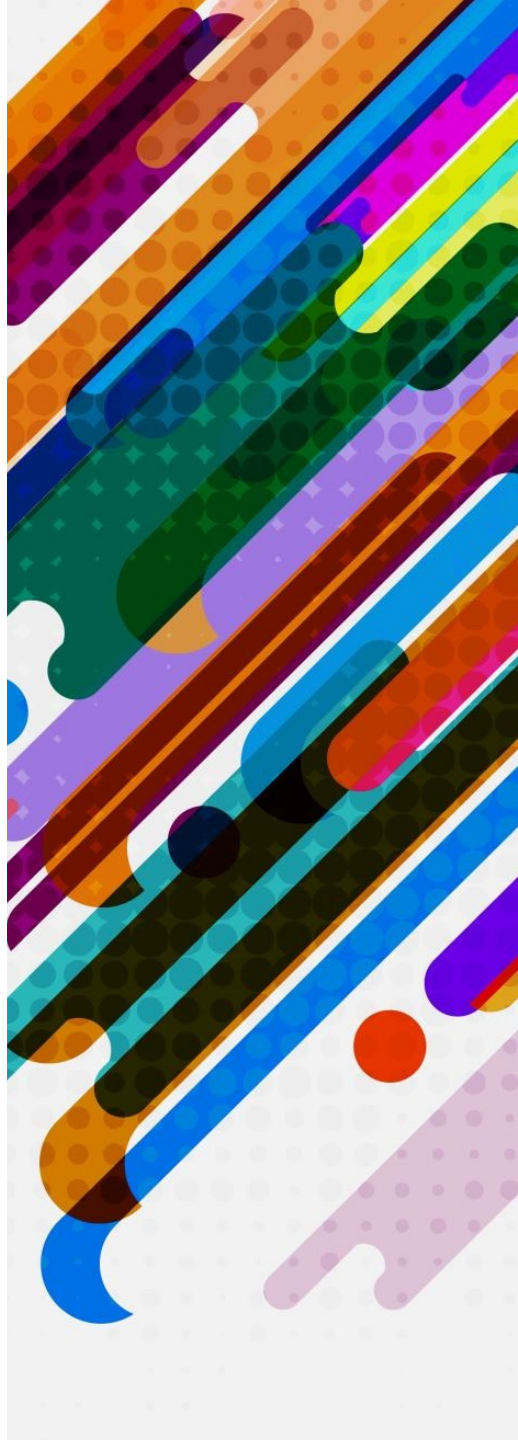
Klinisk forskning BUP Linköping

Maria Zetterqvist

Fortbildningsdagar

SFBUP 11-12 maj 2023

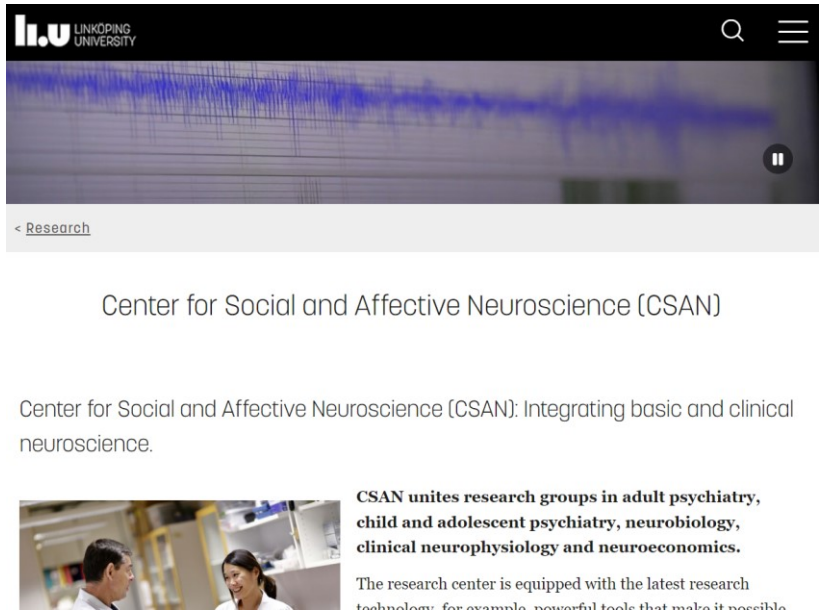


BUP-kliniken Linköping

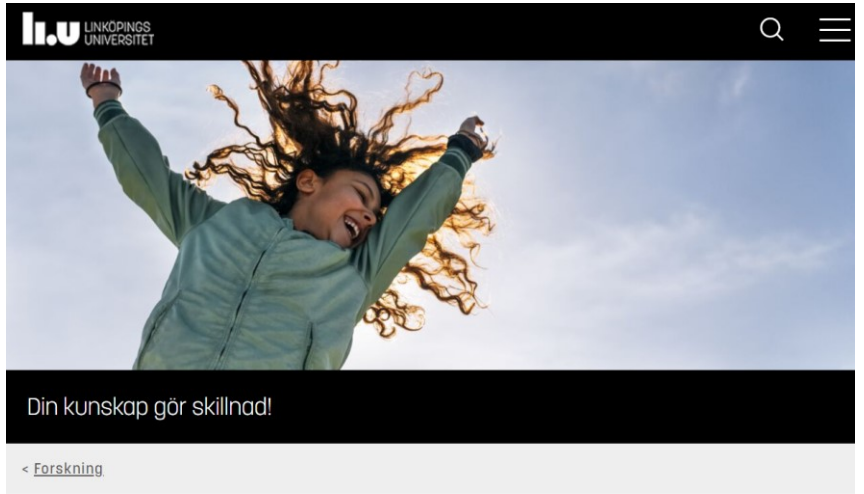
- Självskadebeteende
- Ätstörningar
- Autism
- Psykos

- Självkritik
- Emotionsreglering

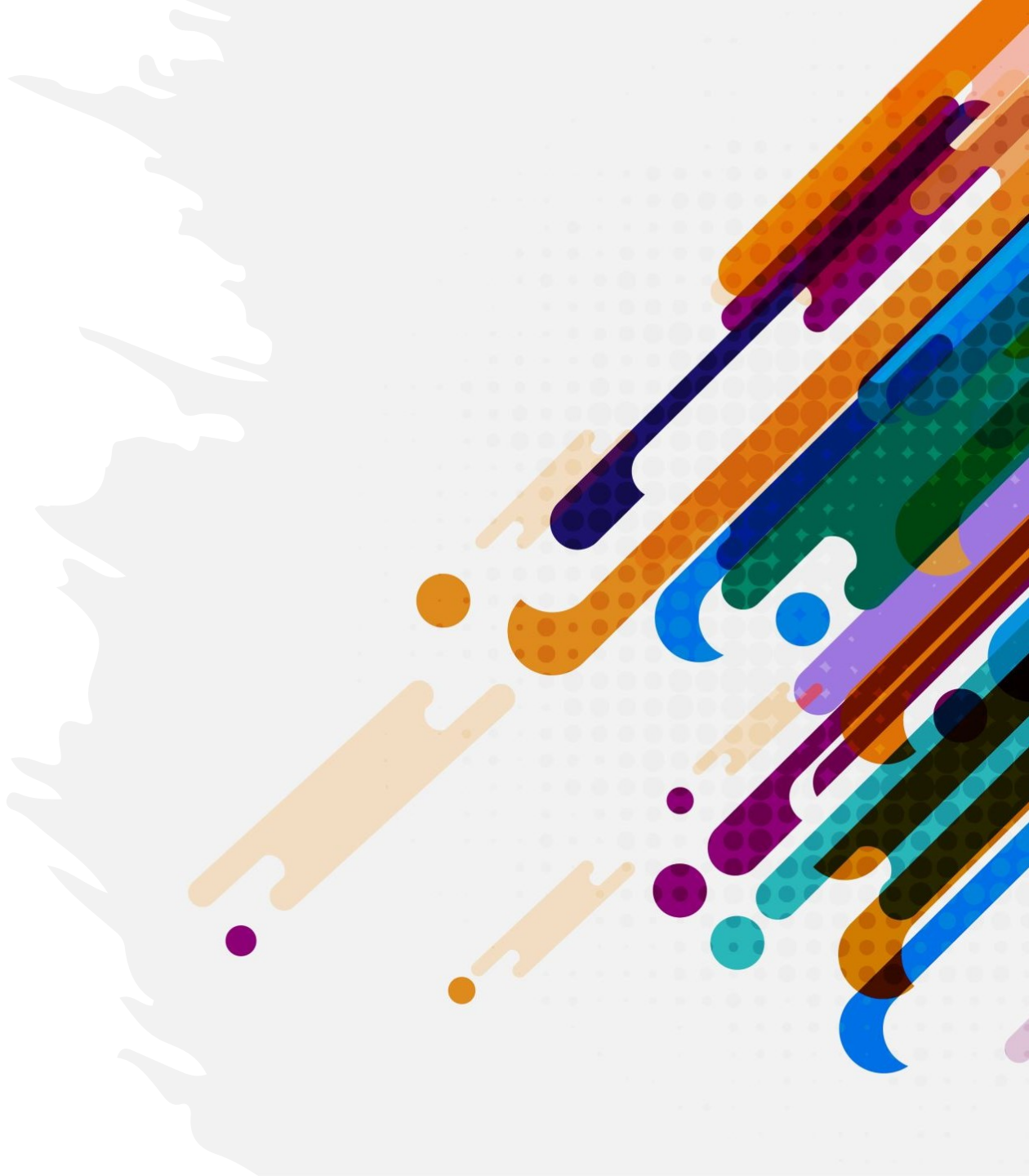
CSAN Markus Heilig



Barnafrid Laura Korhonen



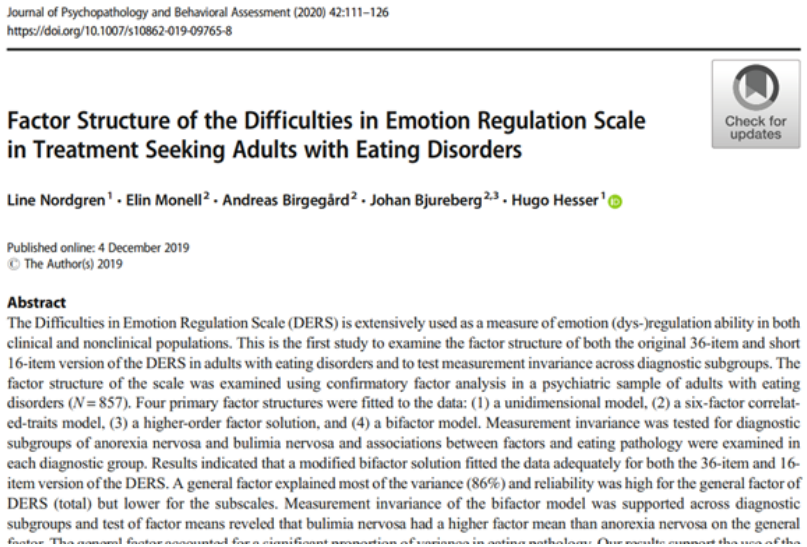
Emotionsreglering



Difficulties in emotion regulation scale (DERS)

DERS-16	Total	flickor	pojkar	Icke-binär
Högstadiet (*N* = 267)	36.1 (15.5)	39.7 (15.6)	29.4 (12.1)	60.8 (10.3)
Gymnasiet (*N* = 3,169)	36.5 (15.7)	40.5 (15.9)	31.3 (13.8)	49.8 (17.4)
BUP (*N* = 305)	48.14 (17.5)	49.8 (17.2)	41.8 (16.6)	45.3 (21.6)

Opublicerade data



Journal of Psychopathology and Behavioral Assessment (2020) 42:111–126
https://doi.org/10.1007/s10862-019-09765-8

Check for updates

Factor Structure of the Difficulties in Emotion Regulation Scale in Treatment Seeking Adults with Eating Disorders

Line Nordgren[1] · Elin Monell[2] · Andreas Birgegård[2] · Johan Bjureberg[2,3] · Hugo Hesser[1]

Published online: 4 December 2019
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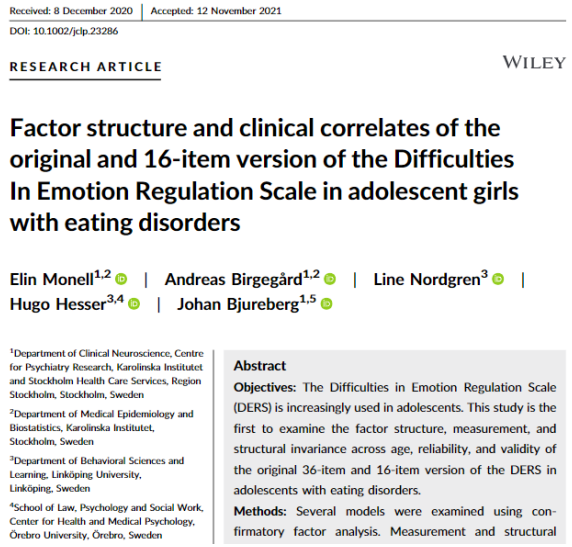
Abstract
The Difficulties in Emotion Regulation Scale (DERS) is extensively used as a measure of emotion (dys-)regulation ability in both clinical and nonclinical populations. This is the first study to examine the factor structure of both the original 36-item and short 16-item version of the DERS in adults with eating disorders and to test measurement invariance across diagnostic subgroups. The factor structure of the scale was examined using confirmatory factor analysis in a psychiatric sample of adults with eating disorders ($N = 857$). Four primary factor structures were fitted to the data: (1) a unidimensional model, (2) a six-factor correlated-traits model, (3) a higher-order factor solution, and (4) a bifactor model. Measurement invariance was tested for diagnostic subgroups of anorexia nervosa and bulimia nervosa and associations between factors and eating pathology were examined in each diagnostic group. Results indicated that a modified bifactor solution fitted the data adequately for both the 36-item and 16-item version of the DERS. A general factor explained most of the variance (86%) and reliability was high for the general factor of DERS (total) but lower for the subscales. Measurement invariance of the bifactor model was supported across diagnostic subgroups and test of factor means reveled that bulimia nervosa had a higher factor mean than anorexia nervosa on the general



Received: 8 December 2020 | Accepted: 12 November 2021
DOI: 10.1002/jclp.23286

RESEARCH ARTICLE

WILEY

Factor structure and clinical correlates of the original and 16-item version of the Difficulties In Emotion Regulation Scale in adolescent girls with eating disorders

Elin Monell[1,2] | Andreas Birgegård[1,2] | Line Nordgren[3] | Hugo Hesser[3,4] | Johan Bjureberg[1,5]

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[2]Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden
[3]Department of Behavioral Sciences and Learning, Linköping University, Linköping, Sweden
[4]School of Law, Psychology and Social Work, Center for Health and Medical Psychology, Örebro University, Örebro, Sweden

Abstract
Objectives: The Difficulties in Emotion Regulation Scale (DERS) is increasingly used in adolescents. This study is the first to examine the factor structure, measurement, and structural invariance across age, reliability, and validity of the original 36-item and 16-item version of the DERS in adolescents with eating disorders.
Methods: Several models were examined using confirmatory factor analysis. Measurement and structural

Emotionsregleringsstudier

Table 1 Overview of the Content of the Emotion Regulation Skills Training	
Sessions	Content
Session 1	Awareness of emotions and labeling emotions
Session 2	Identifying emotions and the functions of emotions
Session 3	Primary and secondary emotion. Validating and reducing judgment
Session 4	Reducing vulnerability and emotional imbalance
Session 5	Making conscious choices – goal directed behaviours
Session 6	Acceptance and valued directions
Session 7	Repetition
Booster	Repetition and maintenance

Article

Clinical Child Psychology and Psychiatry
1–15
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SAGE

Emotion regulation group skills training for adolescents and parents: A pilot study of an add-on treatment in a clinical setting

Kristina Holmqvist Larsson[1], Gerhard Andersson[2,3], Heléne Stern[4] and Maria Zetterqvist[1]

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[2]Department of Behavioural Sciences and Learning, Linköping University, Sweden
[3]Department of Clinical Neuroscience, Karolinska Institute, Sweden
[4]Psykologhälsan, Sweden

Abstract

Difficulties with emotion regulation have been identified as an underlying mechanism in mental health. This pilot study aimed at examining whether group skills training in emotion regulation

Holmqvist Larsson *et al. Journal of Eating Disorders* (2020) 8:12
https://doi.org/10.1186/s40337-020-00289-1

Journal of Eating Disorders

RESEARCH ARTICLE Open Access

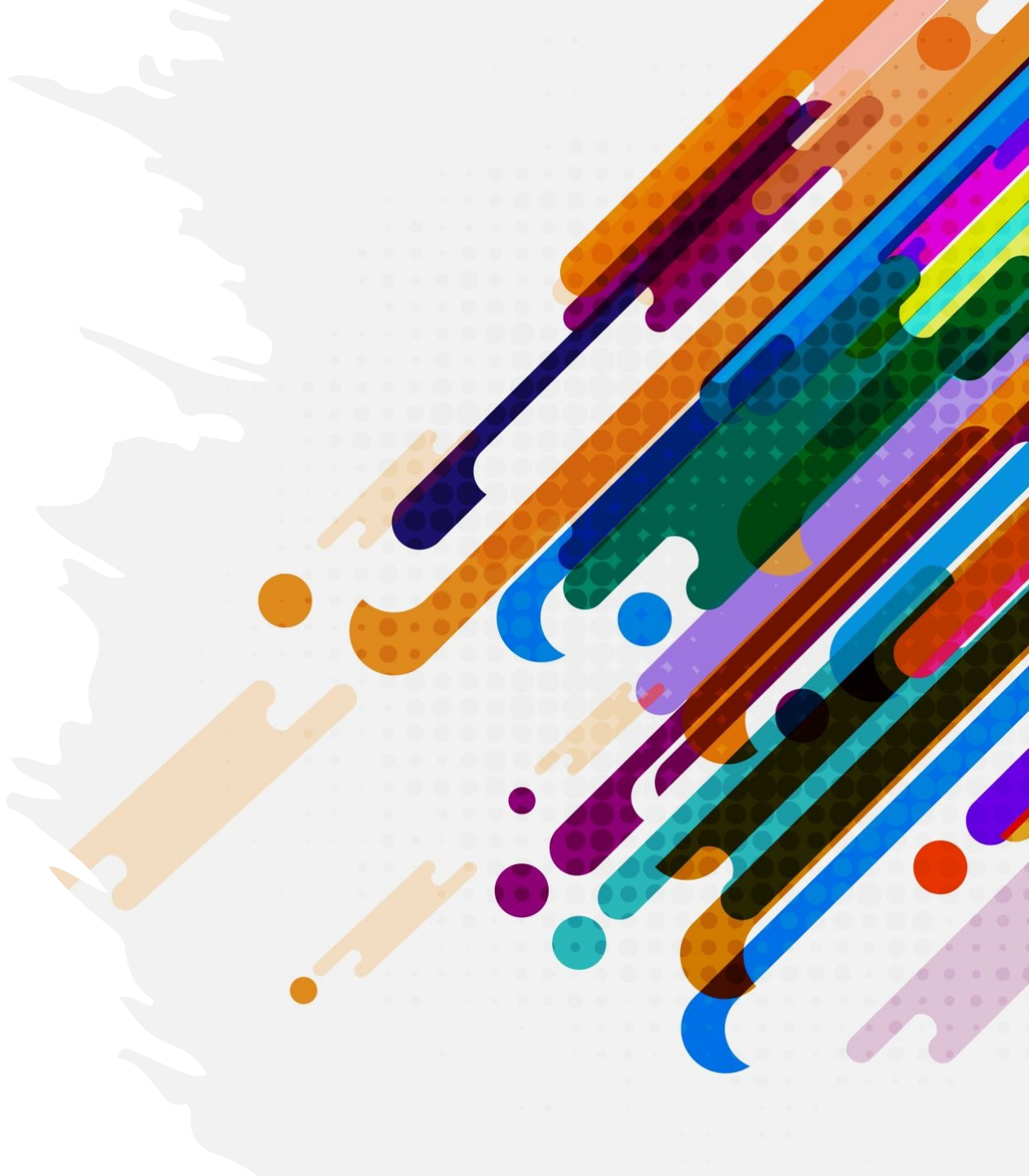
Emotion regulation group skills training: a pilot study of an add-on treatment for eating disorders in a clinical setting

Kristina Holmqvist Larsson[1,2*], Anna Lowén[1], Linda Hellerstedt[1], Linn Bergcrona[1], Mimmi Salerud[1] and Maria Zetterqvist[1,2]

Abstract

Background: Emotion regulation difficulties appear to play a role in the development and maintenance of several eating disorders. This pilot study aimed at examining whether a short add-on group skills training in emotion regulation for young adults with different eating disorders was feasible in a psychiatric clinical setting. We also investigated if the treatment increased knowledge of emotions, and decreased self-reported difficulties with

Självkritik



Behandlingsinnehåll

...och ett tillfälle till vårdnadshavare.

Tillfälle	Innehåll
1	Introduktion & Vad är självkritik?
2	Hur uppstår självkritik?
3 & 4	Kartlägg & utmana självkritiska tankar och prova nya beteenden
5 & 6	Visa medkänsla med Dig själv
7	Acceptera självkritiska tankar & gör det som är viktigt för dig
8	Repetition, vidmakthållande & avslutning
Tre månader efter tillfälle 8	Uppföljning: Repetition, problemlösning & vidmakthållande

Översikt

VAD ÄR DET?

Vad är självkritik? Hur uppstår självkritik?

VAD GÖRA ÅT DET?

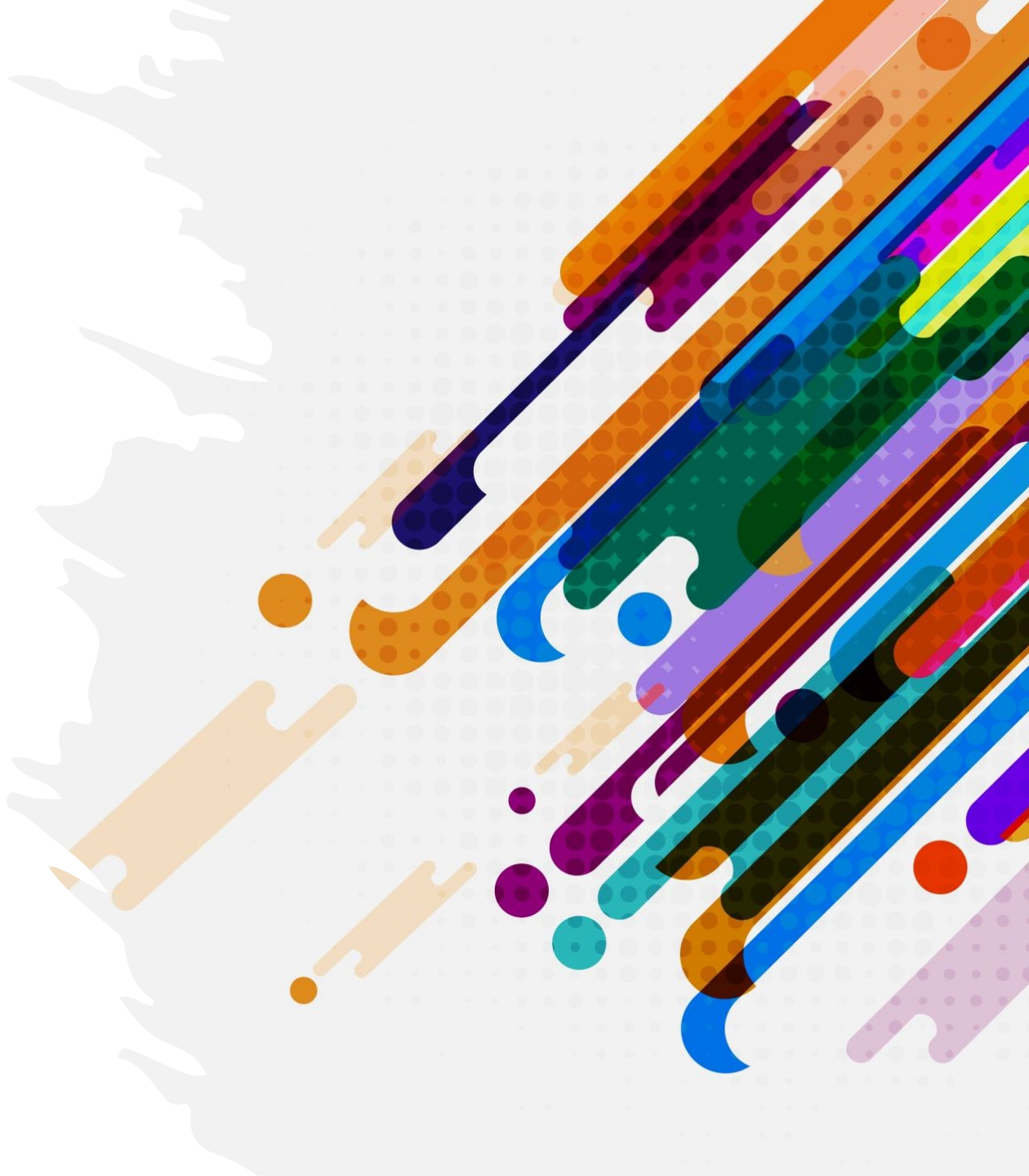
Kognitiv beteendeterapeutisk ansats:
Kartlägg & utmana självkritiska tankar och prova nya beteenden

S k self compassion:
Visa medkänsla med Dig själv

Acceptans-vägen:
Acceptera självkritiska tankar & gör det som är viktigt för dig

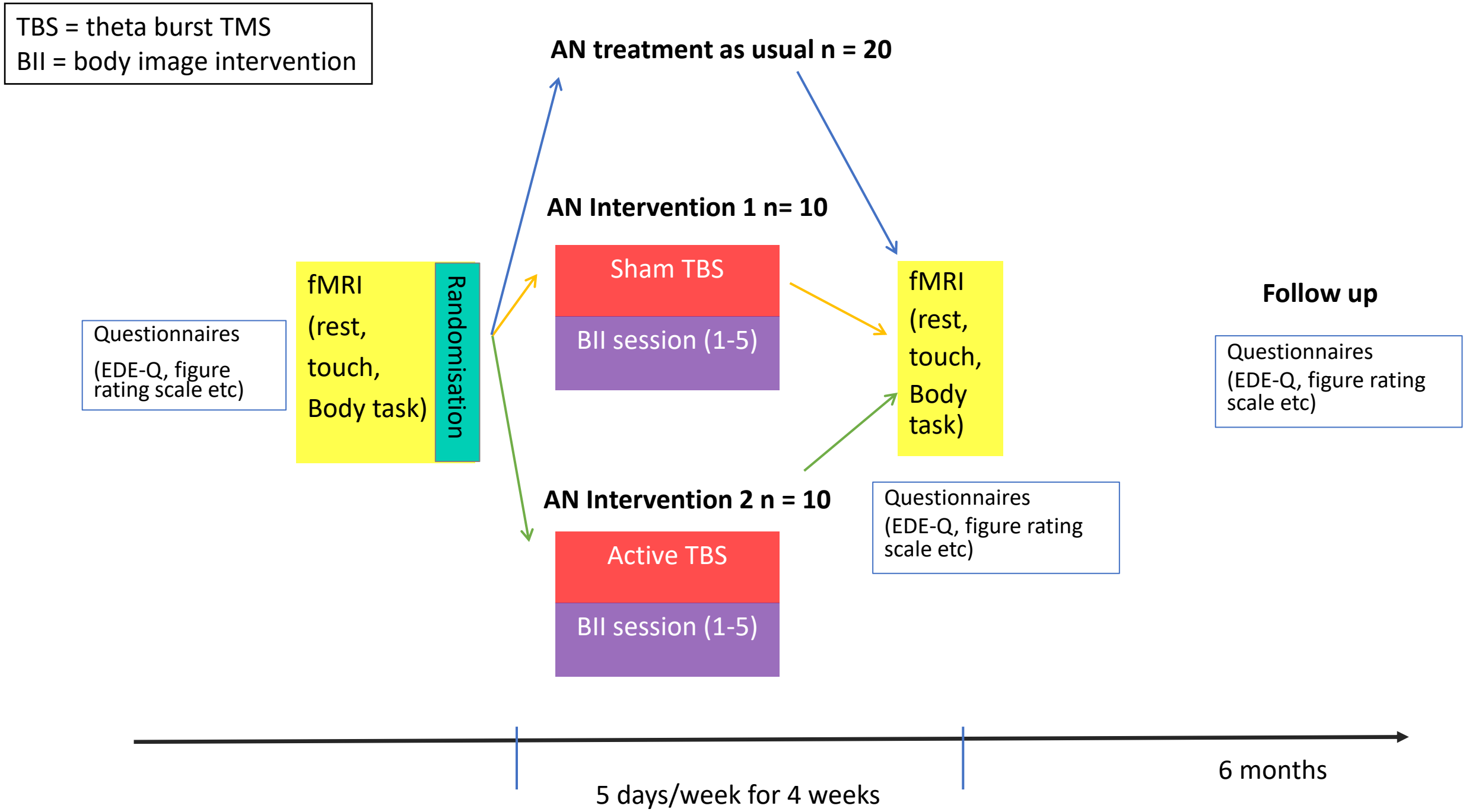
Anorexistudien

TMS treatment for Anorexia nervosa: effects on body image processing and clinical outcome measures



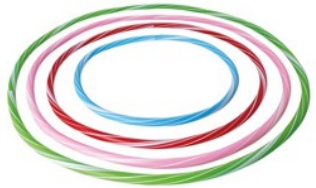
Intervention kropps-uppfattning

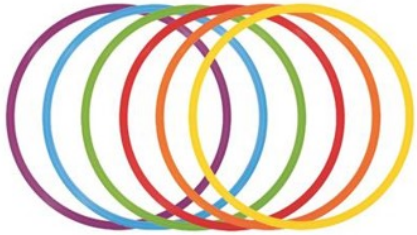
- Förvrängd kroppsuppfattning svår att komma åt i behandling
- Kroppsbaserade interventioner randomiseras och erbjuds i direkt anslutning till TMS som riktas mot EBA
- ”Window of opportunity”
- Behandlare blinda för om patienten får riktig TMS eller shamTMS
- Ges dagligen i fyra veckor = 20 sessioner
- Fem interventioner som återkommer varje vecka


TBS = theta burst TMS
BII = body image intervention
AN treatment as usual n = 20
AN Intervention 1 n= 10
Sham TBS
BII session (1-5)
Questionnaires
(EDE-Q, figure rating scale etc)
fMRI
(rest,
touch,
Body task)
Randomisation
fMRI
(rest,
touch,
Body
task)
Follow up
Questionnaires
(EDE-Q, figure rating scale etc)
AN Intervention 2 n = 10
Active TBS
BII session (1-5)
Questionnaires
(EDE-Q, figure rating scale etc)
6 months
5 days/week for 4 weeks

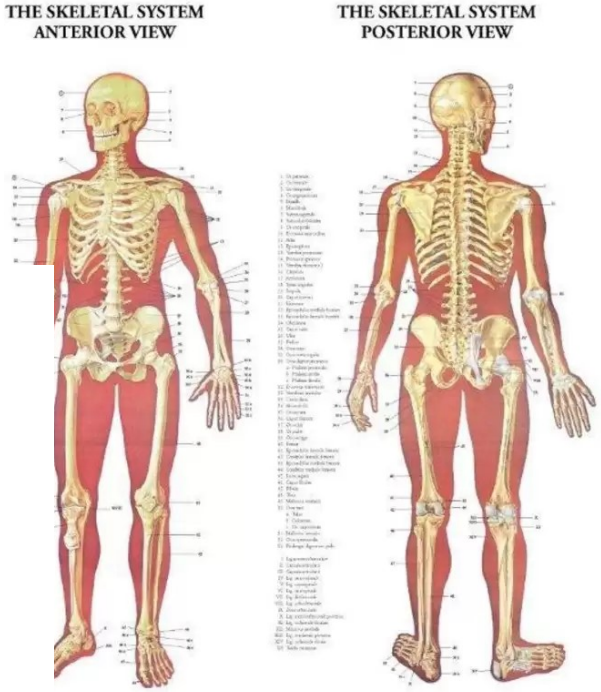
Kroppsuppfattningsintervention

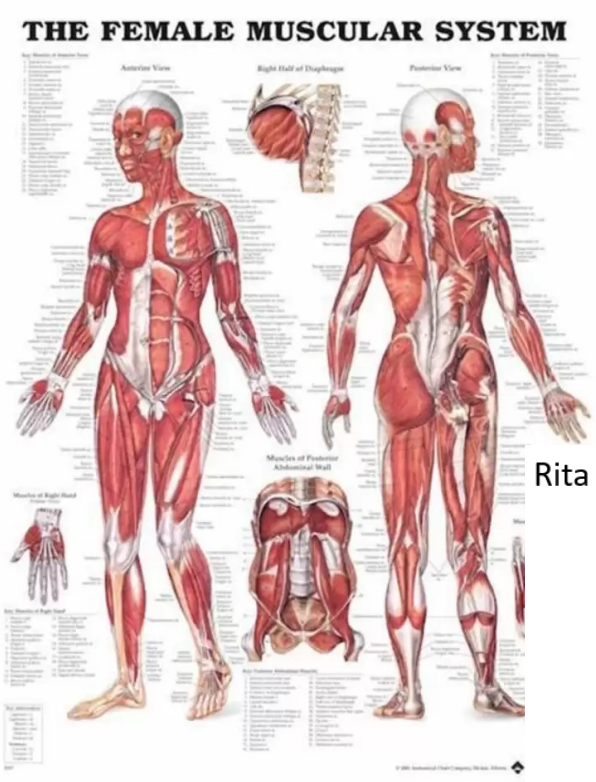
Kroppsomfång med ringar





Psykoedukation



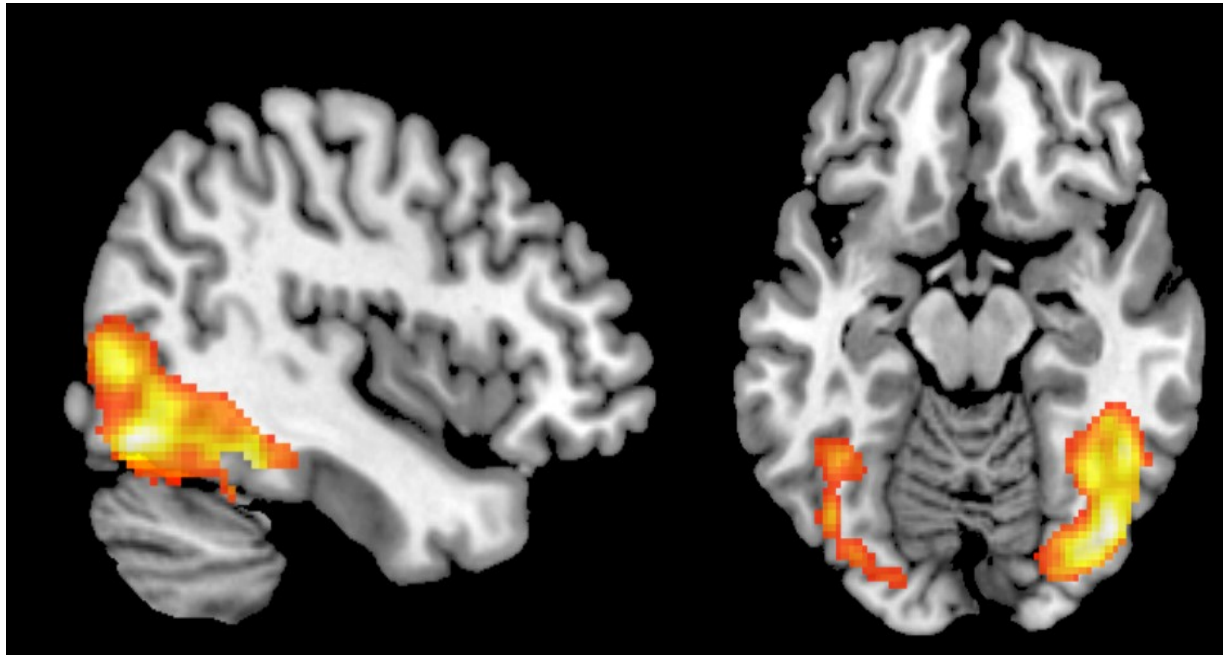


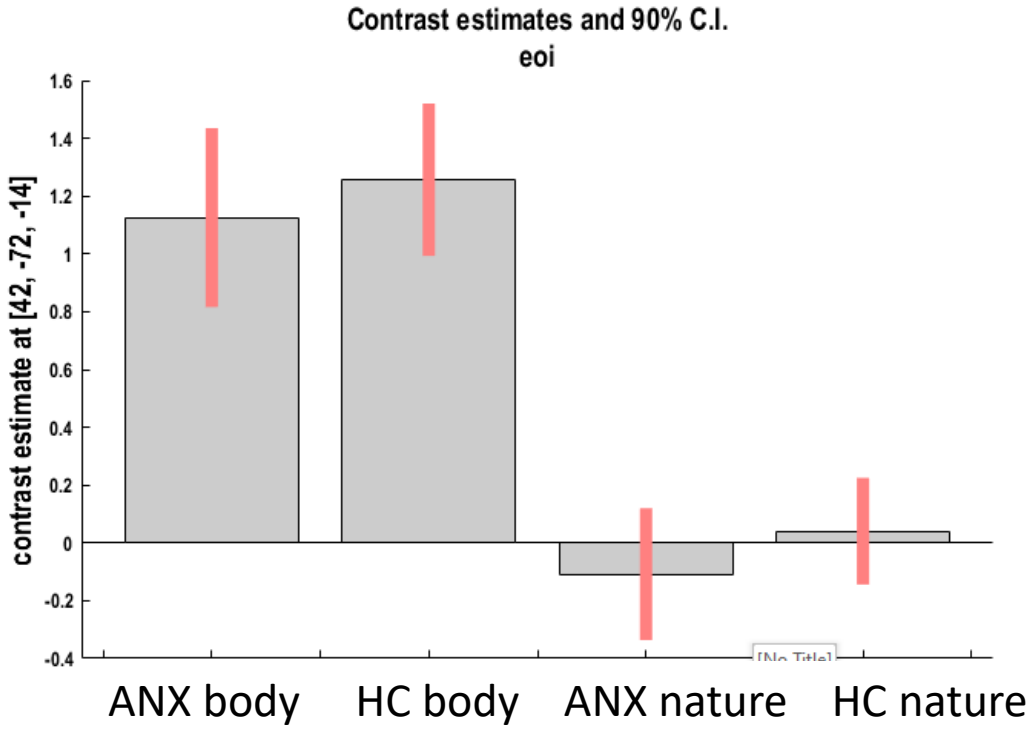
Uppskatta storleken på kroppsdelar med snöre

Digital kroppsmorph

Rita av kroppen

EBA – preliminary results (anx=24,hc=27)





P<0.05, FWE-corrected for the whole brain, clustersize >10

Opublicerade data

NeuroImage: Clinical 36 (2022) 103264

Contents lists available at ScienceDirect

NeuroImage: Clinical

journal homepage: www.elsevier.com/locate/ynicl

Neural processing of self-touch and other-touch in anorexia nervosa and autism spectrum condition

Morgan Frost-Karlsson [a], Andrea Johansson Capusan [a,b], Irene Perini [a,d], Håkan Olausson [a,c,d], Maria Zetterqvist [a,e], Per A. Gustafsson [a,e], Rebecca Boehme [a,d,*]

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[b] Department of Psychiatry in Linköping and Department of Biomedical and Clinical Sciences, Linköping University, 58185 Linköping, Sweden
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[e] Department of Child and Adolescent Psychiatry in Linköping and Department of Biomedical and Clinical Sciences, Linköping University, 58185 Linköping, Sweden

ARTICLE INFO

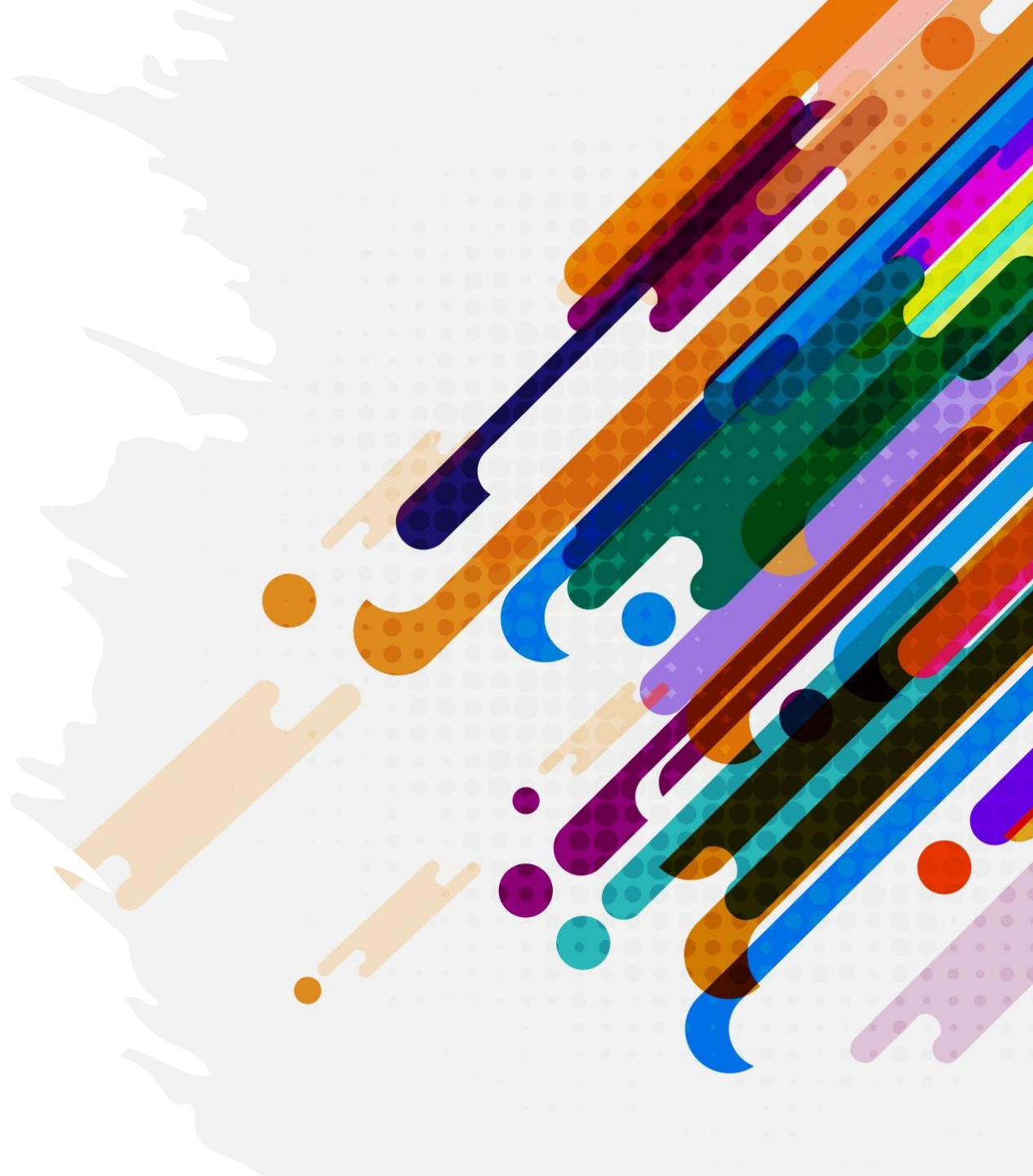
Dedication: This article is dedicated to the memory of our dear colleague Per A. Gustafsson.

Keywords:
Social touch
Self-other-distinction
Bodily self
fMRI
Anorexia nervosa
Autism spectrum condition

ABSTRACT

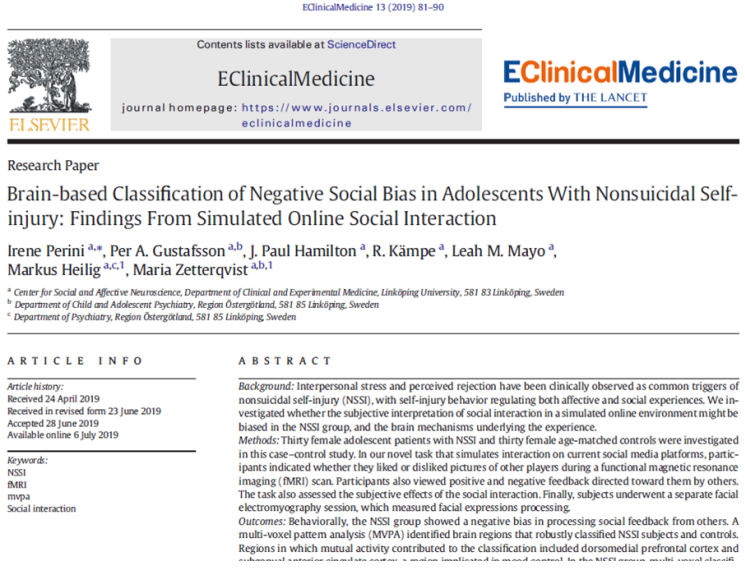
Introduction: The tactile sense plays a crucial role in the development and maintenance of a functional bodily self. The ability to differentiate between self- and nonself-generated touch contributes to the perception of the bodies' boundaries and more generally to self-other-distinction, both of which are thought be altered in anorexia nervosa (AN) and autism spectrum condition (AS). While it has been suggested that AN and AS are characterized by overlapping symptomatology, they might differ regarding body perception and self-other-distinction.
Methods: Participants with a diagnosis of AN (n = 25), AS (n = 29), and a comparison group without diagnoses (n = 57) performed a self-other-touch task during functional brain imaging. In the experimental conditions, they stroked their own arm or were stroked on the arm by an experimenter.
Results: As shown previously, the CG group showed lower activation or deactivation in response to self-touch compared to social touch from someone else. A main group effect was found in areas including somatosensory cortex, frontal and temporal gyri, insula, and subcortical regions. This was driven by increased activations in participants with AN, while participants in the AS group showed mostly comparable activations to the com-

Självskadebeteende



Självskadebeteende

- Psychobiological markers of difficulties with affect regulation in adolescents with and without nonsuicidal self-injury
  - NSSI uppföljningsstudie. Prediktion?
  - NSSI kvalitativa intervjuer (upplevelse av vården och processen att sluta)
- Bio- och neurofeedback



EClinicalMedicine 13 (2019) 81–90

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Research Paper

Brain-based Classification of Negative Social Bias in Adolescents With Nonsuicidal Self-injury: Findings From Simulated Online Social Interaction

Irene Perini [a,*], Per A. Gustafsson [a,b], J. Paul Hamilton [a], R. Kämpe [a], Leah M. Mayo [a], Markus Heilig [a,c,1], Maria Zetterqvist [a,b,1]

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ARTICLE INFO

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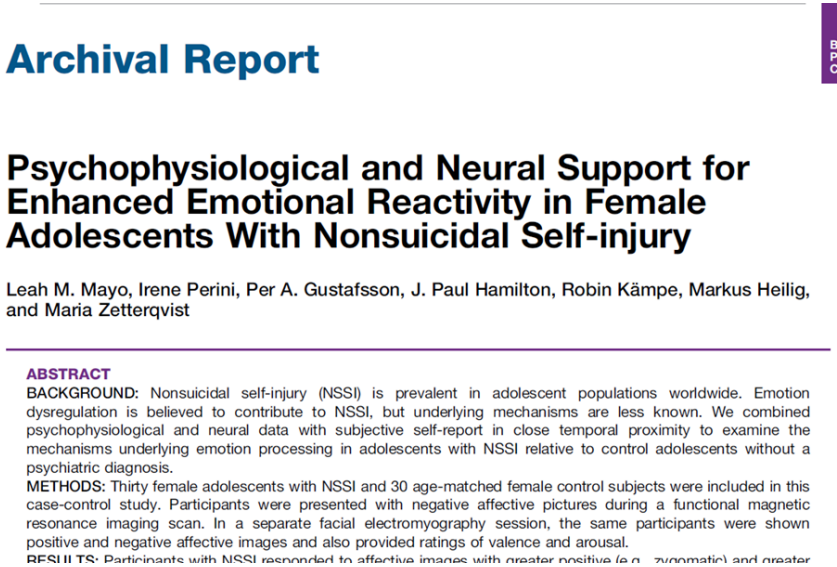
Keywords:
NSSI
fMRI
mvpa
Social interaction

ABSTRACT

Background: Interpersonal stress and perceived rejection have been clinically observed as common triggers of nonsuicidal self-injury (NSSI), with self-injury behavior regulating both affective and social experiences. We investigated whether the subjective interpretation of social interaction in a simulated online environment might be biased in the NSSI group, and the brain mechanisms underlying the experience.

Methods: Thirty female adolescent patients with NSSI and thirty female age-matched controls were investigated in this case–control study. In our novel task that simulates interaction on current social media platforms, participants indicated whether they liked or disliked pictures of other players during a functional magnetic resonance imaging (fMRI) scan. Participants also viewed positive and negative feedback directed toward them by others. The task also assessed the subjective effects of the social interaction. Finally, subjects underwent a separate facial electromyography session, which measured facial expressions processing.

Outcomes: Behaviorally, the NSSI group showed a negative bias in processing social feedback from others. A multi-voxel pattern analysis (MVPA) identified brain regions that robustly classified NSSI subjects and controls. Regions in which mutual activity contributed to the classification included dorsomedial prefrontal cortex and



Archival Report

Biological Psychiatry: CNNI

Psychophysiological and Neural Support for Enhanced Emotional Reactivity in Female Adolescents With Nonsuicidal Self-injury

Leah M. Mayo, Irene Perini, Per A. Gustafsson, J. Paul Hamilton, Robin Kämpe, Markus Heilig, and Maria Zetterqvist

ABSTRACT

BACKGROUND: Nonsuicidal self-injury (NSSI) is prevalent in adolescent populations worldwide. Emotion dysregulation is believed to contribute to NSSI, but underlying mechanisms are less known. We combined psychophysiological and neural data with subjective self-report in close temporal proximity to examine the mechanisms underlying emotion processing in adolescents with NSSI relative to control adolescents without a psychiatric diagnosis.

METHODS: Thirty female adolescents with NSSI and 30 age-matched female control subjects were included in this case-control study. Participants were presented with negative affective pictures during a functional magnetic resonance imaging scan. In a separate facial electromyography session, the same participants were shown positive and negative affective images and also provided ratings of valence and arousal.

RESULTS: Participants with NSSI responded to affective images with greater positive (e.g., zygomatic) and greater

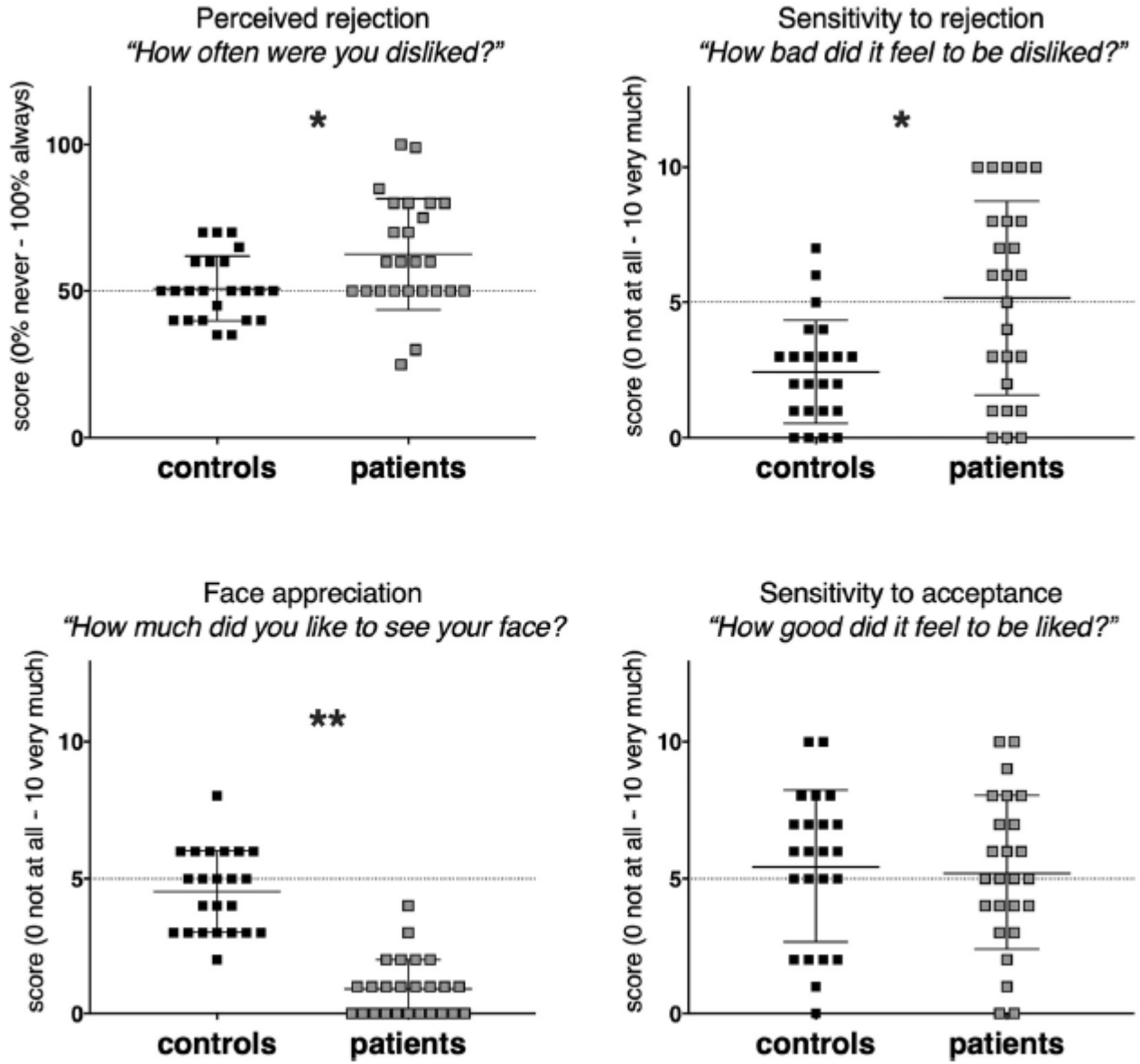
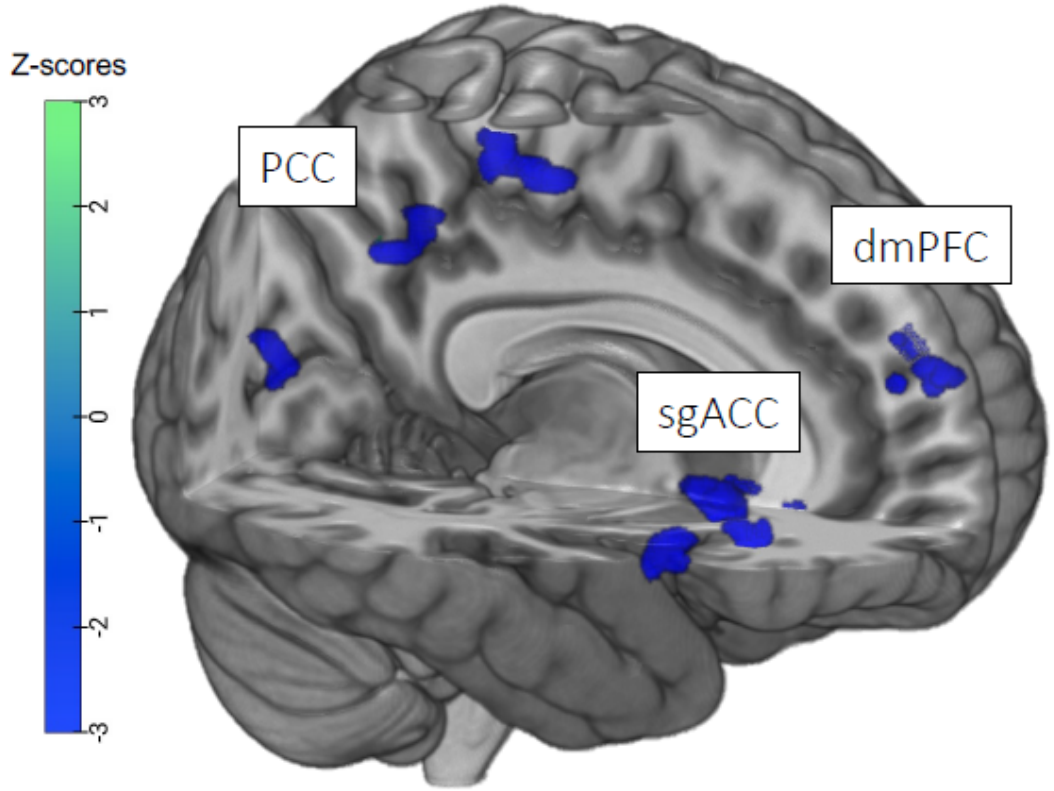


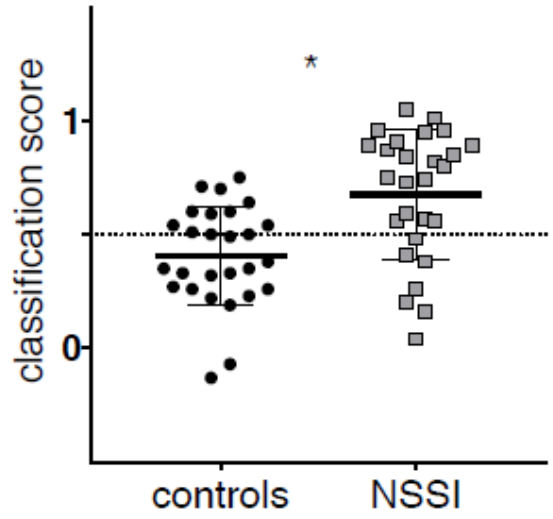
Fig. 1. Subjective perception of the social interaction as measured by post-scan questions. NSSI individuals were significantly different in all scores except for sensitivity to acceptance. * indicate $p < 0{\cdot}01$, ** indicate $p < 0{\cdot}001$.

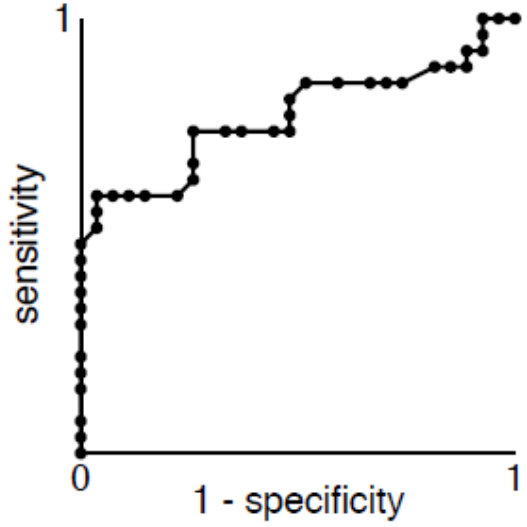
Perini et al. 2019 *EClinicalMedicine*

Multi-voxel pattern analysis (MVPA)

Significant classification between controls and NSSI during anticipation of social judgment







Linear SVM classification performance. Sensitivity=0.7, specificity=0.5, 1000 permutation corrected *p*=0.03. AUC=0.77, p=0.001. Weight-vector maps thresholded at per-voxel p=0.002 (two-sided; z=2.89), *a*lpha=0.05 family-wise error corrected.

Perini *et al.,* 2019

Facial Electromyography (facial EMG)

Application of surface electrodes to measure affective responses

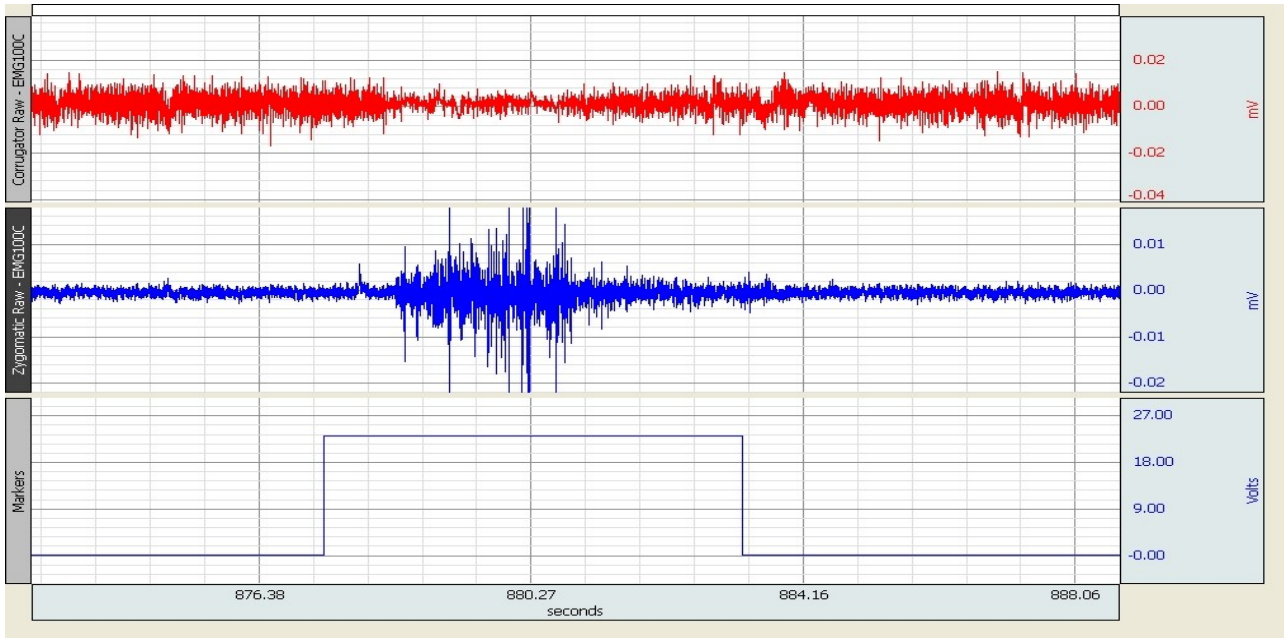
- *Zygomaticus major:* **increases** in response to positive affective stimuli
- *Corrugator supercilii*: **increases** in response to negative affective stimuli; **decreases** (relaxes) in response to positive affective stimuli

from Leah Mayo

Facial Electromyography (facial EMG

Corrugator (frown)

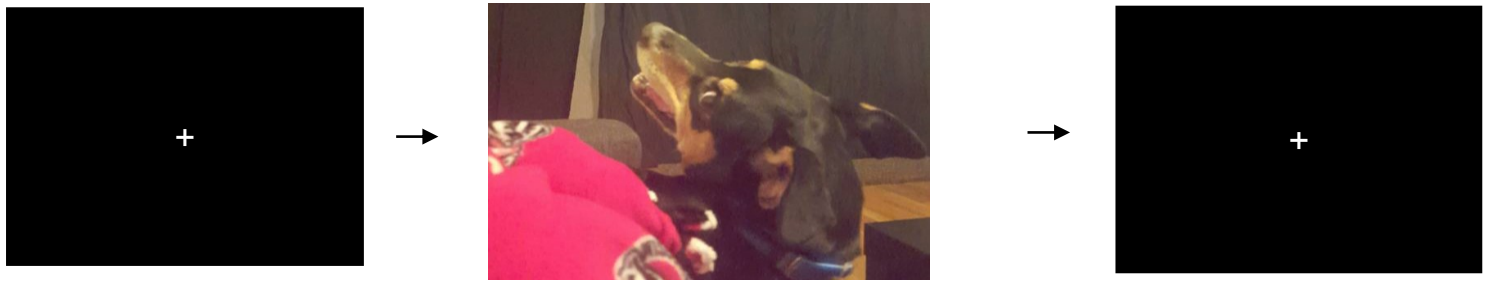
Zygomatic (smile)



1s Baseline

6s picture

Variable inter-trial Interval



from Leah Mayo

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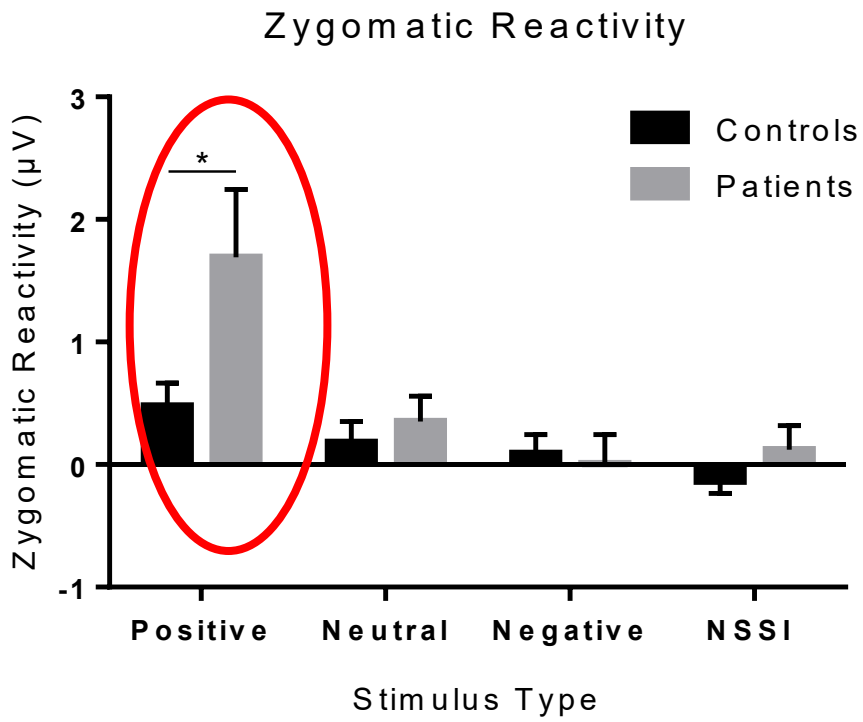
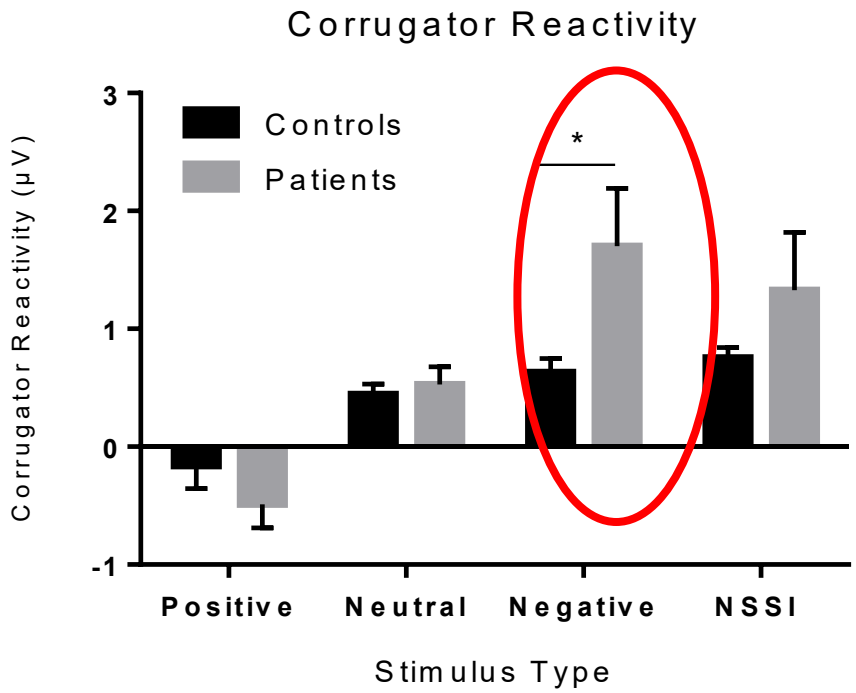
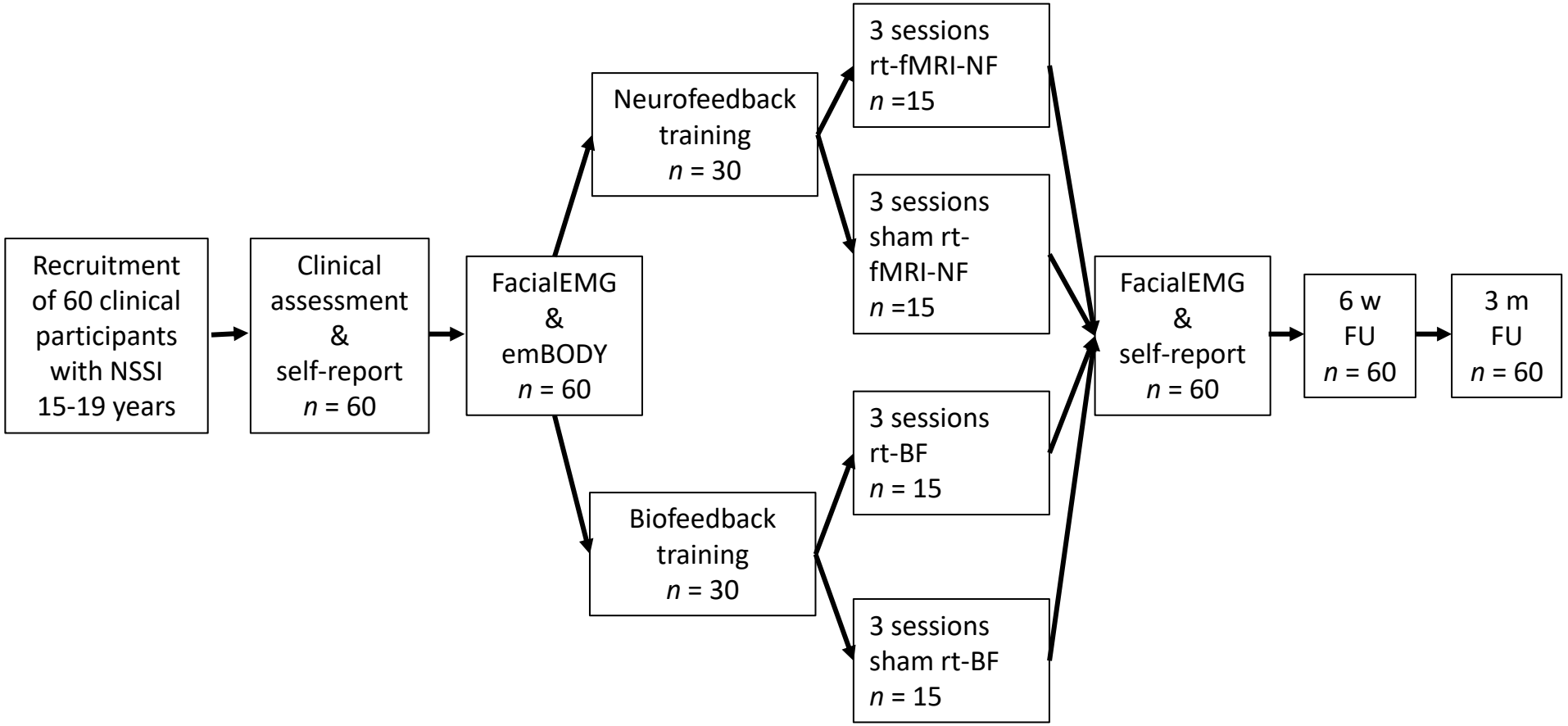
Emotional reactivity in adolescents with NSSI, facialEMG





Mayo et al. 2021 Biol. Psychiatry: CNNI

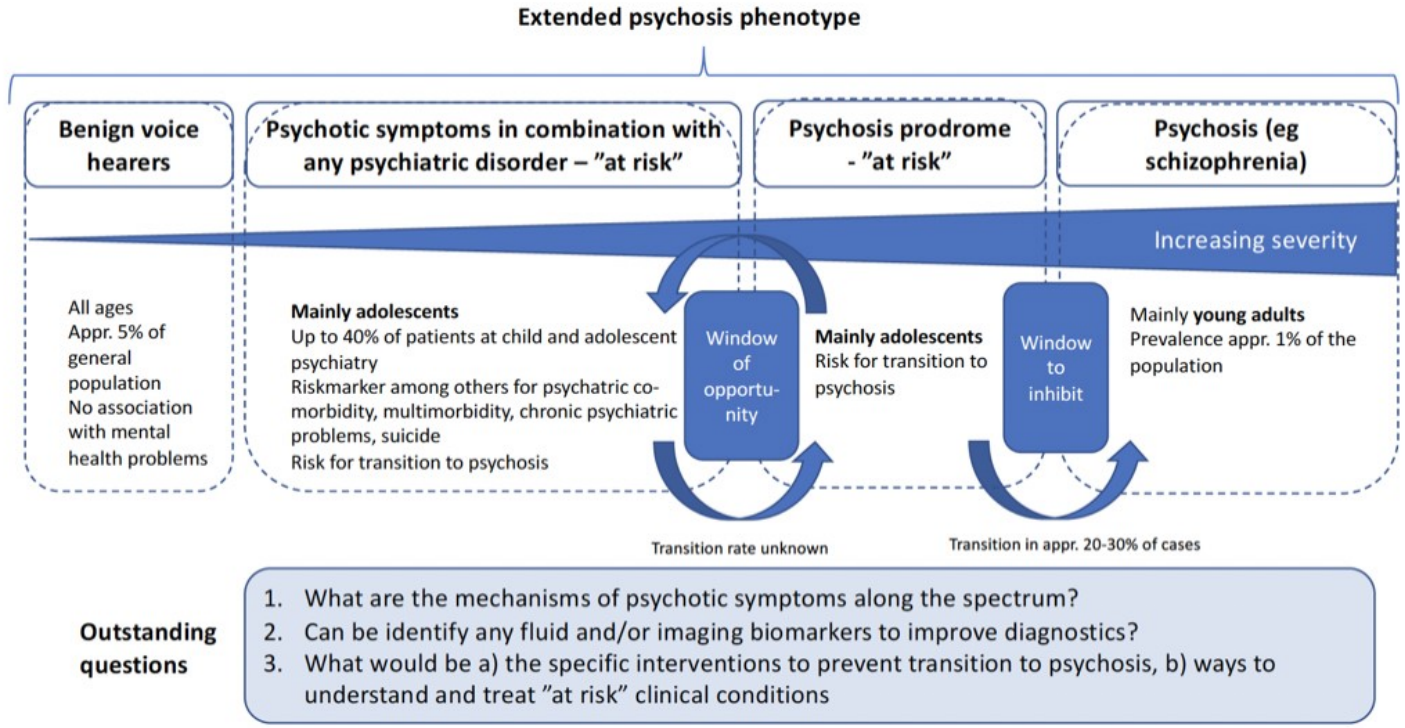
Real-time neuro- and biofeedback



Psykosstudien

Design

- Adult cohort
  - Schizophrenia patients
  - healthy controls
- Adolescent cohort
  - BUP patients with psychotic experiences
  - their siblings
  - BUP patients without psychotic experiences
  - healthy controls



Tack!

maria.zetterqvist@regionostergotland.se
maria.zetterqvist@liu.se