



## Information for the Lecture 9

### 1. Psychophysical readiness is not only about strength or endurance

In leading educational and military academies worldwide, psychophysical readiness is assessed even by a person's ability to switch attention quickly and manage emotions. In the USA, it is believed that "operational thinking" can reduce workplace error time by 30–40%, directly influencing safety and productivity.

### 2. Eye muscles – the “forgotten” component of training

Most students have no idea that the eye muscles get tired faster than leg muscles if their work involves a computer, microscope, drafting, or observation. In Japan, special devices called “Eye Motion Boards” are used to train eye movements. We can offer simple in-class analogues:

- “draw a figure eight with your eyes”
- “shift your gaze near–far”
- “vertical and horizontal trajectories”

### 3. Technical-major students are champions of “micro-stress”

MIT research shows that technical majors experience one of the highest accumulations of micro-stress, which manifests not emotionally but physically – as back and neck spasms, sleep disturbances, and visual fatigue. Professional-applied physical training (PAPT) acts as an “anti-stress module” and shows measurable effects after only 3–4 weeks.

### 4. Communicative professions – the “invisible sport”

Communication consumes almost as much energy as a sports match:

- heart rate increases
- cortisol is released
- the body switches into mobilization mode

Psychophysical training acts as an emotional stabilizer – improving nervous system endurance and preventing burnout.

### 5. Agricultural and natural sciences majors – training “in the elements”

These professions often require working:

- at +35°C
- in strong wind





- in humidity
- in cold and temperature drops

Therefore, resilience to environmental stressors is a mandatory component of PAPT – something not required in many other fields. This makes these specialties unique.

## **6. Why should even economists and lawyers train balance?**

Because balance is directly related to brain function. When we train the vestibular system, we activate the same brain structures responsible for multitasking and attention switching. Thus, balance exercises are not just physical conditioning – they are cognitive enhancement tools.

## **7. A funny but true fact about static endurance**

Scientists found that a person gets tired from sitting 1.5 times faster than from walking at a slow pace. So students who sit all day are not “resting” – they are static athletes, and they need back and neck training just as athletes need thigh training.

## **8. Why are hands the main professional tool?**

In precision-based fields (technologists, doctors, designers, mechanics), the fine muscles of the hands are what “burn out” the most. This is why table tennis, badminton, and squash are not just “games” – they are neuromotor training, improving accuracy, speed, and coordination.

## **9. “PAPT is Fitness IQ”**

In modern terms, PAPT is not about “being strong.” It is about: understanding your own body + managing your resources + remaining effective in your profession.

## **10. How to explain PAPT in one catchy phrase**

**“Your profession shapes your body. PAPT shapes your body for your profession.”**

