

Research in Plain English

The influence of music on the perception of oaked wines –a tasting room case study in the U.S. Finger Lakes Region

Research in Plain English provides brief, non-technical summaries of journal articles by Cornell faculty, students, and staff.

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Summary by Rebecca Wiepz.

The takeaway.

- By incorporating multisensory components including art, music, and food into a wine tasting, wineries are able to enhance the overall atmosphere and increase customer loyalty.
- Crossmodal correspondences are defined as associations between apparently unrelated sensations across different senses like taste and hearing.
- Recent research suggests that music experienced as part of a wine tasting not only increases the enjoyment of the event but may also influence what flavors are perceived by the consumer.
- In this tasting room study, the authors found that the presence of music increased wine tasters' enjoyment but did not affect their perception of oak aging flavors.

Background.

The movement of marketing practices from “selling products to selling experiences” has led businesses to introduce multisensory experiences to better engage with customers. Many wineries are including other sensory components in the tasting room, including art and music to enhance the tasting experience.

Recent research suggests that the choice of music may influence what consumers actually taste, in addition to increasing the overall enjoyment of the tasting experience. This is a logical outcome according to the theory of crossmodal correspondences, which describes people's tendency to associate stimuli from different senses.

The experiment.

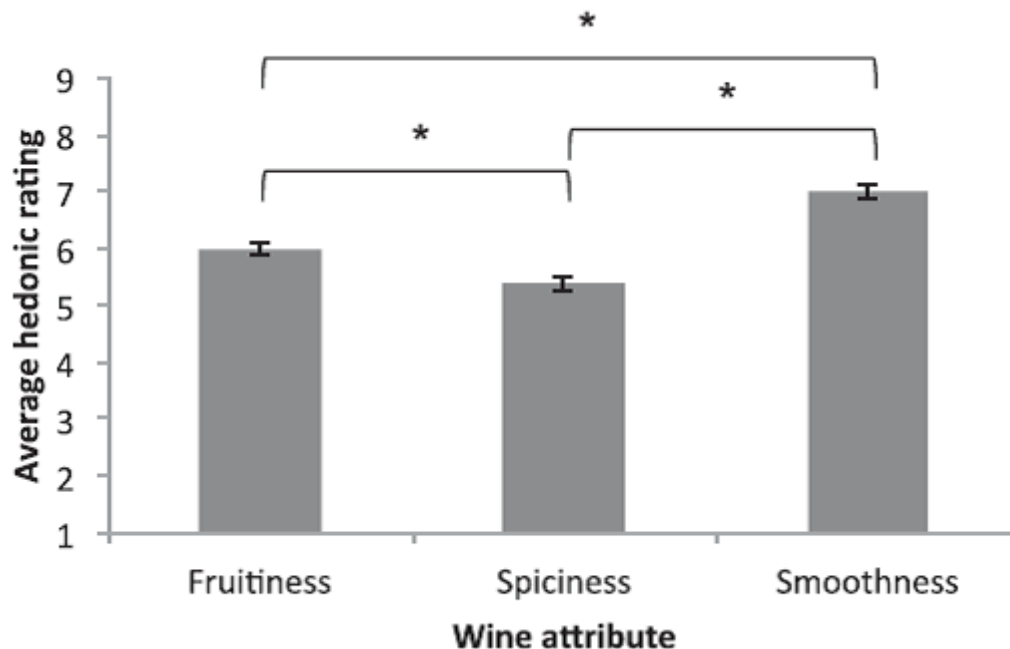
Among people with similar cultural backgrounds, robust crossmodal associations have been found– including connections between sounds and flavors. Lower tones are commonly associated with bitter flavors, while higher pitches are linked to sweet flavors. Crossmodal correspondence studies specifically focused on wine have shown that qualities of the music playing during a tasting can alter the perception of wine sensory attributes, such as length, acidity, and sweetness.

Building on the existing research, the authors of this study measured the impact of specific music on the perception of wines in a tasting room environment, with the goal of answering the question: did the music alter what people were tasting? Even if it didn't, is it still a viable multisensory option for enhancing a wine tasting experience? To answer this second question, researchers conducted a separate online survey to develop an emotional rating of wine characteristics. A separate group of people than the tasting participants rated their positive or negative feelings toward fruitiness, spiciness, and smoothness as wine attributes.

A separate group of ' wine enthusiasts' were invited to participate in a special tasting at a Finger Lakes winery where they rated wines based on the attributes from the survey. The participants were given four wines, two whites, and two reds, with varying intensities of oak aging. They were asked to taste and rate the wines on the above characteristics with and without a soundtrack playing. The soundtrack for the tasting was composed of woodwind, string, and low percussive instruments designed to invoke the flavors of oak aging. Following the tasting, participants were given the opportunity to leave their general comments on the rating form.

The results.

The results of the online survey showed smoothness ranked the highest and spiciness the lowest, as shown in the graph below.



Results of online survey ranking fruitiness, spiciness, and smoothness as wine characteristics.

When the authors compared the rankings of the four wines from the tasting, they found that the presence of the music increased the smoothness and the fruitiness of each of the wines, while spiciness was unchanged. In the comments left by the participants of the study, tasting with the accompanying soundtrack was largely described as positive.

Conclusions and looking forward.

A perceived increase in smoothness and spiciness would be expected given the existing research and the soundtrack that was used. However, fruitiness is not associated with either oak aging or low toned highly resonant music.

The ratings of the online survey suggest that the increase in smoothness and fruitiness could be attributed to participants' emotional response to the music rather than the crossmodal correspondence. The comments left by participants support this conclusion, given that they enjoyed tasting with the music, which would directly correlate with more positively ranked wine attributes (fruitiness and smoothness). While continued research will work to tease apart the emotional and crossmodal responses to this experience, complementary music is clearly a great option for enhancing the tasting room experience.

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