How to Best Account for 'No Preference' Counts

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Two items presented



Do you prefer A, B or have no preference?

Prefer A	Prefer B	No Preference
x	x	x

Questions

Should we offer 'No Preference' option?
What to do with 'No Preference' responses?

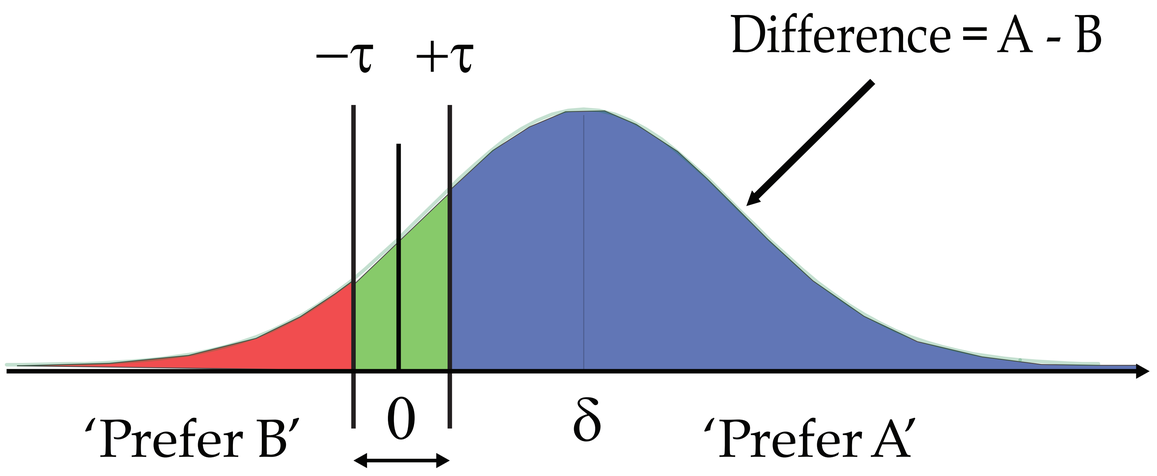
Methods in Use

Reallocate Equally Discard

Reallocate Proportionally

Alternative Method†

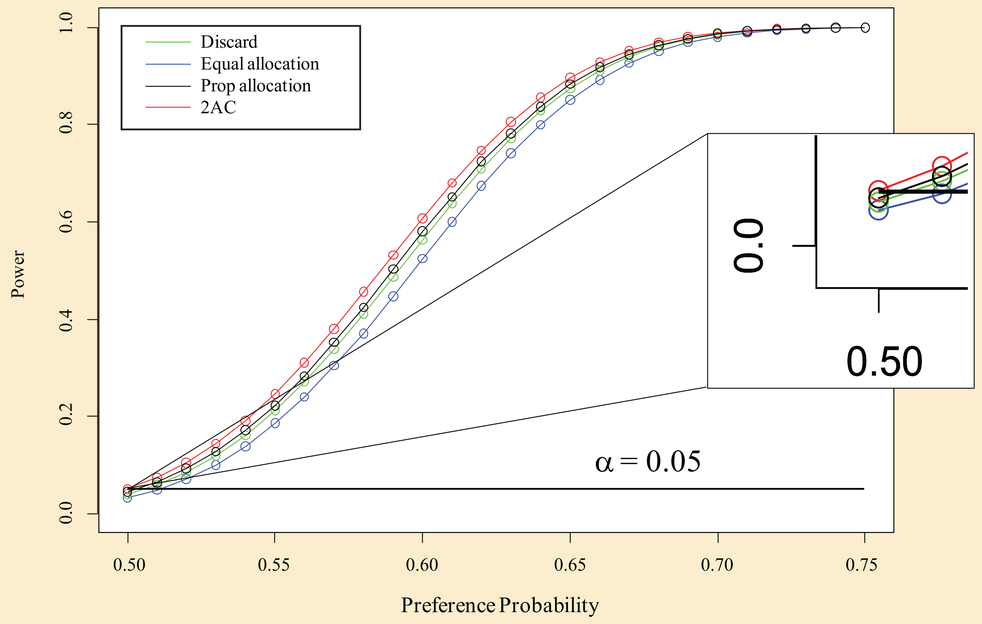
Thurstonian 2-AC‡



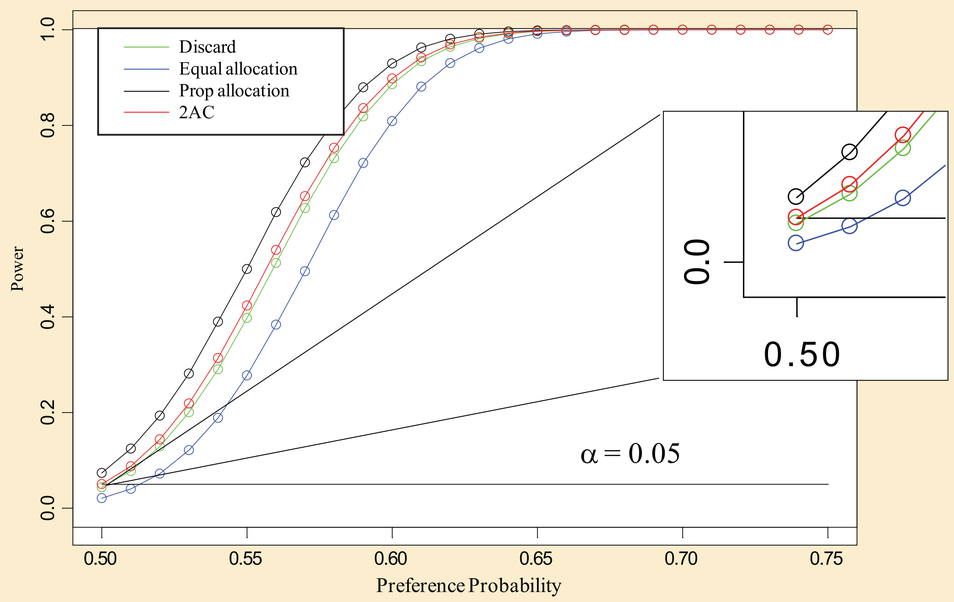
† Other statistical tests such as Putter's test can also be used to analyze data that includes 'No Preference' counts. The authors thank Dr. William Raynor for helpful discussion on this topic.
‡ Tables for use available on www.IFPress.com or analysis can be conducted within IFPrograms™.

Simulation Based Power Curves

n = 100, 'No preference' Probability = 10%



n = 300, 'No preference' Probability = 30%



Conclusions

- 2-AC method recommended
- Discarding less powerful than 2-AC
- Proportional reallocation liberal
- Equal reallocation acceptable in absence of more sophisticated methods

References

1. Ennis, D. M. (1993). The power of sensory discrimination methods. *Journal of Sensory Studies*, **8**, 353-370.
2. Ennis, J.M. & Ennis, D.M. (2010). Recommendations for 'No Preference' responses. *Presented at the 10th Annual Sensometrics Conference,* Rotterdam, The Netherlands
3. Ennis, J.M. & Ennis, D.M. (2010). How to account for 'No Difference/Preference' counts. *IFPress*, **13(3)**, 2,3.