Maximizing Candle Fragrance Evaluation

Background and Objectives

Background
Historically, candle fragrance testing, for a core assortment of fragrance, involved testing multiple fragrances in cold mode, replicating an initial "at shelf" buying experience.

Objective
The objectives of this research were...
• to understand how sensory differences between a diffused candle fragrance in warm mode impact consumer appeal and purchase decisions
• to validate that multiple candles can be tested in burn mode in a separate POD, without any cross contamination

Research Methodology

Sample Description:
• 100% females
• Ages: 21-55

Survey Instrument:
• Overall Liking (9 Point)
• Purchase Interest (5 Point)
• Fragrance Strength (7 Point)
• Word Descriptors to answer fragrance profile

Protocol:
• Consumers could sniff each fragrance for as long as they needed to form an opinion
• They were allowed to sniff again as needed to complete the survey
• Samples were randomized within cell to address position bias

Cold Mode Methodology:
Blinded, Incomplete Block, Sequential Monadic evaluation of 12 fruit/food candle fragrances, each respondent evaluated 4 fragrances.

Burn Mode Methodology:
Blinded, Complete Block, Sequential Monadic evaluation of 4 fruit/food candle fragrances.

Implications

Findings / Conclusions

Over all Liking Mean Ratings

PURCHASE INTEREST (% Definitely/Probably Buy)

While the fragrance descriptors trend similarly in cold and burn mode, when burned the Fruit scents have a somewhat more pronounced personality.

The two Gourmand fragrances also trend similarly, however, they both demonstrate a much more complex and intense profile in burn mode.

Goal 1: Understand sensory differences between burn and cold candle fragrances to determine how this may impact consumer acceptance of the fragrance.

Implications: While the fragrance descriptors that characterized each fragrance in the usual cold mode testing environment did not change in burn mode, the burn mode displayed a more complex and pronounced aroma.

This greater diffusivity of the Gourmand fragrances may account for the marked increase in definite intent to buy and more appealing aroma.

Goal 2: Obtain holistic evaluation of 4 candles in burn mode without cross contamination using portable olfactory devices (PODs).

Implications: Four candles in burn mode were evaluated, each in a separate POD, in the same room, without any cross contamination.

<table>
<thead>
<tr>
<th>Fragrance Line Chart</th>
<th>Gourmand Line Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruity Line Chart</td>
<td></td>
</tr>
<tr>
<td>Gourmand Line Chart</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>