

A NOTE ON THE ALLEGED NONEXISTENCE OF INDIVIDUAL DIFFERENCES IN REMINISCENCE

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The evidence regarding Peters' suggestion that there are no individual differences in reminiscence is reviewed, and his attempt to explain the observed differences as due to statistical artifacts is shown to be incorrect. It is concluded that such differences are real, that they correlate with extraversion, and that the data support a consolidation, rather than an inhibition, theory of reminiscence.

Peters (1972a, 1972b) has criticized Eysenck's (1956) hypothesis that extraverts show greater reminiscence in pursuit-rotor work and other tasks on the grounds that crude gain measures of change are inadequate, and that reminiscence scores are not independent of performance level. Peters (1972a) maintains that

all the variables which have been found to be related to reminiscence, as measured by raw gain, are also related to performance on the task used to measure reminiscence (primarily the pursuit rotor and inverted alphabet printing). . . . If there are no individual differences in reminiscence, then there are no individual differences in reactive inhibition and, therefore, no basis for Eysenck's theories relating reactive inhibition to motivation and to extraversion-introversion [p. 367].

Eysenck (1962) published a table listing researches into the relationship between extraversion and reminiscence published through 1962; out of 20 studies, only 2 failed to support the prediction. Since then, the number of confirmatory studies has almost doubled. Is it true that these results are entirely due to statistical artifact as Peters would have us believe?

On Eysenck's (1956) original hypothesis, extraverts accumulate greater inhibition (I_R) than introverts; this depresses pretest performance to a greater extent than would be true for introverts. Rest dissipates all of the accumulated I_R , and posttest performance is equal for both extraverts and introverts; hence extraverts show greater reminiscence. Eysenck (1964) has demonstrated quite

clearly that this account is wrong; he found that extraverts do not differ from introverts on terminal pretest trials but do so differ on posttest trials. This conclusively disproves the I_R hypothesis. He quotes Star (1963) as showing similar results, and more recently Farley (1971) has also published results showing a similar trend. All three authors find significant reminiscence differences between extraverts and introverts, with extraverts having higher scores, but they fail to find any pretest differences in performance; observed differences are exclusively in posttest performance. This fact, among others, led Eysenck (1965) to suggest a new theory of reminiscence, abandoning inhibition and introducing consolidation as the primary factor involved. The connection with personality was postulated to be through individual differences in arousal (Eysenck, 1967).

The data referred to disprove Peters' assertion that variables which have been found to be related to reminiscence are also related to performance; there is no difference in pretest performance between introverts and extraverts in the studies quoted (or in many others which could be quoted in addition). It is consequently not possible to appeal to performance differences in order to explain individual differences in reminiscence. This fact of performance equality pretest eliminates at once the various other causes of statistical artifact suggested by Peters. It remains true that in some of the studies mentioned by Peters, differences in pretest performance level do exist, and in those cases, careful recalculations would be in order to eliminate this factor. However, his generalization of this performance difference to all (or even the

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majority) of studies into extraversion-introversion correlates of reminiscence is quite arbitrary and not in line with the evidence; the study by Yates and Laszlo (1965) which Peters (1972b) himself quotes disproves his point quite clearly and fails to reveal any performance differences between extraverts and introverts under either massed or spaced conditions of practice.

It seems difficult to come to any other conclusions than that (a) individual differences *do* exist with respect to pursuit-rotor reminiscence, and (b) that these differences are correlated with extraversion-introversion as required by Eysenck's theory. The data also (c) conclusively disprove Eysenck's original inhibition theory but are in good agreement with his consolidation theory, which has since received a certain amount of additional support (Eysenck, 1973).

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