EXAMINATION OF A MODEL OVER SELF-CONTROLLED MOTION-LEARNING

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Introduction: Self-controlled motion-learning occurs, if the learner has control over at least one component of the learning process (i.e., the use of learning hardware). The new tests on this topic show a consistent pattern. This is what the pattern says. In short-term, expectancy in long-term things just learned are still only being exercised. There are no significant differences between the self-controlled learning groups and the non-self-controlled learning groups in their performance skills. Nevertheless, in longer-term, a retardation test, the self-controlled groups show significantly better skills than the externally-controlled groups. Until now, there is no conclusive explanation for this phenomenon. Bund and Weymeyer (95) assume a model, in which the different controlling and motivational processes have an antagonistic effect. A higher learning motivation is compensated by a higher cognitive demand. Only in the retardation test, there is, in contrast, no more self-controlling effect, the advantage of an external controlling effect was used to check this model with empirical means.

The learners of the different facilities (H=48, M=23.67 years) had to learn a baseline standard track with the row of the non-domain. A leading mount of 100. In two ways was followed after 4 days by a retardation test with a tracks. Target missions (98%) and quality of the movement execution as dependent variables were determined.

The results show, that the difference between the placement of the different conditions of the self-controlled feedback, 3 externally controlled feedback target pairs to 3) self-controlled feedback with additional, dominant stimulus, 4) externally controlled feedback with additional, dominant stimulus to pairs (3) and 3) from the model the hypothesis can be derived, that the groups 3 and 4 show worse exercise achievements than the groups 1 and 2, while in the retardation test the self-controlled and the groups 1 and 3 came out as well better than the external regulation groups 2 and 4. The following only applies to the result on the target missions.

Results and discussion: All groups of learners improved their achievement during the course. Every second at the end (P<.01). In the process group specific effects stayed on day 3: group 3: P<.04; p<.05. The post-hoc analyses yield a reference for smaller target missions 1 and 2 in relation to the groups 3 and 4 on the second exercise day (group 3: P<.04; p<.05) in the retardation test group 1 improved their achievements better as the groups 2 and 3: P<.04; p<.05. These findings refer to the acceptance of the model.

ERRORS IN JUDGING "OFFSIDE" IN FOOTBALL AND HOW TO BETTER DEAL WITH IT

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Several authors proposed the Flash-Tag effect to explain the errors made by assistant referees (AFs) both in real life (2) as well as in computer animations and video clips (3). The most important aim of this study was to examine if offside decision-making in computer animations can be improved with specific instructions and appropriate feedback. Belgian elite AFs (n=50), who were all involved in professional football, had to assess computer-based offside situations. In these animations, the position of the offside player relative to the offside line and the offside line to the offside line was experimentally manipulated. Specifically, for the offside positions, the attacker was 10 and 30 yards behind the offside line as well as on the offside line. For the offside line, the attacker was 10 yards behind the offside line. In order to improve the participants had to assess a first set of 32 animations. After 5 minutes break they had to assess a second set of 32 similar animations. Eighteen months later, the same AFs had to assess the same animations of 1st (untrained) condition. Then instructions were given to explain the impact of the Flash-Tag effect. The animations were shown again and passed at the second condition. The AFs who were provided with their own response above their scores with 3 the correct ones. Afterwards, they had to assess the animations of 2nd (experimental) condition. Six weeks later, a retardation test was done with the instructions from the experimental condition.

First, the results showed less errors when the attacker was 10 yards ahead of the offside line than 10 yards behind the offside line. An equal number of errors was found when the attacker was 10 yards ahead of the offside line and 20 yards behind the offside line. This can be fully explained by the Flash-Tag effect. More important was to see whether offside decision-making improved with specific instructions. First, no difference was found between set 1 (63.3%) and set 2 (84.8%) of the first exposure. It can be concluded that there is no difference between these 2 similar sets of animations. Second, an improvement was found for the condition 7 (77%). This can be explained by the repeated exposure to the same situations. Third, the better performance in the experimental condition (78%) compared to the repeated exposure in the control condition showed that the Flash-Tag effect and feedback lead to better decision-making in computer animations. Finally, four, no differences were found between the experimental condition and the retardation test (79%). Future research is needed to investigate the relative role offside decision-making in computer animations and offside in real games.


THE RELIABILITY OF EYEBALL SHUTTLE RUN TEST ON FIVE-YEAR-OLD CHILDREN

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The Shuttle Run test is a part of the EORTC motor fitness test battery, which is recommended for children from the age of six. In Norway, the test is also a part of a test battery recommended from the age of four. Even if some reliability studies of the Shuttle run have been done on children as young as six years old has been reported. For younger children, tests or different validity influence the test results and reduce reliability. Two studies were carried out in two different kindergarten groups. The children were tested in two different groups, the first test and detail of the number of motivational elements. The test was scored in accordance with the movements, but in an attempt to decrease small sources of error alternative scoring procedures, involving data reduction, was tried out. The reliability of the first and second test in any of the alternative scorings (first test and second test) was found to be .76 for five-year-olds. The Shuttle Run test is not a reliable measurement when the sample is small.

AN ADAPTED EXERCISE PROGRAM IMPROVES PERFORMANCE OF ELDERLY PERSONS WITH MENTAL DISABILITIES

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Introduction: Rehabilitative and preventive exercises of adapted physical activity are very important for elderly people to age healthily and to keep independency. Therefore, we developed an exercise program for elderly handicapped persons with mental disabilities. Furthermore, we wanted to ascertain that training improvements may improve physical performance or quality of life.

Methods: In cooperation with the Federal Association of Independent living in Germany 70 men and 21 female persons (52.9 ± 6.9 years with mental disabilities were engaged under the following conditions: maximum age of 40 years, capability to follow simple instructions and an exercise intervention was implemented over 11 months and split up in: a) symmetrical balance, b) grid, c) external and internal perception and relaxation, and d) foot and head movement and endurance. Participants were either selected in a chance-delivered (25% of the total group) condition. The intervention was conducted once a week at random during 60 minutes with basic exercises and games. To evaluate treatment effects before and after the intervention endurance performance (2-minutes, 3-step, reaction-time on a visual sign, hopping number of footstages during 30 seconds) peak exploratory flow and activities of daily living were examined.

Results: Participants improved significantly in most of the tested parameters: the distance accomplished during the 5-min walk increased significantly (74.7 ± 32.8 vs. 95.3 ± 49.9 m, P<0.05), balance-time enhanced from 48 ± 72 to 60 ± 23 s (P<0.05) and the amount of footsteps decreased significantly at 15.2 ± 19.7 times (P<0.05). The amount of footsteps decreased significantly at 15.2 ± 19.7 times (P<0.05). The effect size became .76 (Cohen's d). No significant changes were found for the other parameters.

Discussion: Although studies observed positive effects of controlled exercise training with training three times a week for periods of several weeks in similar populations (2), performance of our cohort improved significantly in most tested parameters by training only once a week. For lack of the participants in regard to lessen contents was also positive. For elderly people with mental disabilities we can conclude from the findings that even with moderate exercise once a week general fitness may be improved.
