriakaki, 2014), as it is broadly believed that higher prices follow higher quality and vice versa (Skytte and Blunch, 2001).

Therefore, these factors are important in the information search process (i.e., type, amount, access) for perceptual screening and formation of the expectations about vendors and their selection. Expectations of retail buyers may be classified as active, in the sense that they are cognitively processed, and have knowable outcomes with probabilities. When expectations are active, thought is given to the occurrence of outcomes (Oliver, 2010). The Elaboration Likelihood Model provides information that can assist retailer buyers in their vendor selection, since it builds on persuasion and expectations. In the B2B (business-to-business) context, a favorable price-quality ratio can increase vendor satisfaction and loyalty (Diller, 2000).

Promotional claims such as sales statements and advertising are vigilantly evaluated by retail buyers as part of the vendor and product selection process. When decisions are made, expectations may relate to promotional claims, which include price/quality and service promises. The same may be said about word-of-mouth, either within the organization or from informal industry sources. Independent sources, such as trade magazines and papers, may also shape expectations of performance by vendors. Finally, product cues with only a general relation to performance outcomes, such as brand image, may influence retail buyer expectations. Since retail buyer search is a high-involvement process, the ease and vividness of promotional information recall should be heightened (Oliver, 2010). Therefore, we propose the following hypotheses:

**Hypothesis 3:** The use of the central route of the Elaboration Likelihood Model will be positively associated with the expectation of favorability of the ratio between price and quality expectations.

**Hypothesis 4:** The use of the central route of the Elaboration Likelihood Model will be positively associated with service expectations.

**Hypothesis 5:** The favorability of the ratio between price and quality expectations will be positively associated with vendor satisfaction.

### 3.4. *Buyers' service expectations and vendor satisfaction*

Consumers in business-to-consumer (B2C) and in business-to-business (B2B) contexts usually consider expectations prior to the delivery of services and make comparisons to performance after service delivery (Briggs et al., 2016). In service settings, the literature shows that experience with a service provider influences future expectations, and has a significant and direct impact on customer satisfaction (Molinari et al., 2008; Patterson et al., 1997). Furthermore, Eggart and Ulaga (2002) assert that satisfaction depends on the confirmation of expectations. If the vendor's behaviors are aligned with the buyer's expectations, the buyer is likely to be more satisfied. Therefore, we offer the following Hypothesis:

**Hypothesis 6:** Alignment of buyers' service expectations with vendor behavior will be positively associated with vendor satisfaction.

## 4. Method

### 4.1. Participants and procedure

To ensure representativeness of the sampling frame, interviewees were approached on a systematic random basis stratified by available time frames. Our sample consists of 67 U.S. retail buyers who attended retailing conventions at New York City's Jacob Javits Center. From a statistical viewpoint, the sample size obtained ( $n = 67$ ) is satisfactory, since this size meets the rule of ten that successfully relates variables to observations (Hair et al., 2017).

In the context of the partial least squares analysis, this rule applies to the maximum number of arrowheads designated for a latent variable, anywhere in a model. Each latent variable in the ELM model meets this sample size criterion, based on a statistical power of 80%, a significance level of 5%, and a minimum  $R^2$  of 0.25.

Although the official numbers are confidential, the approximate number of trade show attendees was 8000 a day. Over the course of two weeks, we sampled buyers who were sole decision-makers for at least one new product available to consumers at retail locations. A trained researcher approached tradeshow participants in the sitting areas in the conference center and asked if they were retail buyers. Qualified participants (i.e. retail buyers) were offered a \$5 Starbucks gift card as an incentive to participate in the survey. The researcher distributed the survey to interested participants and later returned to collect the survey.

The survey included a series of questions related to participants' buying decisions. These questions assessed vendor search process, vendor of choice description, vendor of choice message communication, impressions of the vendor of choice, retail buyer expectations of the vendor relationship, outcomes of the purchasing decision, and seven demographic questions. The researcher was available to answer questions, but there was no debriefing session.

### 4.2. Variables and measures

Measures employed were created specifically for this previously uncharted study, and were solely based on available questionnaire items, mirroring the concepts. Therefore, measurement standards are relaxed under PLS (partial least squares) theory.

*Diogenes Effect (Ethical vendor search efforts)*: We used two dimensions and four indicators for the higher order Diogenes Effect latent variable. These dimensions were (1) buyer search effort and (2) benevolence. Items were: "An extensive amount of information was gathered about this purchase" for the former, and "Our trust in the vendor was the main factor considered" for the latter.

#### 4.2.1. Experience

Experience was measured with a single self-report item: "How many years of experience do you have as a purchasing professional retail buyer?"

#### 4.2.2. Elaboration likelihood

This higher order latent variable was comprised of two first order dimensions: (1) ability and (2) motivation. Six indicators were employed in total. Example items were: "The vendor's messages took an unreasonable amount of time to digest" to measure ability, and "I was motivated to receive messages from the vendor" to measure motivation.

#### 4.2.3. Price and quality expectations

This latent variable was measured by three indicators. The items included: "The selected vendor offered a fair price" and "The selected vendor offered attractive products and services."

#### 4.2.4. Service expectations

This was measured using three indicators. One item asked if the

selected vendor "was capable of handling problems."

#### 4.2.5. Satisfaction

The vendor satisfaction measure was based on four indicators. An example item reads "we are extremely happy with the selected vendor's performance."

The items were measured using a five-point Likert scale anchored with 1 = strongly disagree and 5 = strongly agree (see Appendix A).

### 4.3. Data analysis

The data were analyzed by means of partial least squares (PLS) structural equation modeling. PLS is useful for early-stage theory-building (Hair et al., 2014). It is a distribution-free technique, which may be used to estimate path parameters. Such estimates may be interpreted as standardized regression coefficients. Further, item loadings on constructs are the results of principal components analyses. Other reasons for electing to use PLS analyses include the use of formative indices and the use of less than three items for concepts.

We assessed a direct path to test the Hypothesis that the Diogenes Effect (*Ethical vendor search efforts*) predicted elaboration likelihood. We hypothesized that this link was moderated by the buyers' years of experience, such that more experience relates to a stronger link between them. We also estimated the independent direct paths from elaboration likelihood to the favorability of the ratio between price and quality expectations, as well as service expectations. Significance of path coefficients was measured by the  $t$ -ratio, the path coefficient, to the bootstrapped estimate of its standard error.

## 5. Results

### 5.1. Description of the sample

Characteristics of the 67 retail buyers are presented in Table 1. Partial least squares (PLS) used in the analysis may be employed on modest sample sizes and distribution restrictions. The retail buyers in this study's sample were primarily female (80.6%) and college-educated. Most buyers (mode of 44.8%) had 1–5 years of professional buying experience and hold the position of buyer/senior buyer (64.2%). Table 1 describes the sample (see Table 1).

### 5.2. Reliability and validity of measures for diogenes model

The measurement model was evaluated by internal consistency (composite reliability), indicator reliability, convergent validity (average variance extracted), and discriminant validity. The weight of each measure in the estimation of its respective latent construct is also presented.

Composite scale reliabilities of constructs appear in Table 2 under the heading IRC. The IRC index projects levels of internal consistency reliability. Results for six of the seven latent variables in the model were clearly acceptable for exploratory research. The IRC result for the satisfaction concept was .55, slightly below the rule of thumb for the standard of 0.60 for exploratory research (Hair et al., 2014).

Table 3 shows latent variable correlations, which are markers in assessment of between-constructs discriminant validity. The distinction between latent concepts is evidenced by comparisons between the average variance extracted (AVE) for the latent construct and the level of latent variable correlations. Discriminant validity for model latent variables was in evidence, because scores for AVE elements exceeded those elements in corresponding rows and columns. The exceptions were cases involving hierarchical latent variables which logically should not show discriminant validity.

**Table 1**  
Characteristics of retail buyers.

Demographic Characteristics	Frequency
	67%
Gender	
Female	80.6
Male	19.4
Age	
Age 18-24	9.0
Age 25-34	37.3
Age 35-49	29.9
Age 50-64	20.9
Age Over 65	3.0
Highest Level of Education	
High school graduate/GED	7.46%
Some college	13.4
Associate degree	8.9
Bachelor's degree	44.8
Some graduate work	3.0
Graduate/professional degree	22.4
Years of Professional Buying Experience	
Less than 1 year	7.5
1–5 years	44.8
6–10 years	23.8
11–15 years	3.0
Over 15 years	20.9
Years Worked with Current Employer	
Less than 1 year	10.5
1–5 years	47.8
6–10 years	22.4
11–15 years	3.0
Over 15 years	16.4
Job Title	
Assistant Buyer	7.46%
Associate Buyer	2.99%
Senior Assistant Buyer	2.99%
Buyer, Senior Buyer	64.18%
Divisional Merchandise Manager	11.94%
General Merchandise Manager	4.48%
Type of Retail Store You Work For	
General merchandise	7.46%
Clothing and accessories	64.18%
Other	22.39%

5.3. Hypothesis testing

Hypothesis 1, which posited that the Diogenes Effect will be positively related to the use of the central route of the Elaboration Likelihood Model, was supported (path coefficient = .26,  $t = 2.30$ ,  $p < .05$ ). Hypothesis 2, which posited that professional experience will increase the use of the central processing in the Elaboration Likelihood Model, was supported as well (path coefficient = .34,  $t = 3.21$ ,  $p < .01$ ). Hypothesis 3, which posited that the use of the central route of the Elaboration Likelihood Model will be positively associated with the favorability of the ratio between price and quality expectations, (path coefficient = .30,  $t = 1.92$ ,  $p < .05$ ) and Hypothesis 4, which posited that the use of the central route of the Elaboration Likelihood Model will be positively associated with service expectations (path coefficient = .33,  $t = 2.34$ ,  $p < .05$ ) were also validated.

Hypothesis 5, which posited that the favorability of the ratio between price and quality expectations will be positively associated with vendor satisfaction, and Hypothesis 6, which posited that the alignment of buyers' service expectations with vendor behavior will be positively associated with vendor satisfaction, were tested for connections between vendor expectations for price-quality and service expectations leading to satisfaction with the selected vendor. Hypothesis 5 was not supported, while Hypothesis 6 was supported. Test results reveal that H5: (path coefficient = .20,  $t = 1.40$ ,  $p > .05$ ); H6: (path coefficient = .47,  $t = 4.35$ ,  $p < .01$ ). Validation tests of hypotheses appear in Table 4 and Fig. 3. Fig. 3 depicts the structural model that illustrates the model paths, their coefficients and signs, as well as significance

**Table 2**  
Factor loadings, weights, and internal consistency reliabilities (IRCs).

Construct and measure	Weight of measure	IRC
Diogenes Effect (DE)		0.701
DE1	0.717	
DE2	0.642	
Elaboration likelihood (EL)		0.904
EL1	0.276	
EL2	0.301	
EL3	0.294	
EL4	0.320	
Ability (AB)		0.917
AB1	0.543	
AB2	0.544	
Motivation (MOT)		0.840
MOT 1	0.546	
MOT2	0.628	
PQE		0.800
PQE1	0.756	
PQE2	0.435	
SE		0.886
SE1	0.509	
SE2	0.363	
SE3	0.296	
Satisfaction (SAT)		0.535
SAT1	0.866	
SAT2	0.287	
SAT3	0.033	
SAT4	0.224	

Note: PQE = price-quality expectation; RE = reliability expectation; SE = service expectation.

levels.

6. Discussion

This investigation breaks new ground and makes a practical contribution in enlarging the understanding and predictability of vendor selection by retailer buyers. The original model describes a complex process that is theoretically grounded and empirically supported.

A new and fruitful concept, *Diogenes Effect*, is advanced in this research. This effect had a strong bearing on the level of elaboration likelihood in retail buyers' choice of vendor. It is a concept that reflects the needs of retailer purchasing functionaries. A theoretical contribution of this research is the integration of the Elaboration Likelihood Model into the search process literature in retailer vendor selection. Persuasion owing to elaboration likelihood is based on expectancies. Consequently, elaboration likelihood also may be viewed as a system that generates predictive expectancies for decision outcomes.

6.1. Implications

This study showed that retail purchasers frequently look for ethical vendors as working partners—i.e., the *Diogenes Effect*. It is therefore essential that vendors act in a manner that is devoid of opportunism, comporting effectively in the client's best interests. In the process, vendors should project qualities of honesty, integrity, and empathy. Vendors will be more likely to exhibit these qualities when they feel personally accountable for their dealings with retail buyers.

When the Diogenes Effect is salient among retail buyers, they will study vendor communications more intensively. Better decision-making will ensue as a result of critical examination of vendor claims. The findings of this research demonstrate that retail buyer experience increases elaboration likelihood surrounding product and vendor selection. Therefore, key decision-making should be the province of veteran buyers. Correlatively, vendors under consideration should adapt their sales presentations based on the retail buyers' degrees of professional and product-related experience.

More experienced retail buyers will place greater reliance on their

**Table 3**  
Latent variable correlations.

Measure	No. of Items	1	2	3	4	5	6	7
1. Ability (AB)	2	–						
2. Diogenes Effect (DE)		2	0.30	(0.54)				
3. Elaboration likelihood (EL)	4	0.95	0.31	(0.70)				
4. Experience	1	0.34	0.13	0.38	–			
5. Motivation (MOT)	2	0.79	0.28	0.94	0.36	(0.72)		
6. PQE	2	0.29	-0.02	0.33	0.30	0.29	(0.67)	
7. SE	3	0.33	0.37	0.33	0.22	0.29	0.15	(0.72)
8. Satisfaction (SAT)	4	0.30	0.35	0.32	0.35	0.30	0.27	(0.54)

Note. Items in parentheses represent the square root of the average variance extracted. For latent Variables with a single indicator average variance extracted could not be calculated. Elaboration Likelihood is a higher-order component of hierarchical component model. Ability and motivation are lower-order components of the same model. These inter-correlated measures may not be compared to average variance extracted.

own knowledge. The prospective vendor of choice must persuade retail buyers of their merits, given larger evoked sets (Crittenden et al., 1987; Kline and Wagner, 1994). For experienced retail buyers, vendor selection will be based on more complex decision criteria. In sum, strategic consideration on the part of vendors should be given to segmentation of selling effort by experience levels of retail buyers.

Greater elaboration likelihood is generally beneficial in building positive performance ratings of vendors by retail buyers. Optimal buyer decisions about price and quality will be one positive outcome. Another will be the delivery of superior service by the vendor.

6.2. Limitations and suggestions for further research

The present study did not measure variations in retailer organizational learning capabilities. However, retailer buying decisions are conditioned by the organizational learning capabilities of their firms. Higher levels of organizational learning capabilities have been found to lead to innovation performance (Palacios-Marques et al., 2017). Therefore, learning from past experiences at the organizational level would be expected to lead to more critical evaluations of vendor information on the part of retail purchasers. The measurement of concepts in the Diogenes model was in the main quite acceptable. However, replication studies should improve the measurement of retailer satisfaction, which scored below the expected standard.

Future research on retailer-vendor decisions should include estimates of product selection impact on customers in terms of (a) the fit of the product to the customer shopping basket and (b) the product's enhancement of the store environment (Manchanda et al., 1999; Baker et al., 1992). Finally, strategic implications of retail buyer behavior can extend findings to include pricing and advertising variables (Lal and Matutes, 1994).

The length of relationships between retail buyers and vendors was not measured in the study. Neither was the measure realm of power and asymmetric relationships made available. In principle, these variables might have improved predictions of the model. Additionally, personal characteristics of buyers that affect elaboration motives could be included in future models—for instance, the retail buyers' need for cognition and pre-existing attitudes toward product and vendor selection.

In terms of methods employed, the introduction of mixed methods

in future research is recommended. Greater understanding of product and vendor selection would be achieved by combining survey and observational methods. Elaboration likelihood of persuasive communications available to retail buyers should consider the nature of arguments employed by vendors as part of the selection process. These arguments can be classified as objectively strong, weak, or ambiguous.

Building on the Information Processing Theory of Choice, future research should incorporate substantive specific goals and sub-goals in product and vendor selection. Analysis of retail buyer decisions should provide explanations based on (a) the importance of attributes, (b) modes of attribute evaluations for alternatives, and (c) heuristics employed in arriving at judgments of the best alternative. The theoretical background for the fledgling topic of heuristics in business economics and management is given by Gigerenzer and Gaissmaier (2011).

With respect to the Expectation Disconfirmation Theory, we recommend that future research include variables beyond expectations (i.e., evaluations of product and vendor performance) as well as disconfirmation between expectations and performance. This would permit evaluations of assimilation and contrast effects on satisfaction. Further, retail buyers' expectations alone should be investigated for accuracy in predictions of satisfaction.

The literature that does exist on retailers' buying decisions suggests that buyers' decisions are country-specific (Manjeshwar et al., 2013; Sternquist and Runyon, 2008) and cannot be generalized due to cultural and contextual factors (Manjeshwar, et al., 2013). Therefore, future studies should address cross-cultural aspects of the model employed in this study.

The present study was based on individual decisions about products/vendors made by retail buyers. The present investigation represents the initial effort to apply the Diogenes Effect to Elaboration Likelihood Theory in studying retail buyer decision-making. Indeed, there remains much more to explore.

Appendix A

Elaboration Likelihood, Information Processing, and Expectation Disconfirmation.

When attempting to explain the persuasion process that occurs between a retail buyer and a sales representative, the Elaboration

**Table 4**  
Partial Least Squares analysis of model results.

Hypothesis and Proposed Path	Standardized Path Coefficient	t (67)
H1, H1: Diogenes Effects → Elaboration Likelihood	0.26	2.30*
H2: Experience → Elaboration Likelihood	0.34	3.21**
H3, H3: Elaboration Likelihood → Price-Quality Expectation	0.30	2*
H4, H4: Elaboration Likelihood → Service Expectation	0.32	2.34*
H5, H5: Price-Quality Expectation → Vendor Satisfaction	0.20	1.40
H6, H6: Service Expectation → Vendor Satisfaction	0.47	4.35**

\*p < .05, \*\*p < .01.

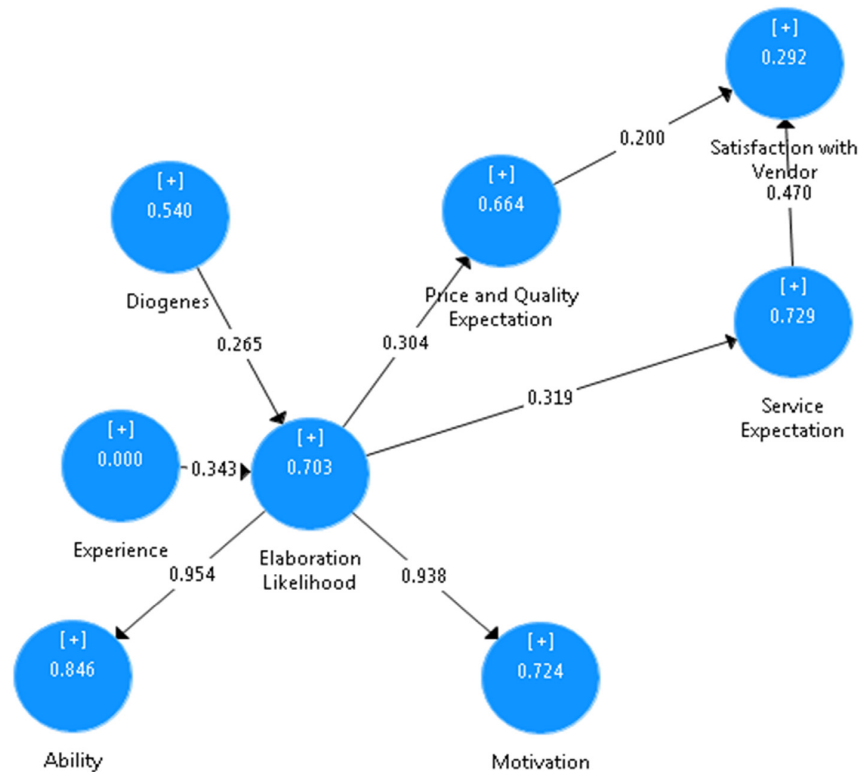


Fig. 3. Elaboration likelihood structural model results.

Likelihood Model offers a basic framework that bridges the Information Processing Theory of Choice (Bettman, 1979) and the Expectation and Disconfirmation Theory (Oliver, 1980, 2010). The Information Processing Theory of Choice posits that the choice process from an information-processing standpoint is motivated by a goal hierarchy (Bettman, 1979). The Information Processing Theory of Choice would apply to the desired end state of selection: the ideal vendor for a purchase decision. Sub-goals in the goal hierarchy would include prioritization of vendor features, evaluations of vendors under consideration on these features, and selecting optimal choices. Goals affect the direction and intensity of internal and external searches for information. Search processes involve attention, perception, memory, and interpretation of information relevant to the goal hierarchy. Based on the perceived value of the information for the choice and other constraints, buyers may decide on the extensiveness of the amount of processing before stopping, and the level of detail in which to engage.

The Expectation Disconfirmation Theory of Satisfaction (Oliver, 1980, 2010) states that expectation levels regarding outcomes and expectancy disconfirmation are independent predictors of satisfaction. In fact, expectations alone are predictive both in the individual level, as well as in the aggregate. Expectations, through suggested anticipations of satisfaction, add a contribution to satisfaction beyond that of experienced performance levels. The extreme prevalence of expectations among buyers in the aggregate indicates that expectations are meaningful for the prediction of satisfaction at the individual level (Oliver, 2010). The empirical relations between expectations and satisfaction may be explained by two theoretical processes: assimilation and contrast effects. Assimilation may be ascribed to a placebo effect (Oliver, 2010).

Given expectations, the potential consequences of actions are salient, and individuals behave to realize and avoid these outcomes. Expectations are estimates of future consequences, based on prior

experiences, current circumstances, or other sources of information. Expectations may be estimated as a probability of occurrence, within the satisfaction response (Oliver, 2010). According to the theory, expectations are multi-dimensional, including attributes, level of desire, level of uncertainty, and comparative referents (Oliver, 2010). In order to understand the formation of an expectation set we turn to an expectancy framework of external and internal factors at work. External factors for building expectations include promotional claims, word of mouth, third party information and product cues. Internal factors that shape expectations consist of ease and vividness of recall (Oliver, 2010).

Expectancy disconfirmation—the extent to which outcomes exceed, fail to exceed, or match expectations—may be objective or subjective. Assimilation and contrast processes are assumed to be operative in expectations and expectancy disconfirmation, respectively. Assimilation minimizes differences from initial expectations to outcomes, while contrast elaborates the effect of such differences. Relations between expectations and expectancy disconfirmation may be dependent on the nature of the task, and the elaboration likelihood phase of information processing.

## Appendix B. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jretconser.2019.03.025>.

## References

- Alpert, F., Kamins, M., Sakano, T., Onzo, M., Graham, J., 2001. Retailer buyer beliefs, attitude and behavior toward pioneer and me-too follower brands: a comparative study of Japan and the USA. *Int. Mark. Rev.* 18 (2), 160–187.
- Arbuthnot, J.J., 1997. Identifying ethical problems confronting small retail buyers during the merchandise buying process. *J. Bus. Ethics* 16, 745–755.
- Baker, J., Levy, M., Grewal, D., 1992. An experimental approach to making retail store



- environmental decisions. *J. Retail.* 68 (4), 445–460.
- Braglia, M., Petroni, A., 2000. A quality assurance-oriented methodology for handling trade-offs in vendor selection. *Int. J. Phys. Distrib. Logist. Manag.* 30 (2), 96–111.
- Briggs, E., Landry, T.D., Daugherty, P.J., 2016. A framework of satisfaction for continually delivered business services. *J. Bus. Ind. Mark.* 31 (1), 112–122.
- Cacioppo, J.T., Petty, R.E., Kao, C.F., Rodriguez, R., 1986. Central and peripheral routes to persuasion: an individual difference perspective. *J. Personal. Soc. Psychol.* 51 (5), 1032–1043.
- Chang, L., Sternquist, B., 1994. Product procurement: a comparison of Taiwanese and US retail companies. *Int. Rev. Retail Distrib. Consum. Res.* 4 (1), 61–82.
- Crittenden, V.L., Scott, C.A., Moriarty, R.T., 1987. The role of prior product experience in organizational buying behavior. *Adv. Consum. Res.* 14 (1), 387–391.
- Da Silva, R., Davies, G., Naude, P., 2002. Assessing the influence of retail buyer variables on the buying decision-making process. *Eur. J. Market.* 36 (11/12), 1327–1343.
- Diller, H., 2000. Customer loyalty: fata morgana or realistic goal? Managing relationships with customers. In: Henning-Thurau, T. (Ed.), *Relationship Marketing*. Springer, Berlin and Heidelberg, pp. 29–48.
- Dotson, M.J., Hyatt, E.M., 2000. Religious symbols as peripheral cues in advertising: a replication of the elaboration likelihood model. *J. Bus. Res.* 48 (1), 63–68.
- Eggart, A., Ulaga, W., 2002. Customer perceived value: a substitute for satisfaction in business markets? *J. Bus. Ind. Mark.* 17 (2/3), 107–118.
- Gigerenzer, G., Gaissmaier, W., 2011. Heuristic decision making. *Annu. Rev. Psychol.* 62, 451–482.
- Hair Jr., J.F., Hult, G.T.M., Ringle, C., Sarstedt, M., 2014. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage, Thousand Oaks, CA.
- Hansen, K., 2001. Purchasing decision behaviour by Chinese supermarkets. *Int. Rev. Retail Distrib. Consum. Res.* 11 (2), 159–175.
- Hirschman, E.C., 1981. Retailing and the production of popular culture. In: Stampfl, R.W., Hirschman, E.C. (Eds.), *Theory in Retailing: Traditional and Nontraditional Sources*. American Marketing Association, Chicago, pp. 71–83.
- Homburg, C., Allmann, J., Klarmann, M., 2014. Internal and external price search in industrial buying: the moderating role of customer satisfaction. *J. Bus. Res.* 67 (8), 1581–1588.
- Hristov, L., Reynolds, J., 2015. Perceptions and practices of innovation in retailing: challenges of definition and measurement. *Int. J. Retail Distrib. Manag.* 43 (2), 126–147.
- Insch, A., Prentice, R.S., Knight, J.G., 2011. Retail buyers' decision-making and buy national campaigns. *Aust. Mark. J.* 19, 257–266.
- Kim, C., Takashima, K., 2016. Retail buyer control systems: implications of buyer behavior strategies for performance. *Australas. Mark. J.* 24 (2), 171–178.
- Kitchen, P.J., Kerr, G., Schultz, D.E., McColl, R., Pals, H., 2014. The elaboration likelihood model: review, critique and research agenda. *Eur. J. Market.* 48 (11/12), 2033–2050.
- Kline, B., Wagner, J., 1994. Information sources and retail buyer decision making: the effect of product-specific buying experience. *J. Retail.* 70 (1), 75–88.
- Lal, R., Matutes, C., 1994. Retail pricing and advertising strategies. *J. Bus.* 67 (3), 345–370.
- Lin, P.C., Wu, L.S., 2011. How supermarket chains in Taiwan select vendors of fresh fruit and vegetables via direct purchasing. *Serv. Ind. J.* 31 (8), 1237–1255.
- Luo, X., Wu, C., Rosenberg, D., Barnes, D., 2009. Vendor selection in agile supply chains: an information processing model and an illustration. *J. Purch. Supply Manag.* 15, 249–262.
- Manchanda, P., Ansari, A., Gupta, S., 1999. The "shopping basket": a model for multi-category incidence decisions. *Market. Sci.* 18 (2), 95–114.
- Manjeshwar, S., Sternquist, B., Good, L.K., 2013. Decision making of retail buyers: perspectives from China and India. *Qual. Mark. Res. Int. J.* 16 (1), 38–52.
- Molinari, L.K., Abratt, R., Dion, P., 2008. Satisfaction, quality and value and effects on repurchase and positive word-of-mouth behavioral intentions in a B2B services context. *J. Serv. Mark.* 22 (5), 363–373.
- Nandonde, F.A., Kuada, J., 2016. Modern food retailing buying behaviour in Africa: the case of Tanzania. *Br. Food J.* 118 (5), 1163–1178.
- Oliver, R.L., 1980. A cognitive model of the antecedents and consequences of satisfaction decisions. *J. Mark. Res.* 17 (4), 460–469.
- Oliver, R., 2010. *Satisfaction: A Behavioral Perspective on the Consumer*, second ed. M. E. Sharpe, Armonk New York.
- Palacios-Marques, D., Roig-Dobon, S., Comeig, I., 2017. Background factors to innovation performance: results of an empirical study using fsQCA methodology. *Qual. Quantity* 51 (5), 1939–1953.
- Pantano, E., 2014. Innovation drivers in retail industry. *Int. J. Inf. Manag.* 34 (3), 344–350.
- Patterson, P.G., Johnson, L.W., Spreng, R.A., 1997. Modeling the determinants of customer satisfaction for business-to-business professional services. *J. Acad. Mark. Sci.* 25 (1), 4–17.
- Perry, P., Kyriakaki, M., 2014. The decision-making process of luxury fashion retail buyers in Greece. *J. Fash. Mark. Manag.* 18 (1), 85–106.
- Petty, R.E., Cacioppo, J.T., 1981. Attitudes and Persuasion: Classic and Contemporary Approaches. Wm. C. Brown, Dubuque, IA.
- Petty, R.E., Cacioppo, J.T., 1984. Source factors and the elaboration likelihood model of persuasion. *Adv. Consum. Res.* 11, 668–672.
- Sen, S., Basligil, H., Sen, C.G., Baraclei, H., 2008. A framework for defining both qualitative and quantitative supplier selection criteria considering the buyer-supplier integration strategies. *Int. J. Prod. Res.* 46 (7), 1825–1845.
- Sher, P.J., Lee, S.H., 2009. Consumer skepticism and online reviews: an elaboration likelihood model perspective. *SBP (Soc. Behav. Pers.): Int. J.* 37 (1), 137–143.
- Sheth, J.N., 1981. A theory of merchandise buying behavior. In: Stampfl, R.W., Hirschman, E.C. (Eds.), *Theory in Retailing*. American Marketing Association, pp. 180–189.
- Skytte, H., Blunch, N., 2001. Food retailers' buying behaviour: an analysis in 16 European countries. *J. Chain Netw. Sci.* 1 (2), 133–145.
- Spreng, R.A., Hui, S.L., Page, T.F., 2009. Service quality and satisfaction in business-to-business services. *J. Bus. Ind. Mark.* 24 (7/8), 537–548.
- Sternquist, B., Runyon, R.C., 2008. The use of buying committees by Chinese retailers: the effects of environment and strategy upon structure. *J. Retail. Consum. Serv.* 15 (2), 93–103.
- Turner, J.H., Boyns, D.E., 2001. In: Turner, J.H. (Ed.), *Return of Grand Theory*. Handbook of Sociological Theory. Springer, New York.
- Wagner, J., Ettenson, R., Parrish, J., 1989. Vendor selection among retail buyers: an analysis by merchandise division. *J. Retail.* 65 (1), 58–79.
- Wagner, J., Benoit, S., 2015. Creating value in retail buyer–vendor relationships: a service-centered model. *Ind. Mark. Manag.* 44, 166–179.
- Webster, F.E., Wind, Y., 1996. A general model for understanding organizational buying behaviour. *Market. Manag.* 4 (4), 52–57.
- Wood, S., Wrigley, N., Coe, N.M., 2016. Capital discipline and financial market relations in retail globalization: insights from the case of Tesco plc. *J. Econ. Geogr.* (2) lbv045.
- Wuyts, S., Verhoef, P.C., Prins, R., 2009. Partner selection in B2B information service markets. *Int. J. Res. Mark.* 26 (1), 41–51.
- Yang, S.C., Hung, W.C., Sung, K., Farn, C.K., 2006. Investigating initial trust toward e-tailers from the elaboration likelihood model perspective. *Psychol. Market.* 23 (5), 429–445.
- Yang, S.F., 2015. An eye-tracking study of the Elaboration Likelihood Model in online shopping. *Electron. Commer. Res. Appl.* 14 (4), 233–240.