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A sensory modulation program for reducing anxiety and mobilizing coping strategies for mental health service users –preliminary results of an RCT study

DANIEL SUTTON, ASSOCIATE PROFESSOR, AUT UNIVERSITY, NZ
ELISABETH ARGENTZELL, ASSOCIATE PROFESSOR, LUND UNIVERSITY



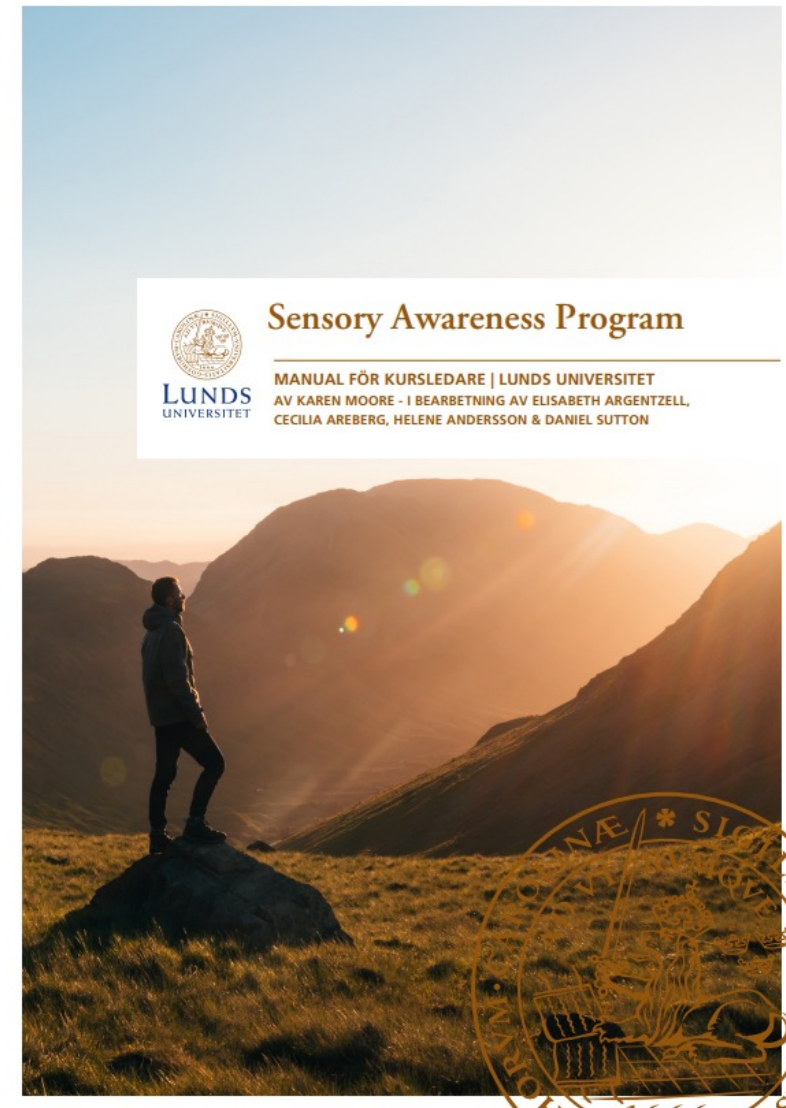
Background

- Anxiety and sensory processing issues are common across mental health conditions (Andersson et al., 2021; Bailliard et al., 2017; National Board of Health and Welfare, 2021)
- Sensory over and under responding associated with anxiety leads to increased physiological and emotional arousal (Andersson et al., 2021)
- This may affect self-regulation, daily functioning, recovery and quality of life (Andersson et al., 2021; Bailliard et al., 2017; Champagne, 2011; Hammud et al., 2025; van den Boogert et al., 2022)
- Limited interventions in mental health services target the sensory and embodied aspects of anxiety via non-pharmaceutical treatments
- No previous RCT studies have examined the effectiveness of group based sensory modulation in adult mental health services

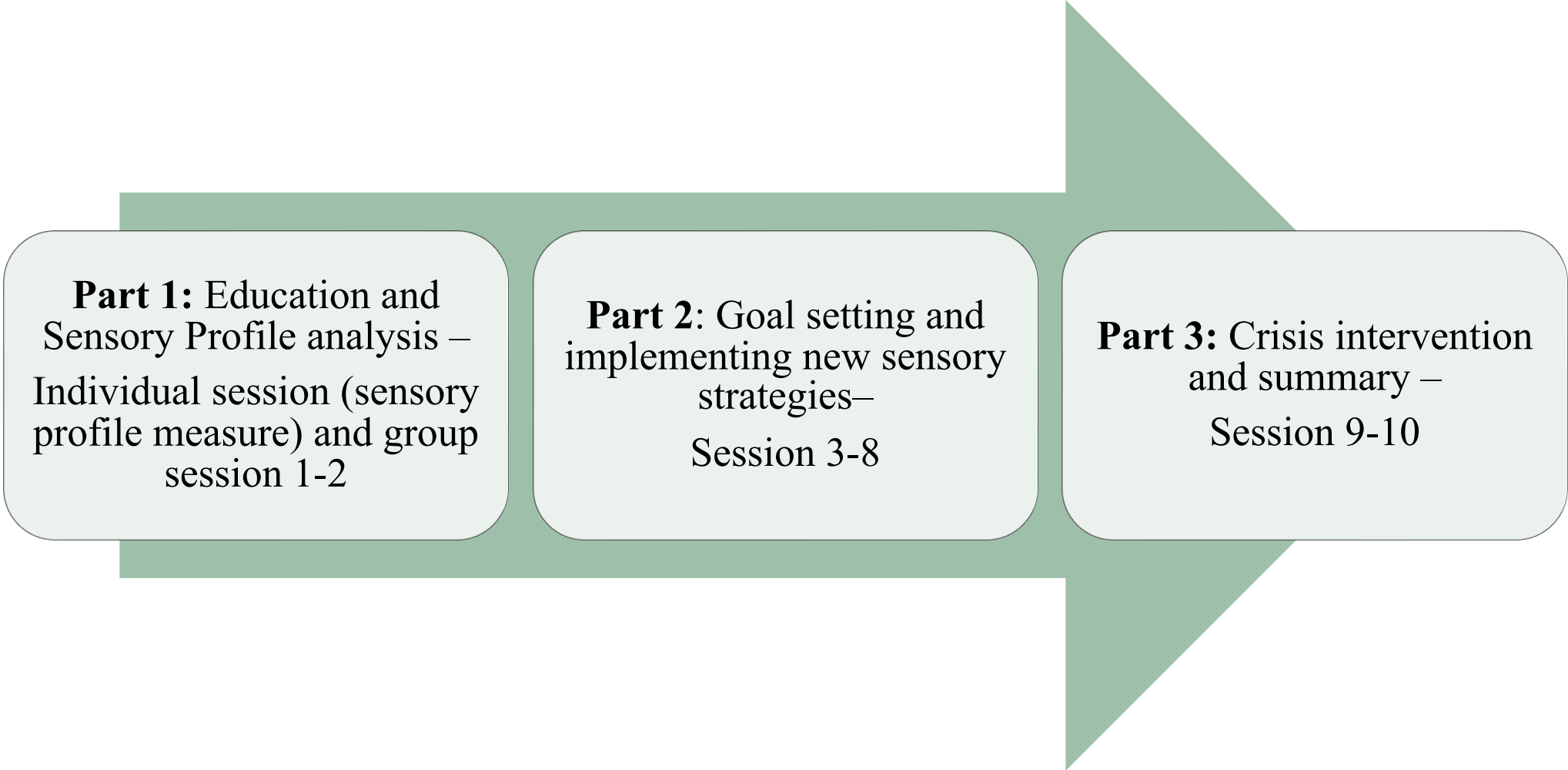


Sensory Awareness Program

- In response to this need, the *Sensory Awareness Program (SAP)* was introduced in 27 Swedish mental health outpatient services
- An 11-week manualized group program, focused on self regulation with help of sensory modulation strategies
- Based on Karen Moore's (2015) *Sensory Connection* program & adapted by our research group, in co production with clinicians, a service user panel and national user network
- Delivered by clinicians (2x per group) who had received a two day education & continuous supervision during delivery
- A program manual, course literature (Eklund et al, 2020) and relevant articles were included as educational material



Overview of the Program Sessions



Part 1: Education and Sensory Profile analysis – Individual session (sensory profile measure) and group session 1-2

Part 2: Goal setting and implementing new sensory strategies – Session 3-8

Part 3: Crisis intervention and summary – Session 9-10

Study Aim & Hypotheses

Aim:

To investigate the effectiveness of SAP as compared to treatment as usual (TAU)

We hypothesized that:

- SAP would be more effective than TAU in reducing anxiety (primary outcome) at three months follow-up
- SAP would be more effective than TAU in supporting clinical and personal recovery outcomes (secondary outcomes) at post intervention, and three and six months follow up.

Study Design



A randomized, assessor-blinded, multi-centre trial

Intervention group (TAU plus SAP, n= 107) VS control group (TAU, n=100)



Participants (n=207) were current mental health outpatients experiencing sig. anxiety, plus a range of self-reported diagnoses (incl. anxiety and mood disorders, psychosis), recruited from 27 sites.



Measures collected at baseline, post-intervention, 3 and 6 month follow up.



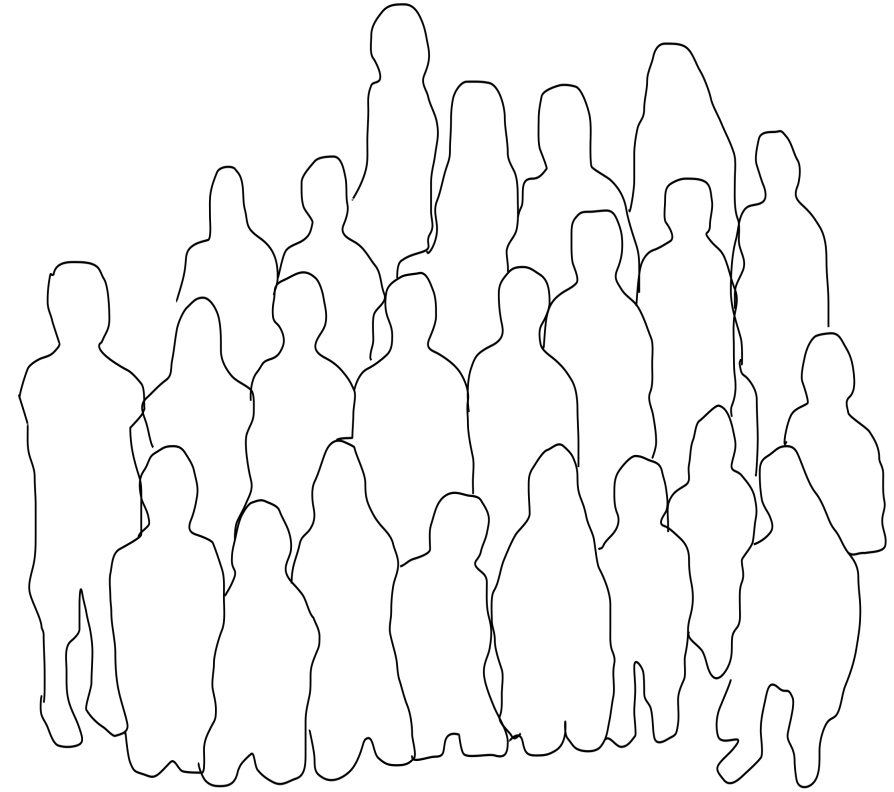
Outcome measures captured anxiety, psychological distress, emotion regulation, quality of life, mastery, occupational engagement, functioning and personal recovery



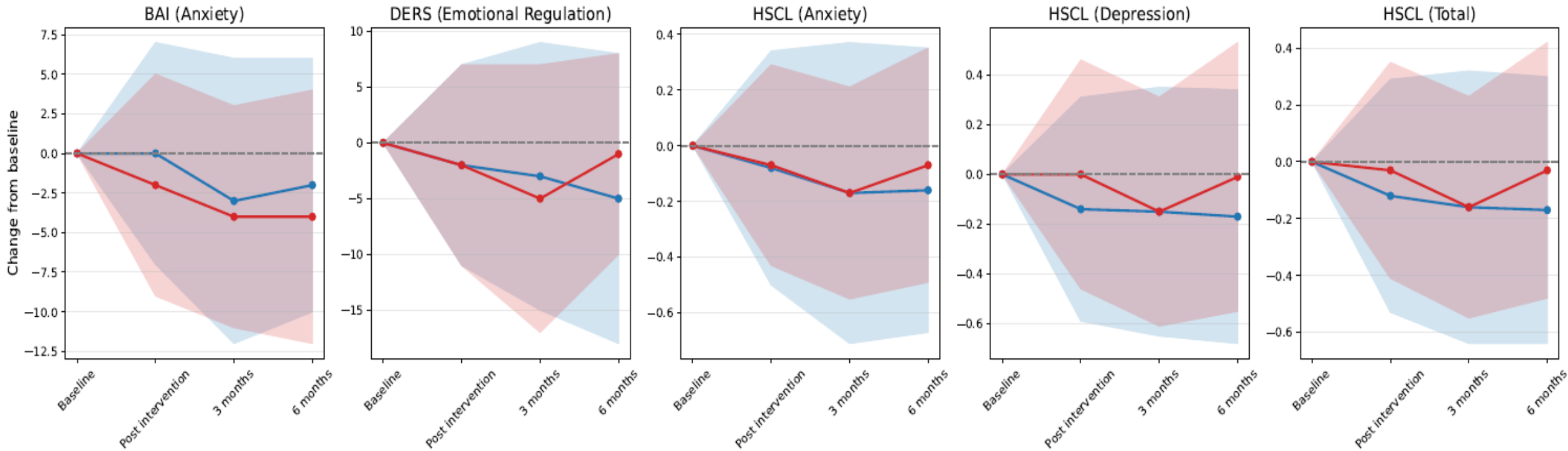
Data analysis consisted of linear regression

Demographics

- 73 % female, 22 % male, 5% other
- Mean age of 43yrs
- Mean no. of years in psychiatric care = 19 yrs
- 48 % in work or study
- 52 % were on sick leave
- 75 % living independently in their own apartments or house
- 25 % in shared accommodation
- 84 % reported a trauma history

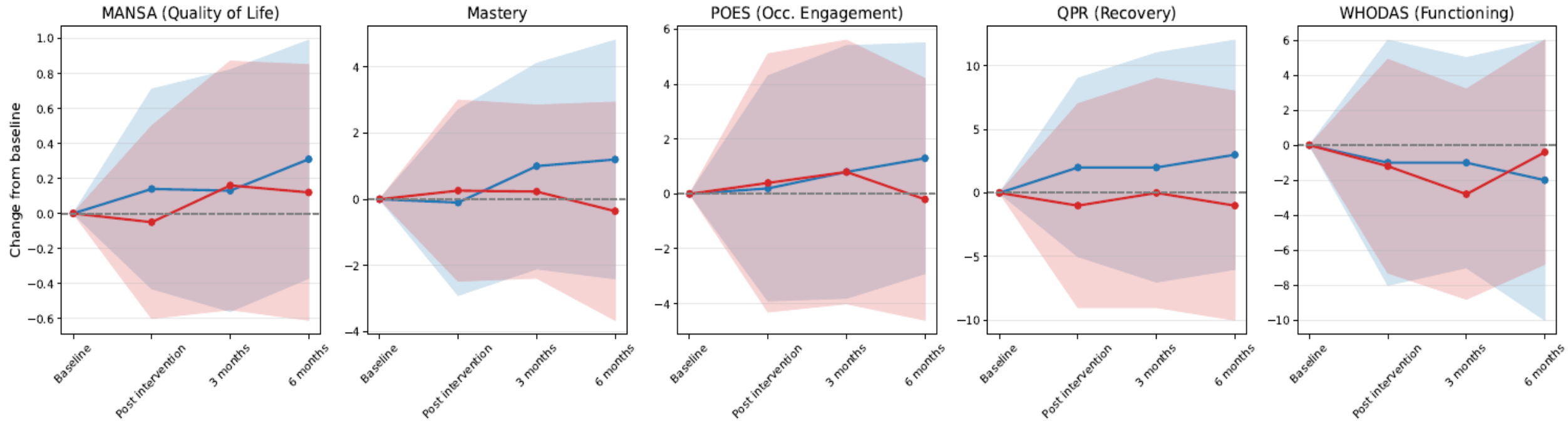


Change in Anxiety, Difficulties in Emotional Regulation & Psychological Distress Scores



Blue line = SAP Intervention group; Red line = TAU Control group; Shaded bands: ± 1 SD for each group

Change in Well-being and Recovery Scores



Blue line = SAP Intervention group; Red line = TAU Control group; Shaded bands: ± 1 SD for each group

Discussion

SAP **was not** more effective than TAU in reducing anxiety at three months follow-up

SAP **was** more effective than TAU in supporting some secondary outcomes (personal recovery, QoL, mastery) at post intervention and follow up

Although symptom reductions were relatively small in both groups, the SAP group appeared to help sustain reductions in the long-term.

We hypothesise that psychosocial factors in the SAP group (e.g. self awareness, sense of control, peer support) may have facilitated greater long-term mastery, quality of life and recovery, compared to the control group, indicating the program could be a worthwhile addition to TAU

This is also supported by earlier qualitative studies on the SAP (Forsberg et al, 2024; 2025)

Further research is needed to corroborate these findings, explore the mechanisms influencing improvements in recovery and mastery, and analyse differences in program impact across the SAP group

Thank you for listening!

dsutton@aut.nz

elisabeth.argentzell@med.lu.se



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