



Training for Excellence (T4X) - Improving two high performance mental training workshops for first year dental students

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Introduction

Dental students around the world are dealing with many stressors during the study Dentistry. To help students to cope with the stressors, first-year dental students at ACTA are trained to perform under pressure with the training method T4X. The method consists of 4 principles: Imitating pressure, Deliberate Practice, Focus of attention and Imagery. This method is proved efficient in other high-performance settings, for example with top-level sport athletes. T4X is now being introduced to first-year dental students in the form of two T4X-workshops where the principles are being taught to the students. In an iterative process the two workshops will be improved, so that they fit the setting of dental education. In workshop 1 awareness is being created by Imitating the pressure of pre-clinical skills with a metaphor of drawing a cartoon figure on a balloon with a time limit. In the second workshop the other principles were educated.

As part of the first iteration, the aim is to improve the T4X -workshops in order to guide first-year dental students in their performance during (pre)clinical activities, even under pressure.

Material & Methods

• Quantitative

First, a questionnaire consisting of six closed-ended questions, regarding several educational aspects, was filled in after two T4X workshops by the first-year dental students (N = 99) at the Faculty of Dentistry, ACTA. The closed-ended questions were rated by the students with a 1-10-point scale (1 = strongly disagree, 10 = strongly agree) and rated the parameters: useful, instructive, inspiring, more control, participation and applicable for the T4X study groups.

• Qualitative

Secondly, with the help of three psychological theories as theoretical framework: Self-Determination Theory (SDT), Transfer Theory (TT) and the Individual Zones of Optimal Functioning (IZOF), semi-structured interviews were performed with a representative sample of ten students (N = 10). The outcomes of the semi-structured interviews were analysed with a thematic analysis and a sentiment analysis.

Results

• Quantitative Results

The students rated all parameters on average with a sufficient score: useful ($\bar{x} = 6,2$; $\sigma = 2,4$), instructive ($\bar{x} = 6,5$; $\sigma = 2,2$), inspiring ($\bar{x} = 6,2$; $\sigma = 2,6$) more control ($\bar{x} = 6,4$; $\sigma = 2,4$), participation ($\bar{x} = 6,3$; $\sigma = 2,5$) and applicable ($\bar{x} = 6,3$; $\sigma = 2,3$).

• Qualitative Results

The overall sentiment among the students in the interviews was as followed: 33% were predominantly positive, 45% were predominantly optimistic after future improvements and 22% were neutral.

Most of the students (N = 7) mentioned in the semi-structured interviews that the T4X study groups were amusing (some said the imitating part was too playful) and helped them to think about how to approach stressful situation while performing pre-clinical skills. The same number of students (N = 7) also mentioned that they stopped using the skills after a while. Most suggestions for the T4X study groups were to align the T4X study groups with the (pre)clinical exams, to involve the (pre)clinic teachers with the T4X study groups, make the T4X study groups more personal and apply more dental education in the T4X study groups.

Conclusion

In this first iteration, analysis show immediate benefits for some students of the T4X method. There is room for improvement by incorporating the suggestions of the students: Especially a more realistic Imitation of the pressure and more alignment in other parts of education is needed. Potential is seen to further develop this T4X-method into the entire curriculum as well as to translate it to other medical curricula.