Qualitative tasting for wines under real and virtual conditions

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Objectives

The aim is to investigate, through real and virtual reality, the influence of the environment and added defaults in wines for a wine tasting experience.

Methods | Experiences | Results

20 participants (8 women and 12 men) aged between 18-35 years old were recruited for this study from the University of Geisenheim. The study focuses on the tasting of 3 different wines variants against a control in 2 environments: a laboratory booth and a cellar. Since the tasting are conducted in RL (Real Life) and in VR conditions, a total of 4 tastings per participant was planned. In each tasting, 8 wines were tasted with the Control being represented twice per wine. The wines chosen for the study are a Riesling (white) and a Merlot (red) from Geisenheim University.

A default was added in 2 out of the 4 glasses depending on the wine color (oxidation for the white wine and volatile acidity for the red wine) with two intensities levels.

The results show that the tastings were less accurate in the cellar conditions than in the sensory room. Additionally, the results of the tastings in the real sensory room against the virtual sensory room showed a similar trend of sensory analysis.

Rooms used for the experiment. Up is the Laboratory booth and down is the cellar.

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Degree programme
Viticulture and Enology

Field of application
Enology, Virtual reality, Wine sensory analysis

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