

One Fish, Two Fish, Red Fish, Blue Fish: Effects of Price Frames, Brand Names, and Choice Set Size on Medicare Part D Insurance Plan Decisions

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Abstract

Because many seniors choose Medicare Part D plans offering poorer coverage at greater cost, the authors examined the effect of price frames, brand names, and choice set size on participants' ability to choose the lowest cost plan. A $2 \times 2 \times 2$ within-subjects design was used with 126 participants aged 18 to 91 years old. MouseLab, a web-based program, allowed participants to choose drug plans across eight trials that varied using numeric or symbolic prices, real or fictitious drug plan names, and three or nine drug plan options. Results from the multilevel models suggest numeric versus symbolic prices decreased the likelihood of choosing the lowest cost plan (-8.0 percentage points, 95% confidence interval = -14.7 to -0.9). The likelihood of choosing the lowest cost plan decreased as the amount of information increased suggesting that decision cues operated independently and collectively when selecting a drug plan. Redesigning the current Medicare Part D plan decision environment could improve seniors' drug plan choices.

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Millions of senior citizens report difficulties in choosing their Medicare Part D prescription drug insurance plan (Konrad, 2009). With dozens of different insurance plans selling prescription drugs for Part D and a lack of standardized benefits, it is no wonder that older adults report difficulties. Despite its financial and health ramifications, little is known regarding how older adults navigate the current maze of choices under the Part D program. We do know, however, that saving money is the most important factor in their decision making (MedPAC, 2006). Yet, the evidence shows that only a small minority are actually choosing the lowest cost plan available to them with potential individual losses of hundreds of dollars annually (Gruber, 2009).

As reported by Hanoch, Rice, Cummings, and Wood (2009) and Hanoch, Wood, Barnes, Liu, and Rice (2011), and others, the difficulty in choosing the lowest cost plan for seniors is in part due to the sheer size of the choice set they face. Beyond cost, medical decision-making research has demonstrated that how numeric information is presented to consumers (e.g., quantitative or symbolic) can affect decision outcomes (Dudley, Hibbard, & Shaller, 2010; Hibbard, Slovic, Peters, Finucane, & Tusler, 2001). Factors such as company reputation play an important role in consumers' medical decisions as well (MedPAC, 2006). However, little is known about how numeric information, like price, affects older adults' Medicare Part D decisions, and how, if at all, older adults trade off between company reputation and costs. The aim of this article is to investigate the effect of price frames (e.g., the use of symbols such as \$\$\$\$ vs. numeric dollar amounts), real versus fictitious company name (i.e., brand effects), and choice set size on whether consumer choose the lowest cost Medicare Part D plan and, if they do not, the dollar amount of the "loss."

To investigate these questions, we used a computer-based process-tracing program called "Mouselab" (Bettman, Johnson, & Payne, 1990; Payne, Bettman, & Johnson, 1993). Mouselab is a web-based decision environment which presents information about choices in a grid but, akin the game "Memory," the information in each cell is hidden. When the cursor moves over the cell, the information is revealed allowing researchers to trace the decision-making process and record participants' decisions.

In recent years, a number of researchers have come to question the idea that increased choice benefits consumers. Iyengar and colleagues, for example, have shown that offering more choices—whether chocolate, jams, or job offers—can negatively affect performance and reduce satisfaction (Iyengar, Huberman, & Jiang, 2004; Iyengar & Lepper, 2000; Iyengar, Wells, & Schwartz, 2006). In one illustrative study, Iyengar et al. (2004) examined 80,000 individuals' willingness to join a 401(k) retirement plan in relationship to the number of plans to choose from. The authors found that the more choices employees had, the less likely they were to join the program, a phenomenon referred to as "decision fatigue." Decision fatigue has also been shown to affect health insurance and retirement saving plans decisions domestically (Besedeš, Deck, Sarangi, & Shor, in press) and in other countries (Schram & Sonnemans, 2011).