CORRIGENDA

to the paper

TAUBERIAN THEORY FOR THE ASYMPTOTIC FORMS OF STATISTICAL FREQUENCY FUNCTIONS*

BY J. M. HAMMERSLEY

Received 5 August 1953

I am indebted to A. Dvoretzky who pointed out to me that Theorem 2B is incorrect, as may be most easily seen by taking $f_n(u)$ identically zero. To rectify matters, the words '*exists and is continuous for* $\alpha < x < \gamma'$' [following (12)] should be supplemented by the clause '*and is not a linear function of x in any sub-interval of this interval*'. This supplementary clause had already appeared in the original statement of Theorem 2A, and is therefore wanted also in 2B when 2A is invoked at the foot of p. 595. It is also wanted because the reasons for (14) are incorrectly stated [inasmuch as the case $\lim\limits_{n\to\infty} f_n(u) = 0$ is not trivial]. The correct reasons for (14) are as follows: Equations (7) and (8) show that $\liminf\limits_{n\to\infty} s_n \geqslant 0$. If (14) were false, there would exist a finite number $\sigma \geqslant 0$ and a subsequence $n_1, n_2, \ldots$ such that $\lim\limits_{i\to\infty} s_{n_i} = \sigma$. Write

$$F_n(x) = \sum_{-\infty \leqslant u \leqslant m_n + x s_n} f_n(u), \quad F(x) = \lim_{i\to\infty} F_{n_i}(x)$$

in accordance with (12). If $\sigma = 0$, (Fx) is independent of x; while, if $\sigma > 0$, we can find a number ξ such that $\alpha < \xi < \gamma'$ and $F(x)$ is independent of x for $\xi \leqslant x \leqslant \min(\gamma', \xi + \frac{1}{2}\sigma)$. In either case the supplementary clause above is violated; and this establishes (14). There is also a misprint in the third equation from the foot of p. 595, where $F'_n(m_n + xs_n)$ should have been $G'_n(m_n + xs_n)$.

LECTURERSHIP IN THE DESIGN AND ANALYSIS OF SCIENTIFIC EXPERIMENT
UNIVERSITY OF OXFORD

* Vol. 48 (1952), pp. 592–9.