Student's z, t, and s: What if Gosset had R?

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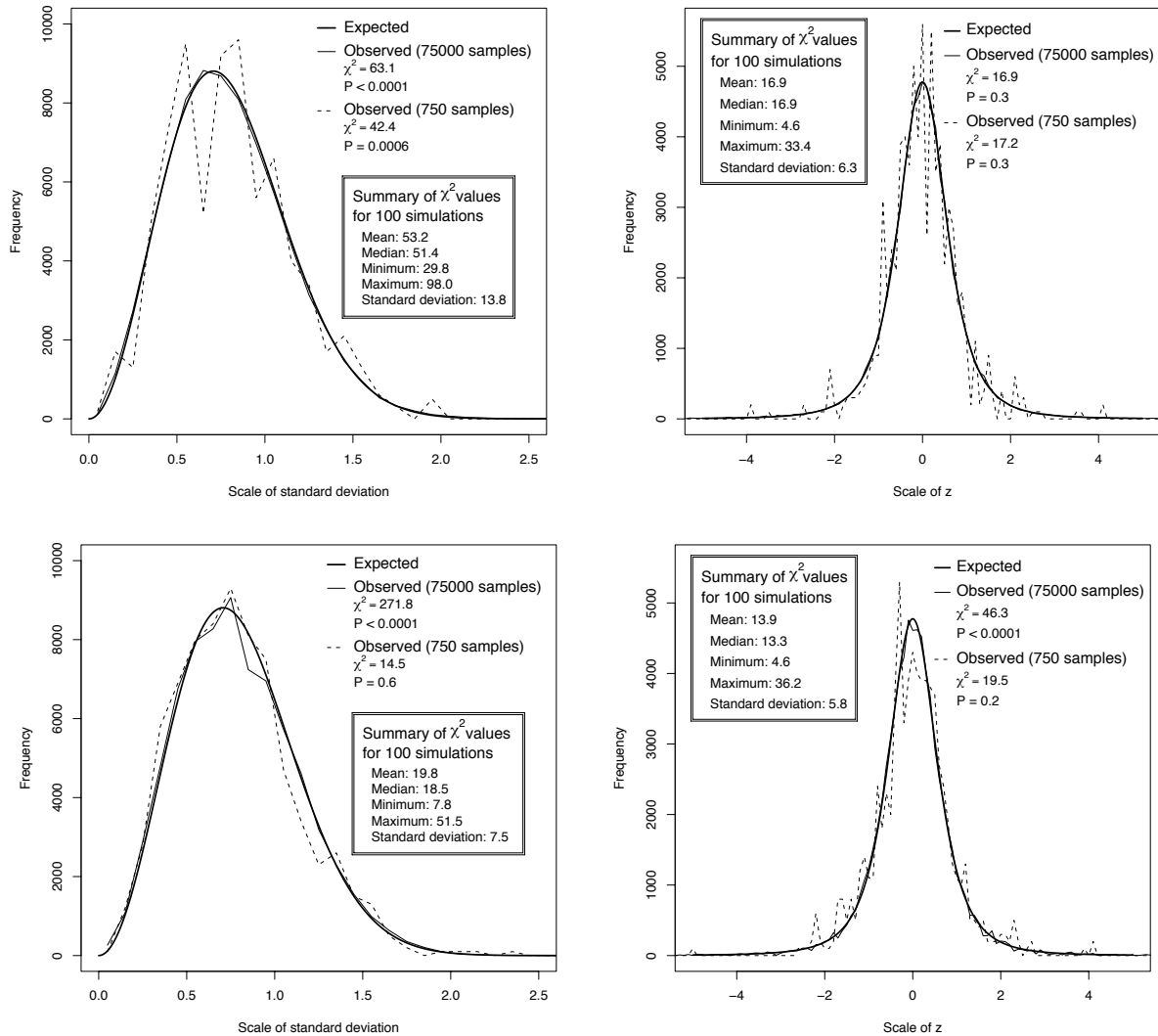**Additional Figures, referred to in the American Statistician article**

Figure 1: TOP: Distributions of s/σ [left] and z [right] in samples of size $n = 4$ from Macdonell's data on *heights* of 3000 criminals. <u>Dotted line</u>: (re-scaled) distribution of sample statistics obtained from one set of 750 random samples generated by Gosset's procedure. <u>Inset</u>: distribution of 100 chi-square statistics (18 s/σ, 15 z intervals). <u>Thin solid line</u>: distribution of statistics obtained from 75,000 samples of size 4 sampled with replacement from 3000 heights recorded to the nearest 1/8". BOTTOM: Corresponding results for *left finger lengths*, by Gosset's procedure, or – in case of the 75,000 – recorded to nearest 1mm.

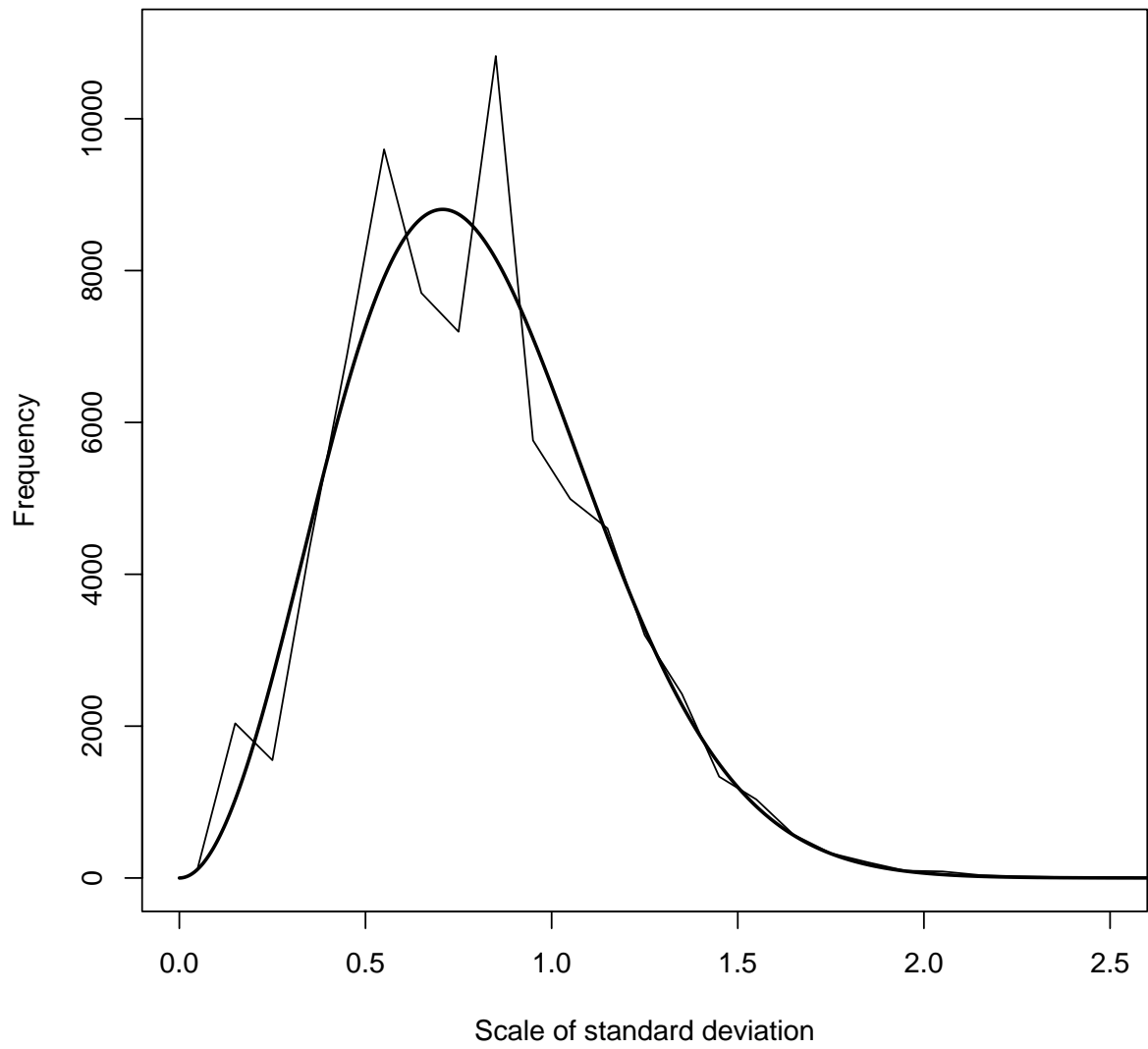Figure 2: Distribution of s/σ in 75,000 samples of size $n = 4$ sampled with replacement from *heights* of 3000 criminals, recorded to nearest 1" (thinner line) versus theoretical distribution (thicker line).