CHAPTER

17

Aging and Consumer Decision Making

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Studying consumer behavior across the life span is becoming increasingly important, as the number of consumers over the age of 65 continues to grow dramatically. Recent reports by the U.S. Census Bureau have projected that the older adult population will increase to over 20% of the U.S. population (i.e., 72 million) by the year 2030. This demographic shift highlights the need for more research on aging consumers as the topic is of vital importance to individual consumers and policymakers alike.

In this chapter, we draw on extant literature from consumer behavior, psychology, and related disciplines to provide a review of research findings on decision making by older consumers. First, we review literature that examines how normal aging impacts consumer decision making via changes in cognitive functioning and decision processing. We then describe various factors that moderate the effects of aging on decision making: task environment, context, meaningfulness, personal relevance, and expertise. Finally, we conclude by identifying knowledge gaps and suggesting directions for future research, specifically within the domain of consumer behavior.

AGE DIFFERENCES IN BASIC DECISION SKILLS AND STRATEGIES

Much extant research suggests that normal aging generally leads to systematic declines in cognitive functioning starting from the mid-20s and continuing throughout the adult life span (Park, Lautenschlager, Hedden,

http://dx.doi.org/10.1016/B978-0-12-417148-0.00017-0

Davidson, & Smith, 2002). Tasks that require a great deal of deliberative processing or complex decision making may be more difficult for older adults than for younger adults. Performance on tasks that rely more on affective processing, however, appears to remain largely preserved with age. In the sections that follow, we will briefly outline a few ways in which aging affects basic cognitive and affective processes important to decision making, and the impact of these changes on decision-making skills and strategies.

Aging Influences on Cognitive and Affective Processes

Fluid Mental Abilities and Executive Functioning

Fluid abilities refer to the capacity to process complex, novel, or ambiguous information (Cattell, 1963). They reflect reasoning and problem-solving skills closely linked to executive functioning that involve cognitive control and regulation. Decisions that draw on these abilities show reliable age-related decrements (Bruine de Bruin, Parker, & Fischhoff, 2012).

Basic executive functioning and fluid mental abilities are typically assessed via tasks related to speed of processing, working memory, and inhibitory processes. Speed of processing, or the speed with which one can perform mental operations and process information, is particularly sensitive to age-related declines (Salthouse, 1996), and is correlated with working memory capacity. Working memory is more affected than long-term memory by age-related cognitive declines, and the effects are evident in tasks that require simultaneously holding and processing multiple pieces of information (Hess, 2005; Moscovitch & Winocur, 1995; see Yoon, Cole, & Lee, 2009, for a review). These declines in working memory can have important consequences for complex consumer choices that necessitate the comparison of features or alternatives (Cole & Houston, 1987; Roedder John & Cole, 1986; see also Chapter 7, in this volume).

Inhibition comprises another important aspect of executive functioning, and refers to the ability to shift between task goals, update the contents of working memory, and suppress irrelevant information (e.g., Hedden & Yoon, 2006; West, 1996). Older adults appear to have a diminished ability to inhibit irrelevant information compared to younger adults (Hasher & Zacks, 1988). This suggests that older consumers may be vulnerable to interference effects in shopping environments that are crowded or noisy. Age-related declines in any of these cognitive functions can thus make decision-making tasks more challenging and difficult for older consumers.

Crystallized Mental Abilities and Expertise

Crystallized intelligence relies more on long-term memory and reflects the ability to use experience and knowledge (e.g., vocabulary). In contrast to fluid intelligence, it has been shown to improve with age (Finucane, Mertz, Slovic, & Schmidt, 2005). Expertise is a related factor that should be

considered when examining the influence of age-related changes on consumer decision making. Older consumers are likely to have more experience than younger consumers with making decisions in a wide range of consumer domains, and in such cases, age-related decline would not be expected. The effects of consumer expertise will be further addressed later in this chapter.

Affective Decision Processes and Motivation

Older, relative to younger, adults tend to show a shift in attention from more deliberative-focused to more emotion-focused goals (Socioemotional Selectivity Theory of aging; Carstensen, 1992; Carstensen, Isaacowitz, & Charles, 1999). Specifically, older adults' memory for information tends to skew more positive than that of younger adults, a phenomenon referred to as the "positivity effect" or "bias" (Mather & Carstensen, 2005). Younger adults, on the other hand, typically show a greater skew toward a negativity bias. These changes have been explained by shifts across the life span in one's perception of temporal horizon from long to short (Carstensen, 1992), along with a concomitant increased focus on social and emotional goals that can be achieved in the present moment (Charles & Carstensen, 2009). Socioemotional changes in goals among older adults may influence decision-making strategies in important ways by shifting the focus of these strategies from deliberative to emotional.

Systematic versus Heuristic Decision-Making Strategies

A more complete understanding of age differences in consumer decision making also requires consideration of common decision strategies, which can vary from thoughtful and systematic to more heuristic (Tversky & Kahneman, 1974). Framing of decision-relevant information using a positive (e.g., number of lives saved) or negative (e.g., number of lives lost) information frame can lead older adults to use heuristic or biased strategies in their decision making to a greater extent than younger adults (Kim, Goldstein, Hasher, & Zacks, 2005). This occurs presumably as a way for the decision maker to easily manage the decision process without expending too many cognitive resources. That said, inconsistencies do exist in the literature regarding age-related influences on framing (Mikels & Reed, 2009), and more research is needed in this area.

Satisficing is a heuristic, noncompensatory processing strategy that aims at adequate, rather than optimal, decision making (Schwartz et al., 2002). Research has shown that older adults are often more likely than younger adults to examine option information only until they determine that the amount of acquired information is sufficient and acceptable (Chen & Sun, 2003; Peters, 2010; Yoon, Feinberg, & Schwarz, 2010). Younger adults, on the other hand, tend to use more systematic, maximizing strategies when making decisions. Satisficing is thus a decision strategy that older

adults may adopt in order to decrease the amount of effort required during more cognitively taxing forms of decision making, or when a decision has few personal implications (Hess, Queen, & Ennis, 2013).

Heuristic processing can have both positive and negative consequences for consumer decision making in older adulthood. For example, a greater reliance on heuristics in older age allows for quick and effective decisions (Yates & Patalano, 1999) when making choices in simple or mundane domains (e.g., grocery or household items). However, older consumers are often faced with much more consequential and novel choices having to do with health care, retirement, and financial planning, all of which typically involve large amounts of complicated information that must be waded through in order for older consumers to arrive at a decision. It is in these more complicated domains that the increased use of heuristic processing by older consumers can become problematic.

While evidence suggests that older adults spontaneously use schema-based and heuristic processing more often than younger adults, asking them to consider the reasons for their decisions also promotes greater use of systematic processing on choice tasks that are sensitive to framing (Kim et al., 2005). This indicates that at least some decision biases to which older adults are susceptible can be overcome with strategies that promote greater systematic information processing.

Taken together, the findings suggest that older consumers are in many cases capable of applying systematic processing strategies when appropriate and necessary, but use them less frequently than younger consumers unless the decision environment encourages or facilitates their use. It will be critical for future work to uncover the ways in which different types of processing strategies can be employed by older consumers to make suitable and effective decisions.

AGE DIFFERENCES IN CONSUMER CHOICE AND DECISION MAKING

Age-related changes in basic processing skills and specific strategies substantially influence how consumers make decisions across the life span. These changes affect a myriad of factors that are crucial to decision making, including brand preferences, choice set sizes, and the use of specific types of decision strategies. They also systematically alter how older consumers evaluate and experience products relative to younger consumers.

A particularly important component of understanding consumer decision making is determining how older adults select options when making choices. Older adults have a preference for, and are more likely to purchase, long-established brands (Lambert-Pandraud, Laurent, & Lapersonne, 2005). This is likely due to a number of factors, including experience with

products, product attachment, nostalgia, habit, an aversion to change (Lambert-Pandraud & Laurent, 2010a), and may also be related to the tendency for older adults to satisfice. It may even be the case that forming brand preferences serves as a heuristic strategy.

Another major consideration for older consumers' decision making is the number of options available in one's choice context (Lambert-Pandraud & Lambert, 2010b). Within the domain of health decisions, a number of studies have examined the consequences of the Medicare prescription drug program (Part D) (Abaluck & Gruber, 2009; Tanius, Wood, Hanoch, & Rice, 2009; Wood et al., 2011; see also Chapter 15, in this volume). The Medicare Part D program was created with the intention of maximizing the number of prescription drug choices that would be available to older adults. Research has shown, however, that participants of all ages, including older adults, tend to make better decisions when they have fewer choice options (Tanius et al., 2009; Wood et al., 2011). Further, Abaluck and Gruber (2009) found that older adults tend to focus specifically on a narrow range of dimensions, and the best way to present medical information is to restrict the choice set size to a few options with the lowest average costs. These prior studies suggest that older consumers should be presented with fewer choice options (assuming that these choice options are acceptable along dimensions of importance to older adults) and that choice information be presented in simpler formats to bolster decision performance.

Information search is a cognitively taxing process, and older consumers tend to engage in less search behavior during decision making. Due to the limited amount of time that older consumers spend searching for brand information (Johnson, 1990), they tend to construct smaller consideration sets. Reduced consideration set size is a consequence of a "shrinkage" effect, whereby the decrease in what information is searched for and obtained also leads to the consideration of fewer options (Lambert-Pandraud & Laurent, 2010a). One consequence of these smaller consideration sets is that older adults are more likely to engage in repeat purchasing because they are choosing among only a very small number of options (Lambert-Pandraud et al., 2005). As such, the likelihood of them choosing the same option repeatedly across multiple decision occasions increases, and this leads to brand preferences that are seemingly more stable among older consumers. Another consequence is that older consumers are more likely to eliminate alternatives as soon as any negative information is presented (Riggle & Johnson, 1996).

This preference for smaller consideration sets across the adult life span has been shown to occur linearly and gradually, and across domains (Reed, Mikels, & Löckenhoff, 2013). Although these smaller consideration sets may simplify the decision process, there are sometimes also negative consequences. For instance, searching for too few options (i.e., not searching

for all information available) has been shown to lead older adults to perform more poorly than younger adults on sequential decision tasks (Von Helverson & Mata, 2012). This finding was, at least partly, explained by age-related increases in positive affect that arbitrarily lowers the consumer's threshold for what product options are considered attractive.

Mather, Knight, and McCaffrey (2005) provided evidence that when comparing relatively complex options involving a large quantity of information, such as common decisions about apartments, health care plans, or cars, older adults become more feature oriented (i.e., comparing features from the same dimension across options), whereas younger adults become more option oriented (i.e., examining all of the features of one option before moving to the next option). Choice situations that lead older adults to reduce options and minimize the cognitive effort involved in the decision process may arguably translate into a greater focus on the essentials of the decision, such as the experiential benefits offered by the features.

Decisions comprising fewer attributes may indeed improve older adults' decision making (Finucane et al., 2005). Across several real-world decision domains that can require processing large quantities of information (e.g., health, retirement, finances), older adults have been found to be more inconsistent in their decisions and to commit more comprehension errors than younger adults. It must be noted, however, that in domains where consumers are knowledgeable or where self-relevance is particularly high, decision-strategy differences between younger and older adults disappear (Hess et al., 2013; Queen, Hess, Ennis, Dowd, & Gruhn, 2012). This indicates that the decision domain should be taken into consideration when assessing whether older consumers are likely to simplify their choice strategies and in what situations doing so may either help or hinder the decision process.

Related to the motivational tendency toward a positivity bias, older consumers have been found to be more satisfied than younger consumers across a number of product domains. Yoon et al. (2010) examined cross-sectional data from the American Consumer Satisfaction Index (ACSI; Fornell, Johnson, Anderson, Cha, & Bryant, 1996). The ACSI is a database containing information on consumer satisfaction with products and services representing more than 200 companies in 45 industries, as well as some government agencies. Older adults (aged 65 and above) were found to self-report higher satisfaction across a variety of product and service categories (see Yoon et al., 2010, for a review). The phenomenon that emerged was named the "older-and-more-satisfied" effect. The reasons for this robust phenomenon are currently not well understood but are likely to be multicausal. The authors speculated on a number of potential explanations, including (1) older consumers' extensive experience with products and services leading to a better sense of their own preferences, (2) use of a lower comparison standard than younger consumers who may

know more about the "latest and greatest" products, and (3) a greater likelihood to satisfice than younger consumers on products or services that meet their basic requirements (Yoon et al., 2010). A better understanding of why this "older-and-more-satisfied" effect occurs would help to expand knowledge on how older consumers make product decisions.

Overall, the reviewed literature highlights the importance of understanding the choice domain when making predictions about the use of different strategies by older consumers. Generally speaking, older consumers tend to prefer smaller, simpler consideration sets and have a tendency toward appraising products more positively, relative to younger consumers. Many age-related effects on consumer decision making, however, become less pronounced when the decision in question is of higher self-relevance, which suggests that not all decision problems will be approached differently by older than younger consumers. The reviewed literature also reveals that not all decision contexts are necessarily more challenging for older than for younger consumers, and points to a number of factors that moderate the observed age-related effects on decision making. In the following section of this chapter, we describe a number of these moderating factors.

MODERATING INFLUENCES ON AGING AND DECISION MAKING

We next consider three broad sets of factors that are known to exert moderating influences on consumer decision making across the life span. These factors include the task environment or context, the meaningfulness or personal relevance of the task, and consumer expertise. Although these factors can influence consumer decision makers of all ages, older adults have been found to be particularly sensitive to the moderating factors described here. First, the task environment or context can greatly affect older consumers, relative to younger consumers. Although a difficult task environment can be particularly challenging, support in the form of environmental cues or decision aids can serve to bolster task performance that leads to more effective decisions. Second, the meaningfulness or personal relevance of the task can aid older consumers insofar as they are inherently more interested in the task domain and motivated to make appropriate decisions. Third, consumer expertise can buffer the effects of age and facilitate effective decision making, although there are some pitfalls associated with an over reliance on experience and familiarity. In addition to describing how these moderating factors influence many of the basic age-related differences in decision making already reviewed, we will also present a number of potential interventions. We now turn to a discussion of each of these factors.

Task Environment or Context

The environment in which a decision is made often has important implications for older decision makers' outcomes (Yoon et al., 2009). In particular, time pressure, distraction, irrelevant information, and environmental support can influence older adults' decision making to an even greater extent than younger consumers. While some of these factors have detrimental effects, others may serve to enhance decision performance.

Time pressure in a decision environment can have a detrimental influence on the decision-making abilities of consumers, especially as they age (Earles, Kersten, Mas, & Miccio, 2004; Park, Iyer, & Smith, 1989). Older consumers under time pressure, especially if they are in unfamiliar settings, are less able to locate their preferred brand and end up purchasing brands they did not intend to purchase (Park et al., 1989). Further, time pressure has been shown to magnify decrements in recall by older adults, as compared to younger adults (Earles et al., 2004). One potential explanation for this age difference is that time pressure activates negative stereotypes about aging, which induces feelings of anxiety among older adults (Earles et al., 2004) and leads to hastier purchase decisions.

Another important factor to consider is the influence of distraction and irrelevant information. Prior findings have documented robust age-related increases in vulnerability to distraction across a variety of tasks (e.g., McDowd & Filion, 1992). For example, older adults report difficulty in locating an object in a cluttered visual field (Kosnik, Winslow, Rasinski, & Sekuler, 1988), respond more slowly, and commit more errors in search tasks when the selection environment contains distracters (e.g., Madden, 1983; Plude & Hoyer, 1986).

Many consumption environments, including supermarkets and shopping malls, are busy and contain distracting information that could presumably influence an older consumers' ability to make a decision. Studies on divided attention have also uncovered age differences in dual-task performance, with magnified age differences as a function of task difficulty (McDowd & Craik, 1988). Decrements in the suppression of task irrelevant information are associated with declines in working memory that are especially prominent when cognitive resources are taxed, but enhancement of task-relevant information may be preserved (Gazzaley, Cooney, Rissman, & Esposito, 2005; Gazzaley, Sheridan, Cooney, & Esposito, 2007). Together, these findings indicate that the relevance of the distracting information to the choice task at hand may have an important influence on whether the information helps or hinders consumer decision making across the adult life span.

Environmental primes, or information automatically activated by environmental context, are especially pertinent for the kinds of decisions that consumers are faced with in daily life. Older adults are more vulnerable

than younger adults to the disruptive effects of distraction from task-irrelevant environmental primes and other sources, including irrelevant events from the recent past (Hasher, Lustig, & Zacks, 2007). The explanation given for this sensitivity has been a general inability of older adults to inhibit these irrelevant environmental primes, which suggests there may be negative consequences for older consumers in complex or busy consumption environments such as supermarkets or shopping malls. The diminished inhibitory control experienced by older adults means that irrelevant information remains active in their memory when engaging in subsequent unrelated tasks. It has been shown that this inhibitory deficit can interfere with both older adults' immediate task performance and their downstream performance for up to 15–20 min after initial exposure to the distraction (Hasher et al., 2007). This indicates that irrelevant, distracting information may influence the consumption decisions of older adults to a greater extent than younger adults.

It is noteworthy, however, that emerging evidence suggests there can be some positive downstream consequences to older adults' sustained activation of irrelevant past information. For example, Kim, Hasher, and Zacks (2007) reported superior performance by older adults compared to younger adults on a Remote Associates Task (RAT) after exposure to distracting information on a preceding task (Mednick, 1968). This is particularly interesting because the RAT is considered a measure of cognitive flexibility. In this task, participants are given a set of words (e.g., falling, actor, dust) and are asked to find a new word that can be paired with each word in the triad (e.g., star). Improvement on this task suggests that exposure to this distracting information may boost cognitive flexibility, at least on tasks that involve the processing of associations.

Samanez-Larkin, Wagner, and Knutson (2011) also found that distracting tasks may have less of an influence when the critical information is presented in a simplified format. For example, providing simple expected value information for financial decisions has been shown to improve older adults' decision quality even in the presence of distracting information. One important future direction for research is to further examine how distraction and inhibitory failures lead to performance costs as well as benefits for older adults across a variety of consumption domains.

Recently, Anguera et al. (2013) have provided intriguing evidence that age-related susceptibility to distraction and interference may be reduced for up to 6 months by video game training, which allows participants to exercise cognitive control in multitasking environments. This may prove to be a fruitful avenue for improving the decision-making capabilities of older consumers, but more research is needed to understand the efficacy of such intervention programs. Substantial evidence already exists indicating that cognitive training programs (e.g., ACTIVE trial; Ball et al.,

2002) can be effective at improving and maintaining mental functioning among older adults. More research examining the generalization of such intervention effects to everyday decision making would be informative to our understanding of how older consumers make decisions.

Decision aids represent another category of interventions that may prove especially useful when consumers are faced with distracting contextual and environmental factors (Yoon et al., 2009). The extent to which decision aids can help older consumers, however, has received little research attention. The existing evidence indicates that effective decision aids for older adults can take several forms, including crossing out irrelevant information from preexisting information lists (Cole & Gaeth, 1990) or using visual symbols as a supplement to verbal information (Morrow et al., 2003). The limited empirical evidence regarding this topic has also shown that older adults with higher (vs lower) crystallized and fluid intelligence make greater overall use of decision aids (Johnson, 1997), and that older adults are more likely than younger adults to use memory aids at the end of the decision process, just prior to making the actual decision. Additional research is needed to determine if changes in the point at which different age groups use decision aids is beneficial or detrimental to the decision process. Understanding when and how best to use decision aids across the life span would generate greater insights about the effectiveness of various decision aids.

One especially useful decision-aiding technique for older adults is the task of writing down information, rather than holding it in memory. Cole and Balasubramanian (1993) found that older consumers did not search nutritional information as intensively as younger consumers when shopping for cereal in a grocery store setting. This lack of information search led older consumers to subsequently choose less appropriate cereals. However, when experimenters encouraged participants to write down the information that they acquired during the search process, these age-related differences were eliminated.

The time of day that an older adult is making a decision is also important for complicated and consequential decision making. Older adults, relative to younger adults, are known to show greater improvements in systematic information processing during their peak times of day (Yoon, 1997). This is due to individual differences in circadian arousal patterns that have been found to vary predictably for older and younger adults and, in turn, affect memory and decision-making performance across the life span (May, Hasher, & Stoltzfus, 1993; Yoon, 1997). Older adults tend to reach their peak level of circadian arousal and performance in the morning, whereas younger adults tend to reach it in the afternoon or evening (May et al., 1993; Yoon, 1997). Yoon, Lee, and Dazinger (2007) found that this had downstream consequences for older consumers insofar as they were more likely to be persuaded by heuristic cues at their non-optimal

than optimal times of day. This suggests that when making decisions, consumers of all ages, but especially older adults, would be well-advised to take into account time of day; older adults should make complex or deliberative decisions in the morning, whereas younger adults should make these same decisions later in the day.

As indicated here, contextual and environmental factors have a number of consequences for consumer decision making across the life span, and may be especially important to consider for older consumers who are often more sensitive to these effects than younger consumers. Additional research should be conducted to fully understand when these factors lead to both detriments and benefits for consumer decisions, and when training or aiding interventions are likely to be particularly useful for improving the quality of consumer decisions.

Meaningfulness or Personal Relevance

The personal relevance and meaningfulness of a decision is another important factor that can moderate the effects of aging on consumer decision making. As emotion goals change across the life span (Charles & Carstensen, 2009), emotion information may become more meaningful and personally relevant to older than to younger adults. Older adults have been found to be more sensitive to affective and value-based information than younger adults (e.g., Labouvie-Vief & Blanchard-Fields, 1982; Rahhal, May, & Hasher, 2002). Consistent with this finding, as people age, they also become more reliant on affective, experiential, and heuristic forms of processing (e.g., Slovic, Finucane, Peters, & MacGregor, 2002). This may, in turn, shift their decisions to be in favor of more affective and experiential products.

Further, the traditional decision-making literature has largely relied on a strong assumption that deliberative processing abilities are essential for good decision making (Peters, 2010). Predictable declines in deliberative processing that occur with normal aging (Mather, 2006) are thus thought to be detrimental to overall decision quality. However, some research has shown that older adults focus on personally meaningful choice information and rely more on affect than deliberation when making choices (for review, see Peters, Hess, Västfjäll, & Auman, 2007). As is the case with other important factors, the reliance on affect can have both detrimental and supportive effects on older consumers' decision making.

Despite challenges associated with consumer decision making, older adults have been found to rely on a number of strategies for maintaining high levels of decision quality (cf. Peters et al., 2007). Presenting information in more emotion-focused contexts was also found to benefit performance on certain types of information-processing tasks. Mikels et al. (2010) revealed that younger adults had higher decision quality when

given deliberative, information-focused instructions, whereas older adults had higher decision quality when given emotion-focused instructions. These findings suggest that older consumers might benefit from decision information presented in a format that promotes the formation of general affective impressions about the options, rather than requiring older adults to rely on memory for specific option details.

Imagery also affords a potentially effective use of systematic processing strategies across the adult life span, and can influence behavior above and beyond the benefits that arise from consumer decision justification (Kim et al., 2005) and from being instructed to think deeply about information during a decision process (Cole & Houston, 1987). Specifically, when instructed to form a mental image representing brand claims, older consumers processed details about the claims more effectively (Law, Hawkins, & Craik, 1998). These findings suggest that cues promoting the use of imagery may boost the meaningfulness and personal relevance of products and enable older consumers to use more systematic processing in decision situations that require careful deliberation and analytical thinking.

Together, these studies suggest that conveying consumer information in ways that encourage imagery and affective processing may improve decision making. It should be noted, however, that although affect can enhance decision-making quality and ability, circumstances exist in which the greater reliance of older adults on affect could lead to negative consequences for decision making (see also Chapter 9, in this volume). For example, older adults may be especially susceptible to affective appeals in advertising and marketing campaigns that provide uninformative or deceptive information, and this will serve to increase the likelihood of falling victim to scams.

Mikels, Cheung, Cone, and Gilovich (2012) have shown that performance on one such decision task, the ratio bias paradigm, actually declines due to overuse of positive affective information among older adults. In their task, participants drew from one of two dishes of jelly beans. One dish had a higher probability of winning, but a higher absolute number of people had won when drawing a jelly bean from the other dish. An overreliance on positive affect led individuals to choose the dish that more people had drawn from, which is the non-optimal choice from a probability standpoint. These results are consistent with Von Helverson and Mata's (2012) finding that age-related increases in positive affect arbitrarily lower a decision maker's threshold for what options are attractive, and thereby lead to poorer performance in sequential decision tasks. This also accords with findings by Bauer, Timpe, Edmonds, Tranel, and Denburg (2012) that older adults make more errors on the Iowa Gambling Task due to disproportionate sensitivity to reward, and with Queen and Hess's (2010) findings that an overreliance on automatic, affective evaluative information

leads to non-optimal decisions when the choice requires deliberation (i.e., when the choice options have both positive and negative attributes). Thus, the evidence suggests that a reliance on affect during decision making can have both positive and negative consequences, depending on the type of decision being made.

Further, the influence that socioemotional attention shifts have on emotion goals and temporal horizon has been investigated in studies on information-processing responses to advertising. Older consumers focused more on emotionally meaningful information and goals (Fung & Carstensen, 2003) and subsequently responded more positively to affective advertising appeals than younger consumers (Williams & Drolet, 2005). Older consumers also showed greater liking for and increased recall of information presented in emotional advertisements, and the time horizon perspective moderated these age-related differences. Further, advertisements that were focused on avoiding negative emotions were liked and recalled more among both older and younger consumers when they were experimentally manipulated to have a limited time horizon perspective. These findings highlight the fact that changing temporal horizons, either associated with age or experimentally induced, can affect the extent to which both older and younger adults exhibit positivity and negativity biases.

Based on the evidence presented here, we suggest that older consumers tend to put more effort into decisions that are meaningful or self-relevant, and may be more likely than younger consumers to evaluate advertisements and products more positively. Thus, expanding our knowledge of how meaningfulness and self-relevance influence consumer decision making is of vital importance to understanding how consumers respond to consumer information and products.

Consumer Expertise

Another important factor to consider is the expertise that the consumer brings to the decision context. Consumer expertise is a function of both familiarity (or repeated experience) with a product domain and increasing objective knowledge or skill with making a decision within that domain (Alba & Hutchinson, 1987). After many years of experience and the acquisition of more knowledge, an older adult may be viewed as having gained greater expertise in decisions across many consumer domains. At the same time, there are likely to be domains that pose difficulties for the typical older adult (e.g., high technology).

Familiarity should also be taken into account because older consumers are unlikely to experience difficulties when making decisions involving mundane tasks that are highly familiar (e.g., shopping in a favorite grocery store). Product familiarity often serves to facilitate ease of processing among older consumers because information that is experienced

repeatedly is easier to perceive and remember than unfamiliar information. Accordingly, variables that facilitate easy processing of consumer information, including print fonts, layouts, and color contrast, may profoundly influence persuasion among older consumers. This association between ease of processing and perceived familiarity has many important consequences. For example, information that is more familiar is also more likely to be accepted as true. Numerous studies have found that repeating the same statement reliably increases its perceived truth (e.g., Begg, Anas, & Farinacci, 1992; Hasher, Goldstein, & Toppino, 1977). This "illusion of truth" effect is particularly pronounced among older adults (Law et al., 1998), and the reliance on familiarity to infer truth can lead to negative consequences. For instance, being repeatedly exposed to a false health claim leads consumers to misremember that false claim as true later on (Skurnik, Yoon, Park, & Schwarz, 2005).

Although expertise can lead to these negative consequences (Camerer & Johnson, 1991; Shanteau, 1992; Wood & Lynch, 2002), it also has many benefits for consumer decision making. Experts are often confident about their ability to make choices and find information, and this confidence may foster individuals' feelings of self-efficacy and prompt actions or decisions (Bandura, 1976). Greater expertise also facilitates effective decision making by enabling consumers to be more efficient in information search and learning (Brucks, 1985; Johnson & Russo, 1984).

Experience can further promote consumer adaptation, such that older consumers are better able to select strategies to improve their decision making. In fact, the experience and knowledge that older adults acquire over the years may serve to counteract declines in deliberative and cognitive functioning. Research has shown, for example, that older consumers are able to remember the prices of products sold within a grocery store as well as younger consumers, due simply to their extensive experience and familiarity with grocery shopping contexts (Castel, 2005). Such experience effects likely play a large role in helping older adults make successful and satisfying consumption decisions, and future research should explore when experience leads to positive and negative consumption decisions.

Consumer experience within a number of domains leads to the use of strategies that reduce cognitive effort during decision making, including the information search process. As noted earlier, older consumers have been found to seek out less information than younger consumers. They also take longer to process the information they do search for (Johnson, 1990; Mata, Schooler, & Rieskamp, 2007). Older consumers, however, can use adaptive decision strategies within the information-processing contexts. A study instructing participants to make several price inferences indicated that, although older adults indeed sought out less information and took longer to process that information, they also used simpler and less cognitively demanding information-processing strategies (Mata et al., 2007).

This shift in processing strategy actually led older adults to receive higher monetary payoffs than younger adults.

An adaptive shift in strategy selection further influences older consumers' reactions to persuasion. Using in-depth surveys conducted across the adult life span (i.e., ages 18–74), Kirmani and Campbell (2004) showed that older consumers self-reported a wider range of strategies for dealing with persuasion attempts than younger consumers. The authors asserted that this was a consequence of older adults having more exposure to, and thus experience with, advertising and persuasive messages across their lifetime than younger adults. Such findings suggest that older consumers' experience with persuasion attempts may in fact make them relatively resistant to deceptive appeals.

The evidence reviewed here indicates that older adults are able to use adaptive strategies for decision making in consumer domains. This suggests that in many cases, prior knowledge and experience can improve decision making and potentially help older adults counter limitations that result from normal age-related cognitive declines.

CONCLUSIONS

This chapter has reviewed the literature on older consumers' decision making and identified various gaps in knowledge where future research is needed to fully capture the complexity of their decision processes. Future investigations should consider the nature of task or decision environments that have an influence on consumers of all ages and account for older consumers' greater susceptibility to the effects of time pressure and distraction. Detailed and deliberate processing among older consumers could be improved through the provision of environmental supports and decision aids.

Further, more research should focus on decision contexts that are meaningful and relevant to older consumers. Future research should also account for the tendency of older adults to engage in more affective modes of processing strategies, with differential attention paid to positive information. Researchers should take into consideration the importance of familiarity and expertise in older adults' financial, medical, and consumer decisions as aspects of adaptive strategies to complement deliberation. In general, greater research efforts should be directed at uncovering what domains or contexts promote positive and negative decision outcomes. Such research would generate a better understanding of how and when older consumers' decision making could be improved, as well as which decision contexts may be more or less challenging.

Although we are beginning to understand how older consumers adapt their decision and choice strategies to maintain high decision quality and

satisfaction, further research on this topic would greatly enhance our understanding of consumer decision making across the life span. It would also be useful to understand what mechanisms underlie the observed "older-and-more-satisfied" effect.

Of additional interest are questions surrounding how older consumers go about making the choices they do. For example, do older consumers rely more on independent and marketer-supplied information, more on informal information sources, or both? Does the decision context or importance influence what information older consumers ultimately rely on? How does this relate to the decreased information search often observed among older consumers?

In terms of the growing field of financial decision making, future research should elucidate what factors render older consumers in a financial domain unable to compensate for age-related cognitive declines even with greater experience. Can these deficits be mitigated in some way?

The discussion within this chapter is by no means exhaustive, and there exist many other areas that are of potential interest to aging and consumer decision making. These include investigations of changes in risky decision making across the life span, changes in goals and motivations that consumers face as they age, and how cultural factors modulate age-related changes in consumer decision making. Further research on these topics will add to the literature on decision quality and provide insights into how decision making can be maintained, or even improved, across the adult life span.

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