
The Retail Shopping Experience for Low-Literate Consumers

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ABSTRACT

With the lack of research on low-literate consumer shopping behavior in retail settings, retailing decisions are likely to be based on implicit assumptions about literate consumer behavior. In turn, this leads to a lack of understanding of how low-literate consumers can be empowered in the retail environment. A series of interviews and observations offer qualitative insights about the challenges that low-literate consumers face when shopping in retail settings and the coping strategies they employ. These insights are used to develop a theoretical interpretation of low-literate consumer behavior in the retail setting, covering aspects such as environmental effects, self-esteem maintenance and avoidance behaviors. Implications for retailers and consumer research are discussed.

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Grocery shopping for literate consumers may involve comparisons of prices, brands, and package sizes, and weighing costs and benefits to obtain the best deal. Being short of money at the counter may require returning an item, perhaps attributing the event to, and mildly scolding oneself for, forgetfulness. However, this typical visit does not begin to emphasize the challenges that low-literate consumers face at retail stores. Moreover, outcomes such as being short of money at the counter may be attributed to low literacy and lead to even despair rather than being attributed to something as mundane as forgetfulness. The 2002 National Assessment of Adult Literacy (NAAL) suggests that at least 22% of US consumers lack the ability to perform basic tasks in retail environments such as calculating unit prices and price discounts or comparing product attributes (Viswanathan et al. 2009). Skills taken for granted by the literate world are central to the low-literate shopping experience.

Method

Our research was conducted at adult education centers and retail outlets in the Midwestern United States. Our focal informants were adult education students. Students ranged in grade equivalent levels from 0-12, based on reading and math ability, measured at enrollment and periodically thereafter. The students were placed into classrooms based on one of three groups: 0-4, 5-8, and 9-12. We also conducted four interviews with adult education teachers to gain a basic understanding of students, and three interviews with store managers to better understand

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store policies and attitudes toward low-literate consumers. The store managers were from a national discount chain, a national chain of superstores, and a regional grocery store.

We conducted 14 in-depth interviews with 0-4 level students and 21 in-depth interviews of 5-12 level students. Interviews ranged in length from 20 minutes to 2.5 hours, averaging about an hour. The interviews were tape-recorded and transcribed for analysis. Broad questions about a) store/brand preferences, b) price-value relationships, c) nutritional labels, d) the influence of ads, television, and other people on buying decisions, e) budgeting, and f) attitudes toward stores were used to focus the conversation on consumer experiences. Informants were encouraged to focus on what they considered important. To facilitate the interviews, examples of ads and coupons were shown to 0-4 grade level consumers who were initially reluctant to speak.

Group observations were also conducted with 0-4 grade level students on two separate shopping trips, spaced a year apart. One trip was at a single store (ten students), and another at a mall (ten students), with many of the students participating in both trips. Some of these students were interviewed individually. The shopping trips were regularly scheduled field activities that the students anticipated enthusiastically. Teachers developed shopping tasks as part of the field trips. Students were asked to find a set of items, list their prices, compute totals, and ascertain whether they stayed within a pre-specified dollar limit. If the limit was exceeded, they were asked to replace an item and re-compute the total.² To study direct interaction with the retail environment, we also conducted six one-on-one shopping observations of 0-4 grade level students and nine one-to-one observations with 5-12 grade level students.

Findings

Consumer Challenges

Retail Environment Challenges

Low-literate consumers' challenges at the retail environment level encompass cognitive and affective aspects. The findings pertaining to these two aspects are outlined below.

Cognitive Difficulties

Perhaps the biggest challenge our informants faced was the vast information and product choice within the retail setting. Such challenges occurred at the retail environment level due the size and layout of stores. Even in familiar locations, our informants had difficulty locating products.

Dale (40 years old, 0-4): I went to (large national superstore) one time and I couldn't find what I wanted, so I had to ask what I wanted.

Interviewer: How long did it take you to find (the product)?

Dale: An hour or a half-hour.

Dale may have overestimated the time spent, but several informants noted difficulty locating products in large stores, even familiar ones. Large, unfamiliar stores further exacerbated such problems.

² While assigned shopping tasks can potentially change the students' natural shopping behaviors, the running conversation among the students and between students and teachers during the shopping trips suggested that the students generally approached their regular shopping trips in a similar manner. Moreover, the students voted on which outlets to visit which increased their sense of confidence and ownership in the task.

Robert (50, 0-4): I have been at (national superstore) once but I didn't like it. It was too big to get around in... (regional grocery store) – I know where everything is, and when I go to a new store I got to look for everything.

Whereas literate consumers may prefer familiar surroundings, our informants depended on familiarity and were overwhelmed by large, unfamiliar locales where a high amount of effort was required to locate products. .

Affective Aspects

For our informants, affective and cognitive factors were mutually reinforcing, to the point that going to the store was often a threatening experience. Negative experiences arose from a variety of factors, such as carelessness and unscrupulous or inconsiderate sellers.

Janie (17, 5-12): I bought this coat . . . had like a burn right at the inside, and I am like I brought it back . . . nobody in my house smokes . . . I don't smoke. The woman was like, "Well see, you have burnt it because you know we don't sell anything with burns" . . . I was like, "Well you know I just want to exchange it, because I didn't do anything."

The cause of Janie's experience may have been her own carelessness or an unscrupulous seller, but the ultimate result was frustration and a feeling of helplessness. Such experiences add insult to injury, exacerbating the challenges of low literacy, and lead to apprehension and mistrust with shopping encounters. As negative experiences accumulated, regret over poor decisions and feelings of apprehension and mistrust led to the belief of being cheated or exploited.

Fran (24, 5-12): Well I had a car once.... It was about \$3000 or so. I guess people there kind of messed me around. They had me paying a little bit more than I should have.

Interviewer: How do you know that?

Fran: Because my brother talked to me and stuff. He told me that I was paying more... That kind of messed with my head a little bit because I was like, "You know it's the education." I need more skills if I go about doing stuff. I put a lot of money into it. I only had a few more payments to pay, and they came and repossessed it. I still think about it. I was like, "I was f_____d." I was played for the fool, I guess. It never happened again. That's how I feel. It won't happen again.

Product-related challenges

Product-related challenges stemmed from product decisions and focused on decision making. The information display issues discussed earlier provided the context in a broader sense and were relevant for specific product purchases.

Difficulties in processing numerical product information

Our informants spent considerable effort processing numerical information. This was particularly the case with 0-4 level informants who labored over locating price displays, reading prices, and translating volumes into purchase units (e.g., a total of 150 candles requires boxes of 100 and 50). We observed several errors in locating prices (i.e., finding the correct price tag), reading prices (e.g., reading \$220 as \$22), and writing prices down (e.g., \$11.99 as \$11). Errors in reading numbers also occurred, due to a tendency to interchange digits (reading \$49 as \$94).

Basic computations, such as computing the price of two units given the unit price, required paper and pencil calculations or the use of calculators for 0-4 level informants, as did sales tax

estimates. Some informants erred when using a calculator. Relatively simple subtractions, such as those involving round numbers, required arithmetic computations.

Interviewer: How do you figure that (half price) out? If it is \$10 how much would it be?

Dale (40, 0-4): Maybe \$9.

Difficulties in processing text-based product information

Our informants had difficulty reading product information, which resulted in problems at the product level, given the need to transact, read brand names, store signage, and product information. Problems included misreading (or not reading) relevant information and struggling to recognize complex words. Difficulties with reading resulted in avoiding text-based information and the use of visual cues to gather information.

These difficulties led to confusion about what was actually being purchased. For example, reading difficulties led to confusion over which items were on sale. Although our informants generally struggled with reading, some did not resign themselves to poor outcomes. In particular, informants with relatively high literacy levels leveraged their skills and noted the importance of reading when making purchases.

Xavier (21, 5-12): Basically, I get the sales pages before I get there. You know, look at the sale paper... Then you know and go by their prices. Cuz, it don't make sense to be going to (Store A) and they got a pack of chicken wings for ten something a pound, and I go to (Store B) and they got a pack of chicken wings for \$4.99 a pound. So, I go to (Store B). But, you got to survive and eat out here, so you got to spend what you need. That's what I basically do, but I like the sales as far as the food and everything...

(later in the interview) You just can't pick up something and don't read. You just can't go to the grocery store and say, "I want that." You gotta read. That's what the label's there for. You gotta look at it and read.

Coping strategies

Low-literate consumers displayed ingenuity and adaptivity through coping strategies based on the challenges faced in complex retail environments. These strategies addressed both environmental and product level challenges.

Coping with environmental challenges

Our informants' coping strategies for environmental challenges were related to simplifying cognitive demands and reducing the likelihood of negative affect associated with shopping, and often involved putting oneself into a comfortable environment (e.g., shopping in stores where prices are easy to calculate or going to stores with helpful employees).

Simplifying cognitive demands

Our informants coped with cognitive demands in a variety of ways. One strategy was to choose outlets with fewer choices as the confusion from having too many options actually inhibited meaningful choice. Erika described two outlets: Store X was a large grocery store and Store Y was smaller "dollar store" with limited product choices.

Interviewer: Does Store X have more to choose from or Store Y? Which one has more stuff to choose from?

Erika (38, 0-4): Store Y.

Interviewer: Store Y has more stuff to choose from?

Erika: Yeah.

Erika's self-imposed misconception of a store's features may have been a response to the sheer size of a store, but was a functional misconception as it placed the informant in a less cognitively demanding retail environment.

Other informants reported choosing familiar contexts which made it easier to locate products, identify brands, and identify discounts. This resulted in store loyalty. The retail context became central to informants' processing of numerical information, evidenced by the use of price reference points.

Teacher (0-4): . . . when they go to (national fast food restaurant), they know that for \$5 they can get a meal. That's how they have been taught. So they'll always have a \$5 bill and they'll just expect (national fast food restaurant) to give them back right change. So they're really easy to cheat.

Seeking security in shopping environments

Our informants sought security in their shopping environments. Feeling comfortable during shopping (e.g., shopping at a comfortable pace) took on added value given their cognitive difficulties, harsh retail experiences, and undermined self-esteem. One major coping mechanism that our informants reported was dependence on friends, relatives, store personnel, and even strangers.

Fran (24, 5-12): It took me a long time kinda, you know, to go grocery shopping for myself. I always get my mother to come with me so she can help me do the pricing, and it's still hard for me like with meats and stuff...

Retail store personnel played a central role as our informants often visited stores where they knew helpful employees who helped them overcome struggles in the store. They reported establishing relationships with employees who were aware of their literacy and numeracy deficiencies and were willing to work with them whenever their shopping basket total exceeded their funds on hand. Those who reported cultivating relationships with store personnel also reported feeling more comfortable while shopping and seemed highly loyal to the stores in question.

Coping with product-related challenges

At the product level, our informants' coping strategies aimed to address difficulties in encoding alphanumeric information and difficulties with functional skills when making specific product choices. Our informants used coping mechanisms related to concretizing decisions and relying on a sense of knowing, both of which facilitate the usage of available information to make product decisions.

Concretizing shopping decisions

Our informants concretized decisions to negotiate difficulties with issues related to basic literacy, numeracy, and functional skills in a retail context. Informants used numbers to perform concrete operations. For example, one informant reported that they learned, through instruction, to look at the expiration dates without necessarily understanding their exact meaning, but knew that they shouldn't buy products where the dates on the label have already past. Although our informants used a relatively low amount of symbolic information, a large proportion of the information used is numerical in nature which resulted from the focus on price information and on the necessities

of handling money (Viswanathan et al. 2005). Ironically, the centrality of price and the inability of handling money necessitated numerical processing. Our informants were often unable to derive meaning from numerical information but were able to concretely process numbers by focusing on the larger or smaller number (e.g., picking the product with the lower price).³

Holly (18, 5-12): If it is 40-50% off, I'll just get it anyways. Then I'd know in a close range it's close to half off and it's easier...

Interviewer: Suppose something is 75% off, let's say it's \$40 and 75% off, would you get it?

Holly: Probably.

Interviewer: Are there some sales like that, particularly half off, 30% off that you avoid because you say "I don't want to figure that out" or do you normally if it's 30% off you figure it out?

Holly: Sometimes I see it for 30 or 50% off, I'll just walk away. Because sometimes you're not in the mood (to figure out the price). You just come to buy something and you just buy something else.

Holly used the basic rule that 40-50% off was good, thus anything more than 50% off was probably worth buying. However, with numbers less than 50% off, the added difficulty of calculation made not buying a more likely option. Similarly, some informants abandoned purchases altogether due to difficulty computing final prices based on percentage-off or fraction-off offers.

Some informants used pictorial information relevant to product choice to bypass problems with symbolic information. Pictographic thinking emerged in several forms at the product level, including dependence on visual information.

Paula (18, 0-4): I look at the price, I look at the picture. Whatever the picture, if that's what I want, that's what I'm gonna get.

However, the use of surface level cues on a package can lead to incorrect choices.

Zachary (38, 0-4): Well you know just like they got the sugar in the box. They got the white sugar and the brown sugar. See I had problems with that now once – sugar. I got a box of brown sugar at the house, I didn't even know, I thought it was a box of white sugar because the price I seen is 99 cents. Yeah, that's a good deal on the sugar and I'm gonna get it. I got the sugar in there, brought it home, and opened it up and it's brown sugar. I'm like, s**t, I can't use this, you know? That happened.

Shopping with a sense of knowing

Our informants often relied on a *sense of knowing* when making product decisions. This was an overarching feel for product quality and suitability that informs product decisions that is not based on symbolic information. This addressed challenges in effectively using widespread symbolic information in retail environments. Our informants based purchases on products "looking good" or "being fresh," or merely on a positive feeling engendered by exposure to the product. However, they were hard pressed to provide explanations for their choices based on objectively assessed attribute information. "Gut feeling" was another vernacular label applicable to a sense of knowing that was otherwise hard to explain. The key was that our informants fell

³ Numerical information can be processed at a surface level without attention to meaning, and can consequently be easily processed as well (Viswanathan and Childers, 1996; Viswanathan and Narayanan, 1994), but deriving meaning from a single piece of numerical information (e.g., 120 calories is low) requires additional effort and knowledge.

back on a sense of knowing based on intuitions about product quality and benefits. One way in which this intuition manifested itself was in forming an overall product assessment, followed by using one attribute to justify the assessment. This was evidenced by Fran's shopping approach.

Fran (24, 5-12): I just look at what's healthy for them [children]. I don't really look at how many grams was in it, or how much fat is in it. I don't really pay attention to that too much. I know they get their fruits and vegetables, and they eating healthy. So I don't really pay no attention to that (nutritional labels).

Interviewer: So how do you figure what is healthy?

Fran: For instance I wouldn't give them too much sweet. I'd rather give them like a (brand name) crackers or something that ain't got a lot of sweet in it 'cause my mother didn't give us a lot of sweets. They like a lot of broccoli and cheese. That's one of their favorites. They eat healthy. I know that. My mother always cooking good foods so she tells me, you need to feed them good food. And baked foods.

Though many consumers use intuition in making product choices, unique to our informants was the use of this approach to bypass product related challenges. Xavier said it best when asked if he ever became frustrated with outcomes resulting from the use of a sense of knowing.

Interviewer: Have you ever felt frustrated? For instance, the instruction manual ... (interrupted).

Xavier (21, 5-12): No. Because, you have to use common sense. I mean, your brain thinks. A person getting his diploma, that don't mean he gotta be dumb... Ain't no sense in me being frustrated. If I be frustrated, I be frustrated all my life. So, that means I have to really think.

Relying on a sense of knowing does not mean that functionally low-literate consumers do not recognize when their decisions produce clearly detrimental outcomes. Our informants were sensitive to poor quality and performance, and readily admitted when they made a bad purchase. When an overall sense of knowing led to detrimental decisions (e.g., buying a defective product), our informants switched brands and products but the reasons attributed were holistic in nature, a sort of trial and error approach.

Interviewer: How do you learn about these brands?

Robert (50, 0-4): Because you messed up once and you bought something that isn't right and you know that it don't taste right so you ain't going to buy that no more.

Summary of Findings

We organized our findings into the challenges and coping strategies of functionally low-literate consumers at the product and the larger retail environmental levels. Retail environmental challenges capture cognitive and affective elements and product level challenges capture processing of text-based and numerical information. The anxiety and cognitive difficulties associated with the larger retail context can further inhibit product-related processing of information and exasperate product level challenges. At the retail environmental level, coping strategies relate to seeking simplified cognitive environments and seeking security in the retail context. At the product level, coping relates to concretizing decisions and using a sense of knowing.

In general, informants at the 5-12 level were better able to use basic literacy and numeracy and retail functional skills to navigate the retail environment and compensate for deficiencies. On the other hand, 0-4 level informants faced a negative spiral caused by the mutually reinforcing nature of challenges at both the product and retail environmental level. This resulted from the

decreased possibility of using one form of information to compensate for the other or of developing functional skills pertaining to text-based or numerical information.

Despite our informants' negative outcomes, there was also evidence of empowerment for low-literate consumers. Some informants exhibited a willingness and desire to learn, suggesting that meaningful changes in how consumers deal with the retail environment can lead to real life changes. Our data also suggest that as low-literate consumers increase their literacy levels, genuine improvements in the ability to navigate the retail environment are seen. Similarly, some low-literate consumers display ingenuity in developing rules to cope with the constraints they face. The usage of calculation tools and the learning of accurate heuristics can empower low-literate consumers' decision making in the retail setting while minimizing the cognitive effort required. Additionally, our data suggest that those who are able to develop social networks are also able to achieve better outcomes, and thus efforts by retail outlets can further empower low-literate consumers in the retail environment.

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