

The Effect of Contextual Cues on Consumer Liking Results

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Since the early 1900s, sensory analysis has provided food corporations with key information about the demands of consumers. However, a lack of development in the field of sensory science and unreliability of current methods has contributed to high failure rates of new food products. Traditional testing booths lack ecological validity, which likely contributes to data with poor quality. One of the few attempts at remedying the issue has been to allow the consumer to interact with the product in a more realistic environment than the laboratory setting with at-home testing. Despite the valuable results and insights this method may provide, it can also increase error due to the potential lack of standardization and control. The purpose of this study was to investigate whether providing relevant contextual information through a virtual-reality environment (e.g. virtual coffee house) alters the consumer's hedonic perceptions of black coffee compared to traditional in-booth evaluations. Panelists were given five black coffee samples in both testing settings, and rated their liking for each product using a nine-point hedonic scale. Preliminary data revealed that the virtual reality environment was associated with a significant difference in liking between black coffees, whereas the standard booth was not. As a result, the preliminary results suggest that the virtual reality environment provides more sensitive data by decreasing variability in liking scores, and that context impacts how different coffees are perceived. In order to collect more data to support these results, sensory testing will be run with approximately 50 individuals in both sensory testing settings. The final outcome of this set of tests will assist in determining further sensory research involving the virtual reality lab and its efficacy as an advantageous sensory testing environment.