

where

$$(13) \quad \begin{aligned} I &= \int_{-\infty}^{\infty} G(x)H(x)f(x) dx \\ &= \int_{-\infty}^{\infty} \{[xF(x) - Z(x)]^2 + (\mu - x)[xF(x) - Z(x)]\}f(x) dx. \end{aligned}$$

This integral can also be written as

$$(14) \quad I = \int_{-\infty}^{\infty} \int_{-\infty}^x \int_x^{\infty} (x - y)(z - x)f(x)f(y)f(z) dx dy dz,$$

and, according to the distribution involved, formula (13) or (14) may be more convenient in the evaluation of  $\text{var}(g)$ .

Comparing (12) with the formulae given by Nair it is easy to show that an additional term  $(n - 3)\mu^2$  has been omitted in his final formula for  $I_1$ . However, the values of  $\text{var}(g)$  for normal, exponential and rectangular distributions given in [1] are correct and agree with those obtained from formula (12) above.

#### REFERENCES

- [1] U. S. NAIR, "The standard error of Gini's mean difference," *Biometrika*, Vol. 28 (1936), pp. 428-436.  
 [2] M. G. KENDALL, *Advanced Theory of Statistics*, Vol. I, Charles Griffin and Co., London 1943.

### CORRECTION TO "A NOTE ON THE POWER OF A NONPARAMETRIC TEST"

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In the paper mentioned in the title (*Annals of Math. Stat.*, Vol. 21 (1950), pp. 440-443) the proof of the biasedness of a test based on the maximum deviation between sample and population cumulatives is incorrect. A proof is given below. Also, on page 442, line 2, "greater" should be replaced by "less". The notation refers to Fig. 1 of the original article.

Above point  $b$  (note  $F_1(b) = F_0(b)$ ), there will be certain possible heights for  $S_n(x)$  to attain and still remain in the band. Call these heights  $b_1 = 1/n$ ,  $b_2, b_3, \dots, b_k = k/n$ , where  $k/n < 2d/\sqrt{n}$ . Locate the point  $x = c$  ( $c < b$ ) close enough to  $x = b$  so that  $F_0(c) + d/\sqrt{n} > b_k$ . Then consider

$$(i) \quad P_0 = P\{S_n(x) \text{ remain in band} \mid F(x) = F_0(x)\},$$

$$(ii) \quad P_1 = P\{S_n(x) \text{ remain in band} \mid F(x) = F_1(x)\}.$$

Now  $P_j = \sum_{i=1}^k P\{S_n(x) \text{ passes through } b_i \text{ and remains in band} \mid F_j(x)\} = \sum_{i=1}^k P\{S_n(x) \text{ goes through } b_i \mid F_j(x)\} \cdot P\{S_n(x) \text{ stays in band for } x < b \mid F_j(x)\},$