

Using the UP Sensory Identity Toolkit for Sensory Panel Screening and Selection

Josephine Baloyi, Marise Kinnear, Clarissa van Heerden, Riëtte de Kock

University of Pretoria, Pretoria, South Africa

Abstract

Recruitment, screening and selection of a Descriptive Sensory Panel (DSP) is a time-consuming and therefore costly process. Screening and selection of panellists is usually done based on performance on a number of sensory tasks conducted in a sensory laboratory. In 2022 as the COVID 19 lockdown restrictions in South Africa started to relax, the Sensory Division at the University of Pretoria needed to recruit, screen and select new panellists for the year at speed and cost effectively while adhering to social distancing requirements. The researchers developed the Sensory Identity Toolkit for the purpose.

The development of the toolkit comprised different phases:

- 1) Planning the process of recruitment, screening and selection of a trained descriptive sensory panel.
- 2) Developing a recruitment strategy and online questionnaire to pre-screen a large number of potential candidate.
- 3) Developing sensory tasks that can be completed at home to screen candidates for sensory acuities.

A recruitment advert was sent to University of Pretoria students. Interested persons (n=1400) completed the pre-screening questionnaire. The questionnaire collected demographic, health and lifestyle, food consumption or restriction information and screened visual sensory acuity, descriptive and scaling abilities. Participants were included if they self-reported as healthy, non-smoking, interested, motivated and willing to taste a wide variety of foods. Excluding factors included food allergies and/or any restrictions that might affect ability to taste, smell or chew.

Based on the questionnaire results, selected candidates (n=70) were invited to collect a paper bag containing products linked to eight sensory tasks to complete at home. An information sheet with instructions was included and a QR code was used to access Compusense20 software to collect the results of the discrimination and description exercises. The results were used to select the final descriptive sensory panel (n=20).

The UP Sensory Identity Toolkit was efficient to screen and select a new sensory panel in record time. The toolkit was convenient for respondents and saved time of laboratory staff. In future a hybrid model, using the Sensory Identity Toolkit in combination with some sensory exercises in the laboratory, is envisaged. The strategy optimises the panel recruitment, screening and selection process.