

Table 3 is slightly different using the corrected OpenBUGS and SAS programs, given below. The results also now match those found using SDT in R.

Table 3

Parameter Estimates for Two Conditions of a 3AFC Experiment (Ennis & O'Mahony, 1995)

WW Condition	d	b_1	b_2
Table (H&R, 1975)	2.39	—	—
Equation 5 (MLE)	2.41 (0.18)	—	—
Equation 8 (MLE, multinomial)	2.63 (0.23)	0.39 (0.28)	0.85 (0.31)
Equation 8 (Bayesian, multinomial)	2.69 (0.24)	0.42 (0.28)	0.91 (0.32)
Equation 8 (SDT in R)	2.63 (0.23)	0.40 (0.28)	0.85 (0.31)
SS Condition	d	b_1	b_2
Table (H&R, 1975)	1.52	—	—
Equation 5 (MLE)	1.52 (0.14)	—	—
Equation 8 (MLE, multinomial)	1.54 (0.14)	-0.17 (0.18)	0.12 (0.17)
Equation 8 (Bayesian, multinomial)	1.55 (0.14)	-0.17 (0.18)	0.12 (0.17)
Equation 8 (SDT in R)	1.54 (0.14)	-0.17 (0.18)	0.12 (0.17)

Notes: WW is water-water prior stimuli; SS is salt-salt prior stimuli. H&R refers to Hacker & Ratcliff (1975). MLE is maximum likelihood estimation, with standard errors shown in parenthesis. For Bayesian estimation, values are means and standard deviations (in parenthesis) of the posterior distributions. For SDT in R, estimates are from the mAFC function: <https://www3.unifr.ch/psycho/fr/assets/public/Forschungseinheiten/sdt/SDT.pdf>

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DeCarlo, L. T. (2012). On a signal detection approach to m -alternative forced choice with bias, with maximum likelihood and Bayesian approaches to estimation. *Journal of Mathematical Psychology*, 56, 196-207.