

Psychological Foundations of Personality Development in Cadet Pilots' Sports and Health Activities

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The training of aviation professionals requires not only a high level of technical knowledge but also the development of psychological resilience, self-regulation, and the capacity for active personality development. The purpose of the study is to determine the impact of a programme integrating sports, health-promoting, and psychological interventions on the personality development and professional competencies of future pilots. The study involved 116 cadets aged 17–22 years, divided into an experimental group (58 participants) and a control group (58 participants). In the experimental group, a personality development algorithm combined individual coaching, self-regulation training, and the pedagogical strategy “Challenge and Support” within a sports and health-promoting module. The intervention produced significant improvements in key psychological mechanisms. Self-control increased by 28.3% (from 61.2 ± 3.1 to 78.5 ± 2.9 points, $p < 0.001$), while planning increased by 21.5% to 18.1 ± 0.7 points ($p < 0.001$). Verbal creativity rose by 18.9% to 57.9 ± 2.1 points ($p < 0.01$), and mastery-oriented motivation increased by 15.4%. Regression analysis identified self-control ($\beta = 0.45$, $p < 0.001$) and planning ($\beta = 0.32$, $p < 0.01$) as the strongest predictors of personality development, explaining 61% of the variance. The findings support integrating psychological and pedagogical tools into sports and health-promoting training to strengthen volitional control, executive functions, creativity, and adaptive behaviour in cadet pilots.

Keywords: Autonomy Regulation, Motivational-Cognitive Integration, Volitional Adaptive Competence, Creative Behavioural Strategy, Expert Functional Stabilisation.

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