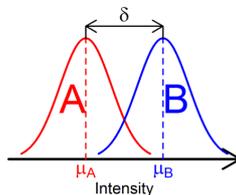




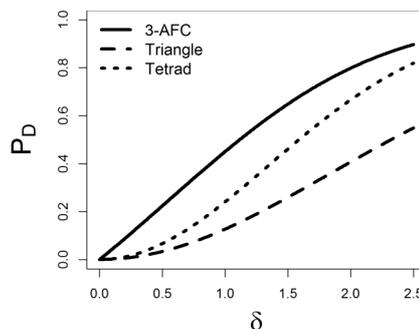
## Quicknotes

This month our Quicknote comes from Thierry Worch

Discrimination tests (e.g. triangle test, *m*-AFC, duo-trio, etc.) are useful methodologies to detect whether process or recipe changes will be detected by consumers. Analysis of such data can be done in two-ways: (1) estimating the proportion  $P_D$  of discriminators who can detect the differences (Guessing model), or (2) estimating the perceptual distance  $\delta$  between pairs of products (Thurstonian model, see figure). In both cases, the results obtained (whether it is  $P_D$  or estimated  $\delta$  observed) are compared to a threshold value defined by the user. If the value observed is larger than the threshold, one would conclude that the difference is large enough to be detected by consumers.



The two methods have their own advantages and disadvantages. Although the guessing model is easy to calculate and interpret, it is "method-specific" (the difference in sensitivities in each protocol is not taken into consideration). The Thurstonian model can deal with the difference in sensitivities between protocols (the decision rule processed is taken into consideration) but requires higher statistical skills and the interpretation of  $\delta$  is not so straightforward. By combining the two approaches and linking both  $P_D$  and  $\delta$  (see graph), a meta-analysis taking the best of both worlds can be proposed. This meta-analysis has the robustness of the Thurstonian model while still being easy to interpret.



### Upcoming Training Courses:

Statistics Fundamental for Science & Industry—a hands-on XLStat course 19th-20th Sept, London

Hands-On Sensory Statistics, 2nd-4th October, New York

Making Sense of Multivariate Data, 7th-8th Oct, New York

This summer the 10<sup>th</sup> Pangborn Sensory Science Symposium will take place in Rio De Janeiro, Brazil (11-15 August 2013). It will be an excellent occasion to catch up with us since Anne Hasted and Thierry Worch will be present. It will also be a good opportunity for us presenting some of the recent research work we have been involved in:

### Oral presentations:

From the formulation to the optimization of skin creams. A case study based on the Ideal Profile Method. *Sensometrics Workshop, Tuesday 13<sup>th</sup> August, 10h45-12h45.*

Open access and data processing of Social Media (Twitter) data - a new and valuable consumer research instrument. *Oral Session 11, Thursday 15<sup>th</sup> August, 9h00-9h20.*

### Posters:

Improving consumer response to Check All That Apply (CATA) attribute batteries.

The effect of dimensionality on multivariate mapping of hedonic data.

A large sample commercial study on emotion measurement for beer: comparing CATA and rating scales.

See you in Rio!



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