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SOME CONCOMITANTS AFFECTING THE SKILL ADAPTATION OF NON-SWIMMERS DURING A TWELVE-SESSION TRAINING PROGRAMME

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An adaptive process is undergone by the non-swimmer who learns to swim. Some influences affecting this process were surveyed in an extensive field experiment completed in 1967 but not published at the time, when 7353 non-swimmers from schools throughout England and Wales were taught to swim under one of the four treatment combinations of two methods of teaching, i.e. single-stroke and multi-stroke methods, and two administrative arrangements i.e. block (daily) and standard (weekly) lesson schedules. Also studied were the effects of selected supplementary techniques, e.g. flotation aids, flipper-float practices and land-drills, the importance of certain facilities, and some attributes of successful pupils and teachers. Success was measured each lesson by width and length tests, and at the end of the experiment by a five minute test.

Results confirmed that a few exceptional teachers obtain outstanding success rates. In general, however, achievements in the 12 sessions were modest. Overall 57.4% of the non-swimmers learned to swim a width and 34.5% a length, while those who passed both tests averaged 75.2 metres in the five minute test. By comparison a control group of 458 non-swimmers who received no teaching achieved results on the same tests of 52.0%, 28.2% and 71.2 metres respectively. These results for the experimental and control groups are similarly related at all ages from 9 years to 12 years. Although statistically significant, the differences between the groups give no cause for enthusiasm. Rather do they raise two queries, one about the economics of providing teaching cover for non-swimmers, the other about the nature of the training given to those charged with providing that cover. A second result, not without bearing on this, reveals that whereas the experienced teachers achieve significantly better results than the inexperienced, the qualified teachers show no particular superiority over the unqualified.

It is concluded that daily lessons are slightly superior to weekly lessons if success is judged by a simple test, but modestly inferior if a more robust test is adopted, that the multi-stroke method is superior to the single-stroke method at all ages from 9 years to 12 years, that success rate is largely independent of sex, very much a function of age, moderately an inverse function of class size, only little related to academic stream and unrelated to type of secondary school. It is thus also concluded that administrative policies and teaching practices affecting the non-swimmer would benefit from review.

SOME HAEMATOLOGICAL FINDINGS IN COMPETITIVE SWIMMERS UNDERTAKING A "TAPER" TRAINING PROGRAMME

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In the weeks immediately preceding important competitions many athletes and swimmers prepare by undertaking "taper" training programmes involving initially long and strenuous training sessions which become progressively shorter and less arduous nearer the competition date. Such programmes are generally believed to enhance the likelihood of achieving good or improved performances.

The present study was undertaken to investigate changes in basic haematological parameters in athletes during a "taper" programme. Two groups of competitive swimmers (7 males, 8 females) were examined during an intensive eight week taper training programme. The average distances swum (per subject per week) were decreased progressively from 80 km to 20 km in the week before the competition. Swimmers who missed training sessions were excluded from the study. Control groups (8 males, 8 females) undertook no strenuous organised physical training. Samples of venous blood were collected from the subjects employing a standardised procedure at regular weekly intervals. Samples were analysed using a Coulter S System and values were obtained for red cell count, haemoglobin concentration, haematocrit, mean corpuscular volume (MCV), mean corpuscular haemoglobin (MCH), mean corpuscular haemoglobin concentration (MCHC) and white cell count.

In both individuals and groups there were significant differences between values at the start and end of the taper programme for some parameters, including red cell count, haemoglobin concentration and haematocrit, whereas the cellular indices MCV, MCH and MCHC