

# SEGMENTING THE MARKET OF IN-STORE DECISION MAKERS: IMPLICATIONS FOR SHOPPER MARKETING

*CATHY J. COBB-WALGREN, Georgia State University*

*NAVEEN DONTU, Georgia State University*

*BRUCE PILLING, Georgia State University*

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*Over \$23 billion is spent on point-of-purchase advertising in the U.S. each year. Yet, for all of this investment, we still know very little about the influences on shoppers at the moment of decision making. It is estimated that at least two-thirds of all buying decisions are made after the consumer enters the store environment. The question arises: are all of these “unplanned” decisions alike? The purpose of this study is to segment the market of in-store decision makers in an effort to identify the consumer, product, and environmental variables which distinguish subgroups of shoppers. In particular, the study examines how impulse purchasing fits into the broader category of in-store buying behavior. Through the use of cluster analysis, five groups of in-store decision makers emerged: Whimsicals, Pillars, Extrinsic, Prompters and Misers. The clusters are discussed, along with implications for advertising and merchandising at the point of purchase.*

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## INTRODUCTION

The way that Americans shop for goods has changed considerably over the past 75 years. In 1945, over 60 percent of purchase decisions were preceded by rather careful deliberation prior to entering a retail establishment (du Pont De Nemours 1945). Today, anywhere from 62 percent (Point-of-Purchase Advertising Institute 2014) to 70 percent (marketing-schools.org 2016) of purchase decisions at retail are unplanned, with an additional 20 percent classified as either substitute purchases or only generally planned purchases. Clearly, the stages of brand choice and actual purchase behavior are moving closer together in the consumer decision process. As this happens, the role of merchandising and advertising at the point of purchase takes on paramount importance. The store is, after all, the last contact with the potential customer and, thus, the last opportunity to make a sale. Some would even argue that the store has become an advertising medium in its own right (“Display’s the Thing” 1989). It does represent “the time and place at which all the elements of the sale – the consumer, the money, and the product – come together” (Quelch and Cannon-Bonventre 1983, p. 2).

Along with the increase in unplanned retail purchases has come a new construct—shopper marketing—“the use of insights-driven marketing and merchandising initiatives to satisfy the needs of targeted shoppers, enhance the shopping experience and improve business results” (GMA-Deloitte 2008). Shankar (2011) defines shopper marketing more broadly as “the planning and execution of all marketing activities that influence a shopper along, and beyond, the entire path-to-purchase, from the point at which the motivation to shop first emerges through to purchase, consumption, repurchase, and recommendation”. Shopper marketing represents a critical focus for CPG manufacturers and retailers (Lucas 2012; Kumar, Umashankar and Park 2014; Gilbride, Inman, and Stilley 2015). A recent study reports that shopper marketing expenditures doubled between 2012 and 2014, and in 2020 accounted for 9.2 percent of total marketing expenditures (Cadent 2020).

While shopper marketing encompasses the entire process that the consumer goes through from the first thought about a product to its eventual purchase, there is no question that merchandising and advertising at the point of purchase are a big part of that process. Purchase decisions made in the store environment have been referred to historically as “unplanned,” although the term is a misnomer in several respects. Calling purchase behavior “unplanned” tells us only what the behavior is not, rather than what it is. Perhaps

as a result, the area of unplanned purchase behavior is plagued by the lack of a strong theoretical base (Rook 1987; Amos, Holmes and Keneson 2014).

In addition, just because a purchase decision is made in the store environment does not mean necessarily that it is unplanned. The use of a store's entrance as the cut-off between planned and unplanned purchase behavior is somewhat arbitrary, because many shoppers use the store environment as a place to develop purchase plans and perform problem framing. Nevertheless, for the last half century, marketers have commonly operationalized unplanned purchasing in one of two ways: 1) the difference between purchase intentions (measured before entering the store) and purchase outcomes (measured after exiting the store) (du Pont De Nemours 1945-1965; Kollat and Willett 1967; Prasad 1975; West 1951); or 2) responses to the question, "When was the decision made to buy--was it before or after entering the store?" asked of exiting shoppers (Bellenger, Robertson, and Hirschman 1978; Cobb and Hoyer 1986).

A final problem, and one which served as the impetus for the present study, is the question of how "unplanned" purchasing differs from impulse purchasing. Historically, most researchers have used these concepts interchangeably (Kollat And Willett 1969; Bellenger et al. 1978; Engel and Blackwell 1982; Cobb and Hoyer 1986). In recent years, however, researchers have argued that unplanned and impulse buying are not the same (Amos et al. 2014; Iyer, Blut, Xiao, and Grewal 2019). Impulse purchasing, they suggest, is a much narrower form of buying action that is highly reactive to the purchase situation and is accompanied by strong emotions and minimal cognitive control. However, these recent research efforts have focused entirely on what the authors call impulse purchasing and have not studied empirically how this form of buying action compares to other types of in-store behavior.

The purpose of the present study is to attempt to clarify some of the issues surrounding decision making in the store environment. We begin with the assertion that what the majority of researchers have measured as "unplanned"

purchase behavior for the past 50 years is actually in-store decision making. If that is the case, several questions remain to be answered. What, if anything, is unplanned purchase behavior? How is it different from impulse purchasing? How do these two buying styles vary from other types of in-store decision making? For example, does the person who buys on sudden impulse have the same motivations, feelings, and attitudes as the person who buys out of habit? What about the person who uses the store environment as a planning aid?

This investigation segments the market of in-store decision makers in an effort to identify the variables which distinguish subgroups of shoppers. In particular, the study examines how impulse purchasing, as defined by Rook (1987), fits into the broader category of in-store decision making. Empirical data are used in this investigation to isolate distinct clusters of buying styles, based on shoppers' responses to a specific purchasing experience. Because attempts at deductive classification in this area have not been particularly successful, the study allows the data to suggest a typology, rather than imposing one upon it.

In the next section, we will look at some of the reasons for the growth of in-store decision making and in-store merchandising. This will be followed by a brief review of the research on unplanned purchase behavior.

## LITERATURE REVIEW

### The Growth of In-Store Decision Making

A widely reported VALS survey of U.S. shopping patterns in 1989 found that less than 30 percent of adult consumers researched products before buying, carefully planned before shopping, compared prices, or even liked to shop (VALS 1989). One year earlier, a survey of 50,000 shoppers also found a general lack of planning prior to purchase. Of that sample, 75 percent or more failed to check the store's ads or promotional circulars prior to their shopping trip, and 80 percent chose not to redeem coupons (Eklof 1988). More recent studies have confirmed the changes in consumer shopping patterns, and the tendency to shift decision making to the store

environment (GMA-Booz & Company 2013; Gilbride, Inman, and Stilley 2015).

The obvious question is why are so many shoppers postponing their purchase decisions until they reach the confines of the store? One explanation is a shortage of time, popularly referred to today as time fatigue. The active lifestyles of today's consumers leave little opportunity for leisurely shopping. An increase in the number of dual-income and single-parent households, coupled with long working hours and commutes, reinforces the scarcity of time for lengthy shopping expeditions. With time compression, time itself becomes a type of currency ("Time Scarcity Trends" 2017). It is not surprising, therefore, that consumers are making shorter, more frequent trips to the store (Therrien and Knorad 1988). As a result, a number of retailers have attempted to reach the time pressured consumer by moving to smaller shopping environments (Target 2019).

In addition to the time pressure, consumers are less likely to take with them a shopping list and more likely to use the store to facilitate decision making. Once in the store environment, consumers have little time to compare brands, because they spend an average of only 25 minutes shopping in a supermarket, and an average of 30 minutes in a department store (Underhill 2009). But neither are they necessarily tied to any one brand in a category. Brand loyalty and the larger domain of brand equity have eroded across many product categories over the past decade, as consumers view more and more products as commodities, differentiated primarily on the basis of price (Landler 1991; Morgenson 1991; Belch and Belch 2015). In addition to decreasing brand loyalty, consumers are increasingly able to block out traditional media advertising (Hein 2008). According to Rotfeld (2006) increasing advertising clutter leads to audience inattention. Point-of-purchase displays and in-store promotions can be effective ways to break through the clutter (Belch and Belch 2015; Gilbride, Inman, and Stilley 2015).

As a result of this trend toward in-store decision making, marketers are beginning to place more emphasis on advertising and promotion at the point of purchase. Today, over \$23 billion is spent on p-o-p advertising in the U.S. (O' Guinn

et al., 2019). Annual shopper marketing expenditures are estimated at \$50 billion to \$60 billion (Kumar, Umashankar and Park 2014). A 2013 study (GMA-Booz and Company) found that 55% of consumer package goods firms planned to increase their shopper marketing budgets by more than 5% annually over the next three years. A recent industry report forecasts that global p-o-p expenditures will expand at a compound annual growth rate of 5.9% from 2018 to 2028 (Research and Markets 2018).

### The Literature on Unplanned Purchasing

Research in this area dates back to the 1940s, when du Pont De Nemours and Company began recording the incidence of unplanned purchase behavior (du Pont 1945, 1949, 1954, 1959, 1965). The majority of early studies tried to link unplanned purchasing to specific types of products and/or specific types of outlets (Clover 1950; West 1951; Point-of-Purchase Advertising Institute 1963; Kollat and Willett 1967; Williams and Dardis 1972; Bellinger, Robertson and Hirscham 1978). Results suggested that unplanned purchasing is not limited to any one type of product or retail setting. Stern (1962) was interested in the characteristics of products which lend themselves to a lack of planning. He identified nine such traits, ranging from low price and marginal need to short product life and prominent store display. Not surprisingly, both academicians and practitioners began referring to goods themselves as "impulsive" or "nonimpulse" (Assael 1984). An unfortunate effect of this line of reasoning has been an overemphasis on the product and an underemphasis on the internal motivations of the person making the purchase (Rook 1987; Iyer et al. 2019).

As early as 1969, Kollat and Willett recognized at least two major problems with the growing literature: 1) the concept of unplanned purchase behavior is "too vague and encompasses too many types of behavior" to be useful to marketing decision makers (1969, p. 80 and 2) the methodology used to operationalize unplanned purchase behavior is inadequate. Over the years, a variety of definitions has been used, many of them employing a taxonomical approach. Stern

(1962), for example, identified four types of impulse buying (pure impulse, reminder impulse, suggestion impulse, and planned impulse). Kollat and Willett (1967) developed an intentions typology consisting of five stages of planning (product and brand; product only; product class only; need recognized; need not recognized). Cobb and Hoyer (1986) focused on three stages of prepurchase planning (category and brand; category only; neither category nor brand). Point-of-Purchase Advertising Institute (1987) grouped purchase decisions into five categories (specifically planned; generally planned; substitute; unplanned; and in-store, which they defined as the sum of generally planned, substitute and unplanned).

A common thread running through most of this research (beginning with the du Pont studies) was the assumption that unplanned purchasing is analogous to impulse purchasing. However, a few authors argued otherwise. Weinberg and Gottwald (1982) suggested that there are cognitive, affective and reactive determinants of impulse buying. They characterized an impulse purchase as involving high activation of the consumer, little internal control of the purchase decision, and largely automatic behavior actuated by a stimulus situation. In their words (Weinberg and Gottwald 1982, p 44), “impulse buying decisions are unplanned in the sense of thoughtless, but not all unplanned purchases are impulsively decided. Unplanned purchases may be made absolutely rationally.”

Building on this distinction, Rook (1987, p. 191) used qualitative research to propose the following definition of impulse purchasing:

Impulse buying occurs when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately. The impulse to buy is hedonically complex and may stimulate emotional conflict. Also, impulse buying is prone to occur with diminished regard for its consequences.

Rook developed this definition by combining different consumer responses to three open-ended questions about a “recent, sudden urge to buy something.” Thus, all of the dimensions did not characterize each consumer’s response;

and, by the author’s own admission, some dimensions were not widely supported by the empirical data. It remains to be seen whether the sum of these dimensions applies uniformly to all impulse purchasing.

A recent meta-analysis of impulse buying research (Iyer et al. 2019) identified several key triggers of impulse buying, including marketing stimuli, consumer traits, consumer resources, and consumer motives. Integrating findings from 231 studies, the authors developed a framework that identified determinants of impulse buying, as well as mediating and moderating variables. Key mediating variables included self-control and mood.

A meta-analysis of impulse buying by Amos, Holmes, and Keneson (2014) identified three categories of independent variables: dispositional, situational, and socio-demographic. The authors noted (p. 86) that “impulse buying is still considered to be a construct without a clear theoretical framework”. This statement appears to be consistent with Iyer et al. (2019) who relied on Rook’s (1987) definition. Amos et al. (2014) did recognize that not all unplanned purchases can be categorized as impulse buys.

In the present paper, we propose a model of in-store decision making which attempts to bring together the disparate interpretations in the literature. First of all, we suggest that there may or may not be a general level of problem recognition prior to entering the store. Once inside the store, three groups of determinants interact to influence the in-store decision process: consumer-related, product-related, and environmental variables. Consumer traits are internal to the consumer and include such factors as motives (emotional versus rational), feelings, mood state, etc. These consumer traits are consistent with consumer motives and self-control identified by Iyer et al. (2019). Product variables center around price reductions, in-store coupons, packaging, and point-of-purchase displays. These product variables are similar to the product characteristics discussed by Amos et al. (2014) and included in the marketing stimuli discussed by Iyer et al. (2019).

Environmental variables include such influences as atmospherics, store layout, sales clerk influence, pressure from other members of the shopping party, and time constraints. Obviously, all three sets of variables will be present at the point of an in-store purchase decision. The key is: which group of variables is dominant? For example, a pure impulse purchase is likely to be influenced primarily by the affective state of the consumer. In other words, feelings and emotions predominate. On the other hand, a shopper who uses the store as a planning aid is likely to be influenced more by product and/or environmental variables.

It is now generally acknowledged that much of the research over the past 50 years has inadequately treated the concepts of unplanned and impulse purchasing. As consumers continue to move their decision making process closer to the point of purchase, marketers need to better understand *how they buy* so as to better influence *what they buy*. This research is a step in that direction.

**METHODOLOGY**

It was considered of utmost importance to gather data as near to the purchase site as possible, given that we wanted shoppers to recreate the feelings, perceptions and motivations surrounding their in-store purchase decision. Thus, the data for this study were collected via mall intercept.

The decision to use shopping malls was based on two factors. One, the majority of research in this area has been conducted in grocery stores. Yet, we know that *any* item can be purchased on impulse, from a vacation to a VCR (Rook 1987). Using mall patrons as a sampling frame helps to expand our knowledge base of in-store decision making. Two, because our purpose was to segment the market of in-store decision makers, it stands to reason that we would want to sample from an environment where in-store decisions are frequently made. Malls are generally believed to draw a large number of recreational shoppers. In a nationwide survey of over 34,000 mall patrons, only 25 percent stated that they came in search of a specific item, when asked the primary reason for their visit (Morris 1987).

Three malls were selected in the north, east, and south sections of a large metropolitan area in the southeastern United States. Demographic information compiled by Donnelly confirmed the diversity of the patrons of these particular malls (See Table 1).

Interviews were conducted over several weekends and across all dayparts, from 10:00 a.m. to 6:00 p.m. (terminating at dusk for safety reasons). The procedure was as follows. One of two trained female interviewers approached adult shoppers as they exited the mall. (It is recognized that some time could have elapsed between exiting the store in which the purchase

<u>Variable</u>	<u>Mall 1</u>	<u>Mall 2</u>	<u>Mall 3</u>
Location within SMSA	North	East	South
% Minority	3%	1%	77%
Average Household Income	Moderate	Moderate	Low
% Mgr/Prof/Tech Occupation	29%	17%	23%
% Non-working Mothers	42%	42%	23%
% Household Headed by Female	8%	9%	24%
% Aged 45+	28%	31%	23%
% Owner-occupied Housing Units	84%	72%	59%
% Housing Built Prior to 1950	13%	23%	47%
SOURCE: Donnelly Marketing Information Services			

was made and exiting the mall. However, mall restrictions precluded sampling inside the mall area.)

Each shoppers was asked three screener questions: 1) "Did you make a purchase in the mall today?" 2) "If so, what item(s) did you purchase on today's shopping trip?" 3) For each item purchased, "Did you plan to buy item before or after you entered the store in which you made the purchase?"

Interviews were terminated if the shopper answer "no" to question 1 or if none of the items purchased was unplanned prior to entering the respective store (question 3). Everyone in the sample, therefore, fit the definition of an in-store decision maker.

A total of 229 shoppers were approached, of whom 160 initially agreed to participate. However, ten of the shoppers made only previously planned purchases. Thus, 150 shoppers qualified for and agreed to complete the survey. (Of this group, 21 shoppers made both previously planned and in-store purchase decisions.)

Interviewers were instructed to take the first item mentioned that was unplanned prior to entering the store and focus on that particular purchase for the remainder of the survey. Laminated cue cards listing response categories were used to facilitate replies to close-ended questions. The entire interview took about 10 minutes to complete.

The research instrument was limited to variables which had a logical or theoretical connection to in-store decision making. Questions centered around three groups of determinants: consumer, product, and environment. Because the study's purpose was to distinguish impulse from other forms of in-store decisions, every effort was made to include the components of impulse buying as defined by Rook (1987). Where possible and available, multiple-item measures were employed. Factor analysis was used to reduce the number of variables and identify the main dimensions that distinguish in-store decision makers. Respondents were first asked in an open-ended format what prompted them to make their purchase once they entered the store.

While this type of question might encourage a rational response, it is clear that not all in-store decisions are made rationally. Therefore, the second set of questions utilized agree-disagree statements to tap some of the underlying motivations (such as curiosity and whim) and reactive conditions (such as peer pressure, sales clerk influence, or price reductions) surrounding the purchase.

Next, the survey elicited feelings which accompanied the urge to buy. Respondents were asked to what extent they experienced various feelings such as excitement, caution, satisfaction, and guilt. This was followed by a set of questions concerning the extent of need for the item, amount of time spent deliberating, and the nature of any concerns or second thoughts. Finally, a few questions were asked about the actual item purchased: amount spent on item, amount spent on shopping trip, and end user.

Few demographic questions were asked, for three reasons. One, the purpose of the study was not to profile shopper on demographic traits. (Past studies have shown that "unplanned" purchasing is not limited to any particular demographic group.) Two, the intercept mode of questioning precluded asking certain sensitive questions. Finally, in order to encourage response, the interview was kept as short as possible. Respondents ranged in age from 18 to over 65. The age distribution was as follows: 18-24 (19 percent), 25-35 (36 percent), 36-49 (25 percent), and 50 or older (20 percent). Consistent with national trends (Schudson 1984; Hu and Jasper 2004), the majority of shoppers (79 percent) were female. Most respondents were either shopping alone or with one other member in their shopping party.

## RESULTS

Before discussing the results of the cluster analysis, it may be of some interest to present the characteristics of the various in-store purchase decisions. As shown in Table 2, a wide variety of items was purchased. The broad category of clothing accounted for the largest percentage of purchases (44 percent). This was followed by accessories (24 percent), then entertainment goods (10 percent), and cosmetics (8 percent).

**TABLE 2:**  
**Characteristics of the In-Store Purchase Decision**

<u>Variable</u>	<u>Frequency</u>	<u>Percent</u>
<b><u>Items Purchased</u></b>		
Clothing:		
Shirt/Blouse/Top	17	11%
Pants/Jeans	10	7
Skirt/Dress/Suit	21	14
Sweater/Coat	5	3
Athletic/Active/Underwear	14	9
Accessories:		
Shoes	17	11%
Belt/Tie/Scarf/Handbag, etc.	13	9
Jewelry	6	4
Cosmetics	12	8
Home Accessories	8	5
Entertainment	15	10
Hobby/Work-related	9	6
Food/Health	3	2
<b><u>Primary Reason for Purchase</u></b>		
Price	41	27%
Observation	35	23
Function	29	19
Affect	25	17
Need	13	9
Want	7	5
<b><u>Cost of Item</u></b>		
\$10 or under	39	26%
\$11-20	52	35
\$21-50	40	27
\$51-100	13	8
Over \$100	6	4
<b><u>End User</u></b>		
Self	107	71%
Other(s)	28	19
Both	15	10
		<b>(Continued)</b>

**TABLE 2:**  
**Characteristics of the In-Store Purchase Decision (Continued)**

<u>Variable</u>	<u>Frequency</u>	<u>Percent</u>
<b><u>Amount of Time Spent Deliberating</u></b>		
Less time than normal	85	57%
About the same amount of time as normal	51	34
More time than normal	14	9
<b><u>Extent of Need for Item</u></b>		
None	49	33%
Some	67	45
Many	34	22
<b><u>Extent of Second Thoughts or Concerns</u></b>		
None	96	64%
Some	46	31
Many	8	5
<b><u>Nature of Concerns</u></b>		
Functional traits of products (style, color, size, workmanship)	16	11%
Price	12	8
Need	8	5
Doubts concerning affect	7	5
Choice among several	2	1
Doubts concerning appropriateness	1	1
Not indicated	8	5
None	96	64

The primary explanation for the purchase, cited by 27 percent of the sample, was price-related (e.g., “good buy,” “on sale,” “cheap”). For 23 percent of the sample, observation of the product prompted the urge to buy. Shoppers referred to window displays, seeing the product on a mannequin, browsing through the department, and visual examination. Of particular interest, however, were the responses “it was inviting” and “it was there,” suggesting that the shopper was literally drawn to the item. Another interesting observational response was “I didn’t see anything else I could buy,” as though the shopper was determined to leave the mall with *some* purchase.

Almost one-fifth of the sample reported functional reasons for purchase, such as “fit,” “color,” “style,” “for a special occasion,” “for a gift,” “to pass the time,” and “variety.” Seventeen percent gave affect-related reasons.

Included here were responses such as “it put me in a good mood” and “I liked it.” Several respondents mentioned the weather as an influence on their mood state. Other interesting responses were “the devil made me do it” and “my fiancé forced me,” both of which suggested a disavowal of responsibility. The final two response categories were need (mentioned by 9 percent of the sample) and want (cited by 5 percent).

The majority of purchases (88 percent) cost \$50.00 or less. Seventy-one percent of the shoppers purchased the item for themselves. Not surprisingly, over half of the sample spent less time than normal deliberating their purchase decision. (Only 9 percent spent more time than normal.)

Forty-five percent of the purchasers cited some need for the item. Almost two-thirds of respondents had no second thoughts or

concerns about their in-store purchase decision (at least immediately after purchase, when the data were collected). Those who did were concerned primarily with price or functional traits of the product (for example, whether it fit properly or was the right color).

### Factor Analysis

Factor Analysis was performed on the initial pool of variables, with two objectives in mind: to reduce the data and to uncover the dimensions that distinguish in-store decision making. The authors expected the dimensions to correspond to the three groups of determinants: consumer-related, product-related, and environmental.

The principal component model with varimax factor rotation was applied to the data. Factor loadings, along with eigenvalues and cronbach alphas, are reported in Table 3. The main variables loading on each factor are boxed within the respective column. The analysis yielded five dominant factors; two dealt with the internal traits of the consumer, two focused on the product, and one centered around environmental variables. Alpha reliabilities for all five dimensions were above 0.70.

The first two factors, accounting for 49 percent of the total variance, were consumer-related. Factor 1, labeled "Consumer Impulse," was defined primarily by affective variables such as impulsive, self-indulgent, tendency to buy on a whim, influence of mood state, and guilt. Factor 2, labeled "Consumer Control," loaded heavily on variables such as confident, in-control, satisfied, and no second thoughts.

Factor 3 was an environmental factor. Variables which loaded on this dimension included the influence of display, peer/family pressure, the element of time, and to a lesser extent, sales clerk influence. Five variables loaded on Factor 4, which was labeled "Product as Reminder." Here, the product itself served as a cue, along with need for the item. The last factor, "Product Price," suggested the strong influence of cost and the presence of a sale.

### Cluster Analysis

To segment the market of in-store decision makers according to the dimensions uncovered in the factor analysis, a clustering procedure was performed. Factor scores from the principal component analysis served as input criteria. Many researchers have advocated using factor scores, as opposed to original variables, in the cluster analysis routine to avoid the interdependencies that may be present in the actual variables (Lorr 1983; Furse, Punj, and Stewart 1984; Singh 1990).

Because cluster analysis is not a probabilistic approach, there is no single best solution. To obtain robust results, a three-stage analysis was conducted using published procedures (cf., Punj and Stewart 1983; Singh 1990). First, a hierarchical cluster analysis using Ward's method was run to get a feel for the number of groups in the data. From a theoretical standpoint, three to five clusters were expected, because published taxonomies of unplanned purchase behavior have stayed within this range (Stern 1962; Kollat and Willett 1967; Cobb and Hoyer 1986; Point-of-Purchase Advertising Institute 1987). Results suggested a four- or five-cluster solution. Next, a k-means non-hierarchical cluster analysis was performed on the five factor scores. The five-cluster solution had the highest significance using Arnold's test for clusters (Arnold 1979). This solution was also theoretically meaningful, as discussed in the next section.

As a final step, the validity of the cluster solution was assessed using a split sample, cross validity analysis. The sample was randomly split into two groups, and cluster analysis was performed on the first group. Using the procedure recommended by McIntyre and Blashfield (1980), the observations in the second sample were assigned to the clusters using a) independent cluster analysis and b) nearest centroid (of first group) assignment. Then, the agreement of these two solutions was evaluated using the kappa statistic to determine stability. All of the validation results are reported in Table 4.

**TABLE 3:  
Factor Analysis of Influences on In-Store Decision Making**

<u>Variable</u>	<u>Factor</u>				
	1 Consumer Impulse	2 Consumer Control	3 Environ- ment	4 Product as Reminder	5 Product Price
Impulsive	.77				
Self-indulgent	.74				
I bought it on a whim.	.62				
I needed something to lift my spirits.	.55				
Guilty	.47				
Confident		.81			
In-control		.73			
Satisfied		.63			
I had many second thoughts while deciding to purchase this item.		-.51			
The item was attractively displayed.			.69		
I thought my friends or family would like it.			.65		
I spent more time deliberating over this purchase than I spend on planned purchases.			.54		
Excited			.42		
Seeing it in store reminded me that I needed the item.				.64	
I very much needed the item.				.54	
Responsible				.49	
I was curious about the item, so I thought I'd try it.				.41	
I bought it because it was on sale.					.65
Cautious					.44
I didn't care how much the item cost, I <u>had</u> to have it.					-.64
Eigenvalue	3.09	2.94	2.68	1.99	1.68
Coefficient Alpha	.88	.84	.77	.75	.72

Loadings < .4 were suppressed to facilitate interpretation

TABLE 4: Summary of Cluster Analysis					
Factor	Average Factor Scores				
	Cluster 1 <i>Whimsicals</i> (26%)	Cluster 2 <i>Pillars</i> (22%)	Cluster 3 <i>Extrinsics</i> (17%)	Cluster 4 <i>Prompters</i> (16%)	Cluster 5 <i>Misers</i> (19%)
Factor 1 – Consumer Impulse	0.97	-0.72	0.39	0.27	-0.24
Factor 2 – Consumer Control	-0.05	0.48	0.18	-0.04	0.25
Factor 3 – Environment	0.28	-0.52	0.60	0.26	0.24
Factor 4 – Product as Reminder	-0.54	0.27	-0.10	0.81	0.22
Factor 5 – Product Price	-0.76	0.11	0.25	-0.03	0.84
Other Variables Used to Profile Clusters					
Cost of item	high	average	average	average	low
Sex	more male	both	more female	both	more female
Age	average	older	average	younger	younger
Reason for purchase	affect	functional	affect	observation	price
Item purchased	clothing	anything	clothing	toiletries	accessories
End user	self	others	others	both	self
Reliability and Validity Statistics					
Statistics		<u>Value</u>	<u>F-Value</u>	<u>Significance</u>	
Wilk’s Lambda		0.08	24.68	0.0001	
Pillai’s Trace		1.64	19.37	0.0001	
Hotelling-Lawley Trace		4.08	27.63	0.0001	
Roy’s Root		2.46	68.81	0.0001	
Arnold’s test for 5 clusters				0.05	
Split Sample Cross Validation Kappa		0.84			

**Validation**

Various tests were performed to check the reliability and validity of the factor analysis and cluster analysis results. To summarize: 1) all factors had significantly high alpha values; 2) all factors had significant R-square values in creating the clusters; 3) the cubic clustering criterion (CCC) for the five-cluster solution had a significant peak (SAS 1988); 4) the cluster solution passed Arnold’s test; 5) the split sample, cross validation had a kappa value of 0.84; and 6) the values for Wilk’s Lambda, Pillai’s Trace, Hotelling-Lawley Trace and Roy’s Root were all significant (see Table 4).

Based on the mean factor scores and the variables that loaded each of the factors, the five clusters were labeled as follows:

*Whimsicals.* The largest of the clusters (26 percent of the sample), Whimsicals were the closest to Stern’s (1962) definition of pure impulse and Rook’s (1987) more detailed characterization of impulse buyers. Whimsicals demonstrated the suddenness which often accompanies impulse purchasing. For example, they were the most likely to call their decision impulsive and to agree that they bought the item on a whim. Reinforcing the affective nature of the in-store decision, Whimsicals used the purchase as a way to lift their spirits.

Consistent with Rook's discussion of the conflict between pleasure and reality, Whimsicals reported feeling excited and self-indulgent on the one hand, and guilty on the other. Low price was clearly not a factor, nor was need. There was, however, some suggestion of compulsion, in that Whimsicals believed they *had* to have the item, regardless of cost.

*Pillars.* Accounting for 22 percent of the sample, Pillars represented a very rational form of in-store decision making. They reported feeling confident, in-control, satisfied, and responsible. Correspondingly, Pillars felt the least impulsive and least self-indulgent of all the groups. They were unlikely to be influenced by the sales clerk or other aspects of the environment, and they had no guilt feelings or second thoughts about their purchase. The fact that they did not take much time to make their decision reinforces the confidence that surrounded their buying decision.

*Extrinsics.* As their label suggests, Extrinsics were greatly influenced by external factors. They were attracted by the store display and felt somewhat pressured by the sales clerk. It was important to Extrinsics that friends and family liked the purchase. Despite the need for external validation, this group still reported a feeling of excitement surrounding the purchase. Strong need was not a factor. Extrinsics comprised 17 percent of the sample.

*Prompters.* Prompters were the smallest of the five groups, accounting for 16 percent of the sample. The major defining trait of this cluster was observation of the product in the store. Seeing the item reminded them of a latent need. Not surprisingly, this group was the most likely to report to a strong need for the product. Perhaps as a result, Prompters felt the most responsible about their product. They were likely to be curious but in a hurry. In sum, this group had certain characteristics of Stern's (1962) classification--reminder impulse.

*Misers.* Misers accounted for 19 percent of the sample. Consistent with their name, Misers were very price conscious. They were the most likely to buy the item because it was on sale. Furthermore, they disavowed any strong compulsion to buy, disagreeing that they had to

have the product regardless of cost. Misers reported feeling cautious, perhaps because this was not a regular purchase. Not surprisingly, this group shared some of the rational characteristics associated with Pillars.

As shown in Table 4, several variables not included in the clustering procedure were used to describe the groups (Aldenderfer and Blashfield 1984). This profiling process revealed some interesting differences that enhanced the generality of the cluster solution.

Whimsicals spent the most on the in-store purchase (and also the most on the entire shopping trip). They shopped the latest in the day and the latest in the week. They were the most likely of the five groups to purchase clothing. In addition, Whimsicals were the most likely to mention affect and the least likely to mention functional reasons for their purchase.

Pillars were the oldest shoppers. They tended to buy for others rather than for themselves. They were the most likely to give a functional reason for purchase.

Extrinsics were the most likely of all the groups to purchase for others rather than for themselves. They purchased clothing and accessories. Extrinsics often mentioned affect as their motivation for purchase.

Prompters were the youngest group. They gave observation-based reasons for purchase more so than any other cluster. Prompters were the most likely to purchase toiletries.

Misers were the most likely to view themselves as the end user of the product, which tended to be accessories. They spent the least on their shopping trip. Not surprisingly, Misers were the most likely to give a price-related reason for purchase.

## DISCUSSION

In today's marketplace, consumers increasingly view time as a scarce commodity. Fortunately, trends in retailing--from warehouse clubs and hypermarkets to 24-hour ATMs and online shopping--make it easy for consumers to shop without much advance planning. The present

study focused on in-store decision makers. The purpose was twofold: 1) to go beyond Rook's (1987) qualitative methodology to examine impulse purchasing, and 2) to distinguish impulse buying from other forms of in-store decision making. As more and more shoppers delay their product choices until they reach the point of purchase, marketers need to better understand the distinction.

The findings of the study confirm that there are different types of in-store decision making. Not every purchase that is characterized by a lack of forethought is an impulse purchase. The latter does appear to be a narrower form of buying behavior that is driven largely by emotion.

A second interesting finding is that in-store purchase decisions are influenced by consumer, product, and/or environmental variables, but not all three are equally important for any one purchase. Furthermore, these determinants can be subdivided. Consumer traits, for example, can be predominantly emotional or predominantly rational. It is significant that the two consumer-related factors were the most important overall, accounting for almost half of the total variance. Rook (1987) may have been correct in suggesting that the impulse literature has concentrated too much on characteristics of the product and not enough on characteristics of the person buying the product. Unfortunately, retailers have less control over internal consumer traits. The study did find, however, that half of the sample was driven more by product or environmental variables, over which retailers and manufacturers do have considerable control.

A third noteworthy finding is that impulse purchasers in the present study did not exhibit the *degree* of anxiety and loss of control that Rook (1987) observed. It is true that, relative to other shoppers, they experienced more guilt. But their scores were still mid-range. Two plausible explanations exist for the discrepancy. One, it is possible that in the present study, strong anxiety had not yet surfaced, because shoppers were questioned immediately after purchase. On the other hand, Rook may have inadvertently created a social desirability bias by leading respondents with the question, "*What kinds of negative consequences have you incurred as a result of your impulse shopping*

(emphasis added)? There is a significant difference between impulsive buying and compulsive buying. Yet, Rook didn't draw much of a distinction.

A strength of the present investigation was the use of actual shoppers near the point of purchase, where they were most likely to recall their thoughts, motivations, and feelings. By intercepting consumers in the shopping environment, we probably got a more representative snapshot of in-store decision making than some other studies obtained. Rook (1987), for example, used delayed self-report measures, asking respondents to think back to a recent impulse purchase. No doubt many subjects recalled their most vivid example of impulse buying, which may or may not have been representative.

A further differentiating feature of the present investigation was the use of shopping malls for the intercept. Articles on impulse purchasing all too often focus on supermarkets when, in reality, almost any product in any outlet can be purchased on impulse.

Among the limitations, this investigation was constrained by the use of a convenience sample. An effort was made to ensure demographic diversity by sampling from three malls, which cater to different socioeconomic groups. But we cannot be certain that the sample conformed exactly to the area demographics. Thus, the results should be viewed with caution.

Additionally, the mode of data collection precluded a lengthy research instrument. As such, many potentially useful questions could not be asked. For example, what kind of point-of-purchase materials would work for each segment? Now that different patterns of in-store decision making have been identified, the logical next step is to empirically link different types of purchasers to specific shopper marketing techniques. It is true that all shoppers "walk down the same aisle," but they are not influenced by the same factors. It would be interesting to determine how different types of in-store shoppers react to these tactics, as opposed to just looking at the overall results.

Also of interest in future studies would be whether the consumer's response style for one

in-store purchase decision carries over to other buying decisions. In the present study, just one purchase was examined. Was it a typical one for the shopper, or are all shoppers different types at different times? There is some suggestion that one unplanned purchase may increase the probability of a subsequent unplanned purchase within the same shopping trip (Gilbride, Inman, and Stillely 2015). Are the drivers of those decisions the same?

Finally, it must be acknowledged that the retail landscape has changed dramatically in a very short time, and will continue to evolve with more and more online shopping and alternative modes of delivery for goods. It would be interesting in a future study to compare online with in-store shopping to see if the same types of shopper groups emerge. Nielsen, for example, reports (against conventional wisdom) that Americans are 5 percent more likely to make impulse grocery purchases online than in brick-and-mortar stores (Specialty Food News 2017). Shopper marketing is obviously playing an important, albeit different, role in online environments. Amazon, for example, is reportedly attracting a lot of the budgets for shopper marketing (<https://digiday.com/marketing/amazon-winning-lucrative-shopper-marketing-budgets/>).

In conclusion, the percentage of purchase decisions that are made in the store provide a powerful statistic when one considers all the money that is spent on advertising outside the store environment. Billions of dollars are spent on marketing messages that might be completely disregarded by customers as soon as they actually see a product on a shelf. Today's marketers must consider their advertising efforts from the moment a customer is introduced to a product to the moment they actually pay for it.

It is encouraging that many manufacturers and retailers are now employing consumer psychology to better understand the factors that affect purchasing decisions, because those purchase decisions are rarely a purely rational choice. Instead, they are often based on a number of environmental and psychological factors (marketing-schools-org 2016). Marketing professionals must understand the mental process behind the decision to buy if

they want to connect with customers in the place where it may matter most—at the moment of choice.

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