Effectivity of a digital PANSS-training

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Introduction

- The **Positive and Negative syndrome Scale** (PANSS[1]) is an often-used semi-structured clinical scale for the assessment of symptom severity in schizophrenia.
- Adequate training of raters is crucial for reliable scoring[2]. Therefore, a **standardized digital training** that is readily available for training and knowledge maintenance may prove useful and cost-effective.

We compared the effectivity and usefulness of a newly developed short theoretical digital PANSS training with a traditional, more extensive practice-oriented training.

Discussion

- Accuracy was higher after the traditional training, however not significant. Theoretical knowledge and preparedness to conduct and rate the interview was higher after the traditional training. Inter-rated reliability was high in both groups.
- The short duration and the lack of feedback and interaction during the digital training may play a role in the differences in effectivity. Further research on the possible influence of these factors is needed.

After the necessary improvements the digital training could be a useful and cost-effective addition to the current PANSS training.

Methods

Healthy students (n=49)

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Screening questionnaire

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Traditional training RGOc
(n=16*)
2 x 6 hours, group-wise

Digital training CROnos
(n=18*)
3 hours, individual

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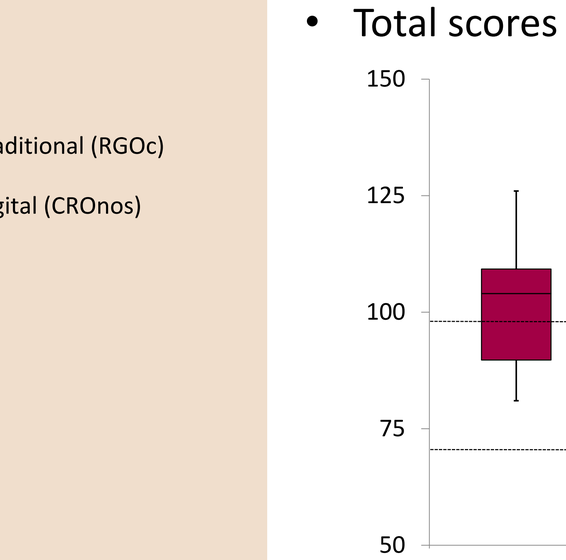
Scoring of two patient video's
- SCI-PANSS
- PANSS

Test of theoretical knowledge

**groups were matched on age, gender, experience and level of education*



The digital PANSS training in practice

Measures

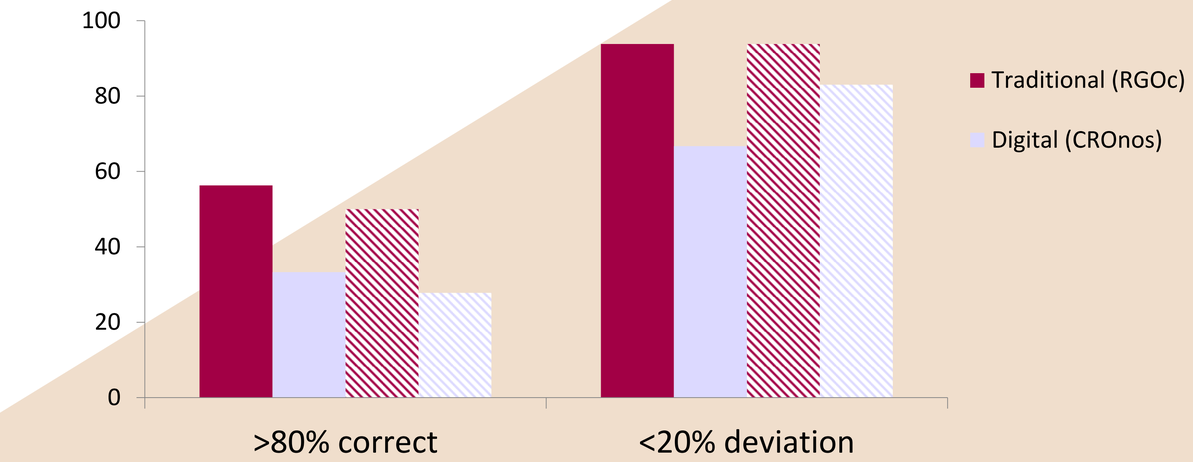
- Accuracy of item ratings[3]
  - *> 80% correct (deviation ≤ 1 from expert item rating)*
  - *< 20% deviation from expert total score*
- Subscale scores
- Inter-rater reliability (intraclass correlation coefficient ; ICC))
- Theoretical knowledge (% correct)
- Subjective feeling of preparedness to **rate** a PANSS interview (scale 1-5)
- Subjective feeling of preparedness to **conduct** a PANSS interview (scale 1-5)

Chi-square and t-tests were used where applicable
Analyses were performed in IBM SPSS version 22
p<.05 was considered significant

Results

Group differences (all **traditional > digital** training)

- Accuracy of item ratings, however **not** significant

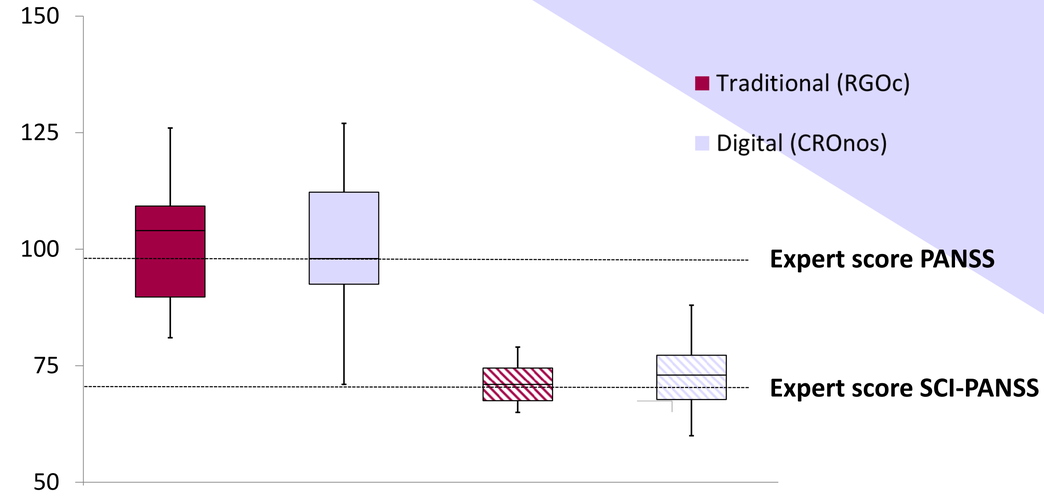


Note. *Solid: PANSS, striped: SCI-PANSS*

- Scores on **negative** subscale of the PANSS (t(32)=-2.73, *p=.01*)
- Preparedness to **conduct** PANSS (t(28.34)=2.22, *p=.03*)
- Preparedness to **rate** PANSS (t(32)=2.71, *p=.01*)
- Theoretical knowledge (81.25% after traditional training, 70.63% after digital training; $\chi^2(5)=12.71$, p=.026)

No difference

- Total scores



Note. *Solid: PANSS, striped: SCI-PANSS*

- Scores on positive and general subscale
- Inter-rater reliability (both groups ICC>.93 on both interviews)

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1. Kay et al. (1987). Schizophr. Bull. 12, 261-276
2. Lewis et al. (1998). J. of Pract. Psychiatry & Beh. Health 4, 127-184
3. Kay, (1991). Positive and Negative Syndromes in Schizophrenia. Brunner/Mazel, New York.