

Individual, variability, error proneness and human performance

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A QUICK REVIEW OF
ACCIDENT PRONENESS
&
MEDICAL ERROR

4

In 1926, two works appeared that gave a lasting name to accident proneness. Eric Farmer and E. G. Chambers of the British Industrial Fatigue Research Board deliberately introduced the term, 'accident proneness'. The German psychologist and philosopher, Karl Marbe wrote of *Unfallneigung*, or inclination to accidents.

Eric Farmer and E. G. Chambers, A Psychological Study of Individual Differences in Accident Rates (Medical Research Council, Industrial Fatigue Research Board, Report No. 38, London: His Majesty's Stationery Office, 1926).

Karl Marbe, *Praktische Psychologie der Unfälle und Betriebsschäden* (München: R. Oldenbourg, 1926).

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INHERENT VARIATION IN
ANY PERFORMANCE

SOME PEOPLE ARE QUICKER
(SLOWER) THAN OTHERS;

SOME SEE BETTER (WORSE) THAN
OTHERS

SOME LEARN FASTER (SLOWER)
THAN OTHERS

6

**THE ACCIDENT DATA
CREATED A NEED FOR
EXPLANATION**

The reasonable hypothesis that the accident data came from a distribution of people equally likely to produce accidents had to be rejected.

7

The alternative hypothesis:
that each person had his/her personal probability of involvement in accidents was in accord with the data.

8

**THE INVENTION OF
ACCIDENT PRONENESS**

“Trivial accidents are indicators of unsafe people whom the record of the ambulance room can be employed to discover.”

– Major Greenwood and Hilda M. Woods, A Report on the Incidence of Industrial Accidents upon Individuals with Special Reference to Multiple Accidents (Medical Research Council, Industrial Fatigue Research Board, No 4, London: His Majesty’s Stationery Office, 1919);

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“Accident proneness,’ means a personal idiosyncrasy predisposing the individual who possesses it in a marked degree to a relatively high accident rate.’

E. M. Newbold, A Contribution to the Study of the Human Factor in the Causation of Accidents (Medical Research Council, Industrial Fatigue Research Board, Report No. 34, London: His Majesty’s Stationery Office, 1926).

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ERROR IN MEDICINE

- An error in medicine is not a MEDICAL error; it is a medical ERROR

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