

# Development and evaluation of the stress lab – A tool for prospective physical education teachers

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## Introduction

To prepare prospective physical education (PE) teachers for dealing with stressful teaching situations (based on Lazarus & Folkman, 1984), the *stress lab* was developed for university education. It consists of two main parts, an e-learning unit for knowledge acquisition and a practical unit in which videos are used to practice dealing with stressful situations (see figure 1).

**The overall aim** was to assess if both parts of the *stress lab* and the videos are suitable for PE students. The evaluation was conducted in three sub-studies.

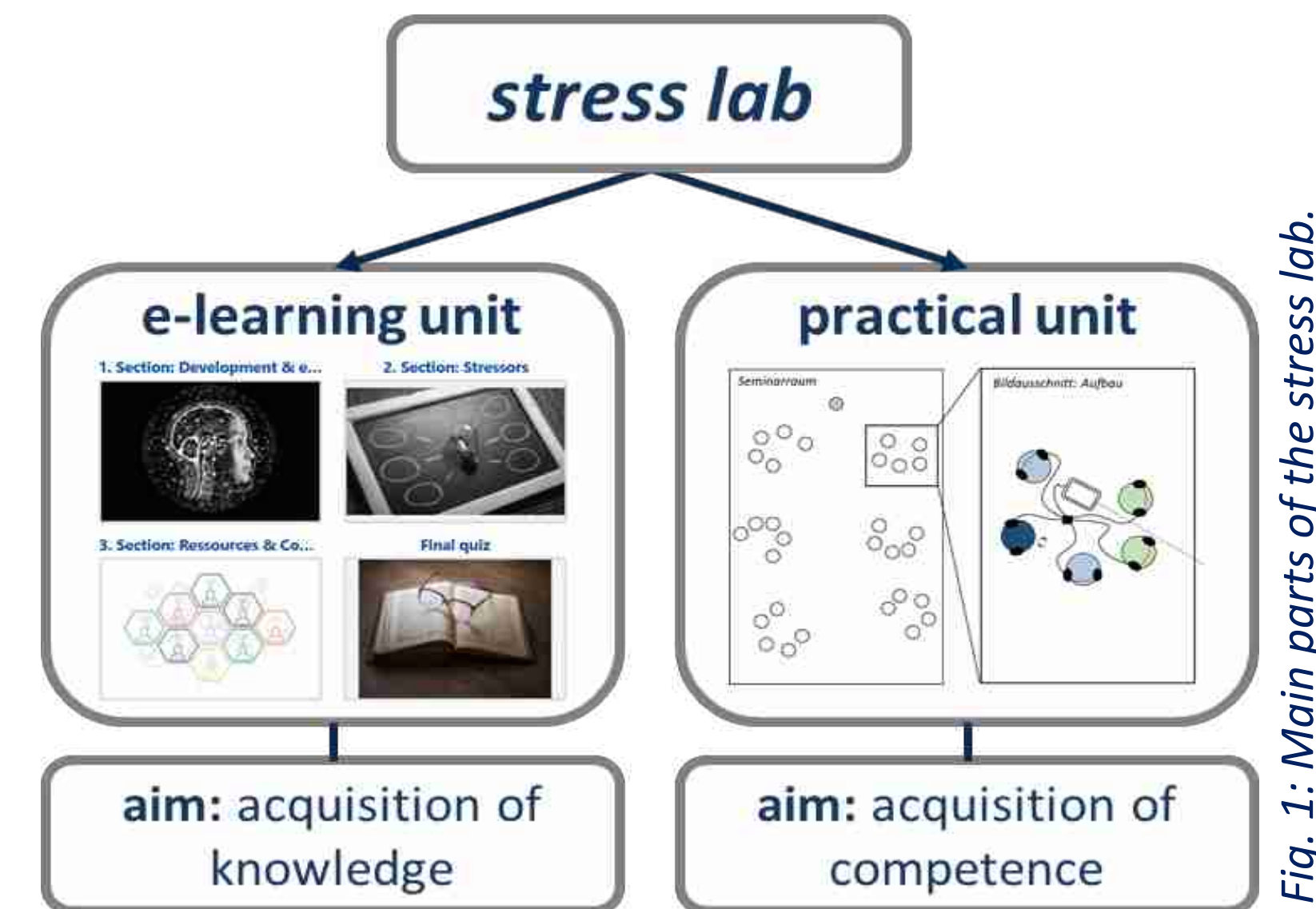


Fig. 1: Main parts of the stress lab.

## Study 1: E-learning unit



Fig. 2: Content of the e-learning unit.

## Acceptance & state of knowledge of PE students

**The specific aim** was to investigate whether the students accept the e-learning unit (see figure 2) and if they can gain knowledge after participating.

**Method.** 24 PE students were surveyed on subjective acceptance (single item: 0 = very bad to 10 = very good) and subjective state of knowledge (18 knowledge statements classified in 1 = applies not at all to 5 = applies completely).

**Results.** Descriptive results show high acceptance ( $M = 7.15$ ,  $SD = 1.71$ ) and a moderate state of knowledge after participating ( $M = 3.80$ ,  $SD = 0.48$ ).

## Stress intensity of the video material

**The specific aim** was to analyse whether the videos represent stressful situations for PE teachers of different career stages.

**Method.** 34 PE students, 22 PE pre-service teachers and 27 PE teachers were asked to rate their acute stress intensity after watching each video.

**Results.** Participants perceive stress with moderate intensity, but there are differences between some of the videos (see figure 3). Videos representing stressful situations are more suitable for integration in the practical unit than others.

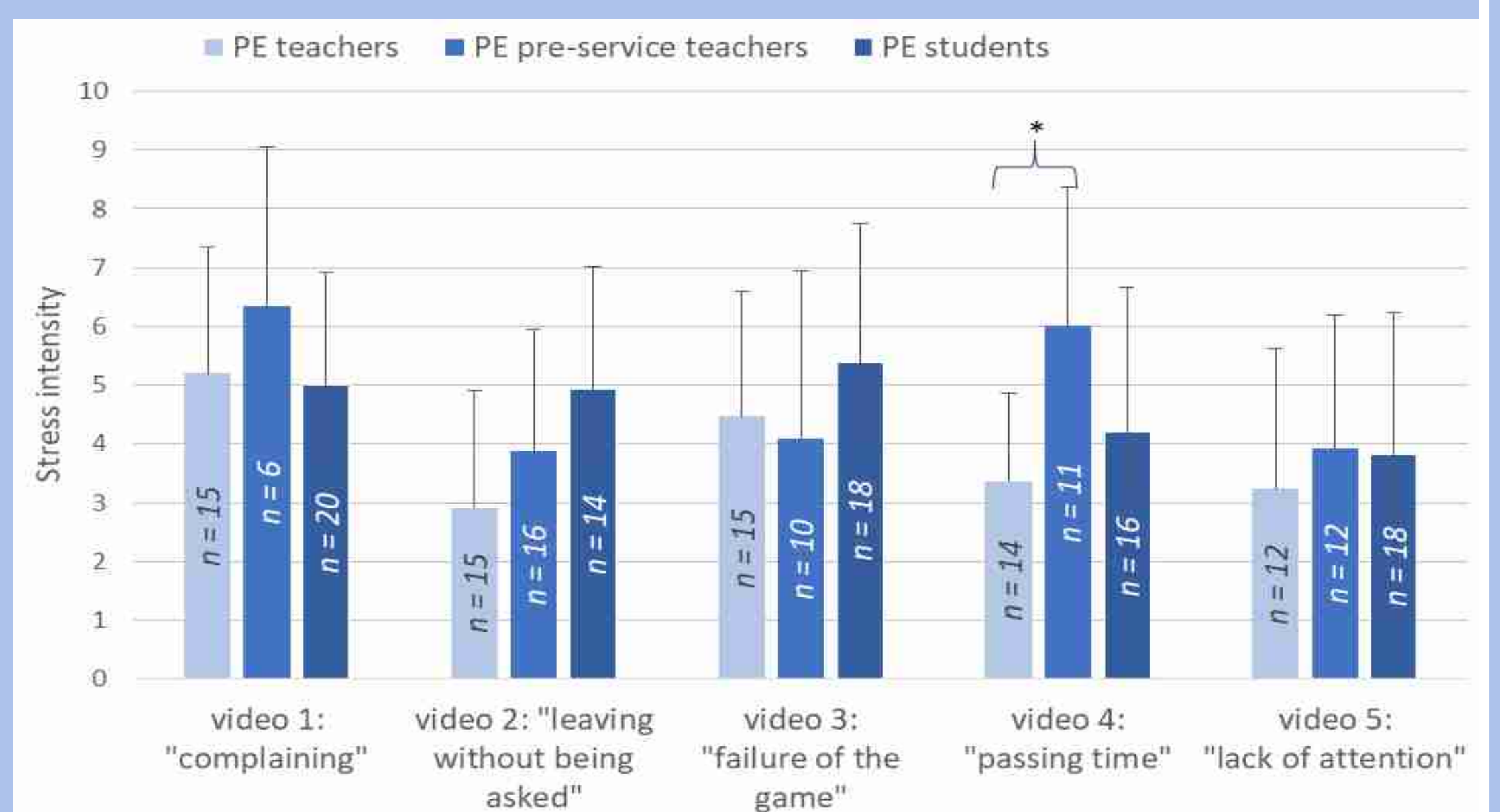


Fig. 3: Perceived stress intensity of participants in certain video situations (single item: 0 = not stressful to 10 = very stressful).

## Study 2: Video material

## Study 3: Practical unit



## Acceptance & state of competences of PE students

**The specific aim** was to investigate whether PE students accept the practical unit and if they gain competences after participating.

**Method.** 10 PE students were surveyed on subjective acceptance (single item: 0 = very bad to 10 = very good) and state of perceived competences (8 statements classified in 1 = applies not at all to 5 = applies completely).

**Results.** Descriptive results show high acceptance ( $M = 7.80$ ,  $SD = 1.32$ ) and a high state of competence after participating ( $M = 4.33$ ,  $SD = 0.37$ ).

## General discussion

Results show that both parts of the stress lab are suitable for PE students to gain knowledge and to acquire competences. Videos offer a suitable opportunity to confront students with certain situations, although videos allow more distance from the situation than real-life situations where they have to react directly. Therefore, videos are suitable for practicing how to deal with stressful teaching situations.