WHERE TO SEARCH FOR PRICE KNOWLEDGE? THE INFLUENCE OF LIFESTYLE ON PRICE KNOWLEDGE

Marc Linzmayer, Zeppelin University, Germany
Tim Eberhardt, Zeppelin University, Germany
Peter Kenning, Zeppelin University, Germany

ABSTRACT

Over the last decades of research, behavioral economics as well as consumer psychologists have yielded several fundamental findings relevant for marketing research and practice. While most of these findings were fruitful for many fields of economics, management, and marketing research, this holds true particularly for the field of behavioral pricing. Within this field, price knowledge became one of the most important themes. However, most of the research neglects the view that price knowledge should not depend solely on product-related or psychological factors, but should also take neurobiological factors into account. This neglect is astonishing, given the common understanding that price knowledge is stored in the memory system of the consumer's brain. Recognizing that this memory system is affected by individual lifestyle components, this study addresses the effect of individual lifestyle components on price knowledge.

Empirical evidence from psychological, neuroscientific, and neuroepidemiological studies served as a basis for hypothesis generation. Accordingly, we hypothesize, that lifestyle components (such as nutritional habits, smoking, etc.) have a similar effect on price knowledge as they have on other cognitive functions. The impact of healthier behavior on one of the proposed components should result in better memory performance and, hence, in better price knowledge. In this study, neuroscientific understandings of memory form the unifying groundwork for every hypothesis. Notably, because the memory process regarding prices relies on the same cellular mechanism as that of all other forms of memory, evidence regarding effect of different lifestyle components on "general" memory found in medical literature can also be effectively applied to price knowledge.

To determine the influence of lifestyle components on consumer price knowledge, we used an experimental approach. We assumed that price knowledge is associated with a specific form of information processing, and hypothesized that this processing is reflected by the consumer's ability to perform price-recall tasks. To accomplish this, we combined a memory performance test developed in neuropsychological literature with the consumer research concept of price recall. Participants had to complete two computer-based learning and testing sequences. The first sequence lasted about 45 minutes, and the second sequence repeated the learning and testing tasks for approximately 10 minutes. Additionally, a lifestyle questionnaire containing reviewed medical and socio-economic dimensions of the complex lifestyle construct was administered during a 30-minute break between the two sequences. On the basis of second-sequence behavioral test results, we computed a recall indicator regarding product-price memory performance of participants. The first step of statistical analysis used principal component analysis (PCA) to explore the dimensions of the lifestyle construct. In the second step, multiple linear regressions were used to reveal the influences of lifestyle components on the recall memory performance measure of study participants.

The empirical part of the study led to an interesting outcome: Price knowledge (price recall) of consumers is significantly influenced by lifestyle components. Participants, who report their health as being better, eat and drink healthier, engage in sports more frequently, have a more balanced stress level, do not smoke and are faced with mental challenges more often, have a significantly better price knowledge. As in previous studies of price knowledge and free recall tasks, age has a moderating influence on the results. Taking into account that lifestyle components are often neglected in studies of price knowledge, future studies in marketing and consumer research should control for these variables and/or use them as moderating variables. We assume that this might help consumer researchers to better understand the concept of price knowledge and the processes of price-memorization. From a theoretical perspective, one primary contribution of our study is that we can indicate that there is a need to analyze price knowledge with respect to the price-related memory systems in the brain. While this could be a complex undertaking, this study shows that it is nevertheless useful to integrate findings from memory investigation in (neuro)psychology into marketing research. From a managerial perspective, we recommend practitioners to build more differentiated price strategies, taking into account that different consumer groups depending on their lifestyle and age might have different reference points when shopping through the hallways.

References available upon request