

Finally, employing (1) and (2'), (5) is equivalent to  $rv(rk - \lambda v - k + \lambda k) \geq k(\lambda k - \lambda v + kr^2 - kr)$ . Grouping the terms in  $\lambda$ , we have

$$(8) \quad kr(r-1)(v-k) \geq \lambda(v-k)(vr-k).$$

If we apply (1) to (8), we get relation

$$(9) \quad r(r-1) \geq \lambda(b-1);$$

however, applying (2') to (8) gives

$$kr^2 - \lambda rv \geq k(r - \lambda) = k^2r - \lambda kv,$$

$$(kr - \lambda v)(r - k) \geq 0,$$

$$(r - \lambda)(r - k) \geq 0.$$

It is trivial that  $r - \lambda > 0$ ; hence

$$(10) \quad r - k \geq 0,$$

which is equivalent, by (1), to Fisher's inequality (3). Thus we conclude that (5) and (3) are equivalent.

This completes the proof that inequalities (5) and (6) are in reality no more general than (3) and (4).

#### REFERENCES

- [1] R. C. BOSE, "A note on the resolvability of balanced incomplete designs," *Sankhyā*, Vol. 6 (1942), pp. 105-110.
- [2] R. A. FISHER, "An examination of the different possible solutions of a problem in incomplete blocks," *Ann. Eugenics*, Vol. 10 (1940), pp. 52-75.
- [3] K. R. NAIR, "Certain inequality relationships among the combinatorial parameters of incomplete block designs," *Sankhyā*, Vol. 6 (1943), pp. 255-259.

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### CORRECTIONS TO "THE SURPRISE INDEX FOR THE MULTIVARIATE NORMAL DISTRIBUTION"

BY I. J. GOOD

In the paper cited in the title (*Ann. Math. Stat.* Vol. 27 (1956), pp. 1130-1135):

Sec. 1, line 4. For **E** read  $\mathbf{E}_i$ . (This was correct on some prints.)

P. 1132, line 7. For  $\lambda_0$  read  $\lambda_u$ .

Two lines above Sec. 4. For  $\lambda$  read  $\lambda_1$ .

End of paper. The remark concerning Hotelling's generalised "Student" test is misleading and should be deleted.