

## A controlled trial of Acceptance and Commitment Training (ACT) for treating comorbid psychosocial problems among inpatient youth.

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## Practicalities

All slides from this symposium will eventually be available at [www.contextualscience.com](http://www.contextualscience.com)

More information about this group format and summary of published research at:

[www.actorganisation.com](http://www.actorganisation.com)

My contact info can be found on the last slide and on the hand-outs



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## Scientific objectives (SO)

Find effective treatments for psychological problems and substance abuse among youth, and investigate:

- SO1) Is this ACT intervention clinically relevant? Does it work?
- SO2) If it works, for what kind of psychiatric problems and levels of respective problems? Are there moderators? (gender, socioeconomic status, other background factors?)
- SO3) Which processes in the treatment mediate (explains) possible improvements? (psychological flexibility?)



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## Background

- ✓ A majority of adolescents who seek treatment for substance use problems also has psychiatric diagnosis (Hodgins et al, 2007).
- ✓ Psychiatric problems almost always develop before first use of substances and tend to increase the risk of future substance use problems (Armstrong & Costello, 2002).



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## Background

- ✓ In the guidelines from The National Board of Health and Welfare it is recommended to address Psychiatric problems and use of substances simultaneously.
- ✓ Surprisingly little has been achieved when it comes to clinical research concerning how to deliver effective treatment for those problems for youth in "prison".
- ✓ In this study we aimed to do this by using Acceptance and Commitment Therapy (ACT) in a group format (Hayes, Strosahl, & Wilson, 1999).



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## Developing the protocol



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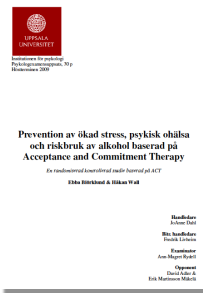
## ACT for youth med psychological problems in collage

### Participating youth:

- ✓ 200 youth ages 16-18 yrs are screened for psychological problems.
- ✓ The 15% worst off are offered participation
- ✓ 24 youth are randomized to ACT or just regular school.

### ACT - treatment

- ✓ Total of 12 hrs. after school with our protocol.



## ACT for youth med psychological problems in collage

### Results in favour of ACT-group:

- ✓ Less stress (large effectsize)

### Results in favor of ACT-group: (not at 95% level)

- ✓ Less psychological problems (SDQ)
- ✓ Less use of alcohol (AUDIT)
- ✓ More psychological flexibility (AAQ-II)
- ✓ More acceptance (AFQ-Y)

(all had small to medium effectsize)



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## Livheim et al 2015



## ACT as an Early Intervention Group Program for Adolescent Depression and Stress Symptoms: Two Randomised, Controlled Pilot Trials in Two Countries (Livheim et al. 2015)

### The interventions

**ACT:** The ACT Experiential Adolescent Group is a manualized 8-week group program. The program uses experiential mediums, for example painting and role-play, to facilitate adolescents' experience of the six ACT process. The group was run for 8 weeks within school hours, with each session lasting approximately 90 minutes.

**Treatment as usual (TAU):** Consisted of 12-weeks of monitoring support from the school counsellor, which is the standard care provide by the school for students identified as at risk.



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## Objective:

The aim of these two present pilot studies was to examine the effect of a brief intervention based on the principles of ACT among adolescents screened for problems in school settings.

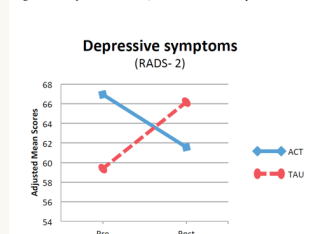
- ✓ In the Australian study, depression was main target.
- ✓ In the Swedish study stress was the main target.



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## Results Australia:

Figure 3. Primary outcome Australia, Intervention Effects on depression



### Primary outcome:

Reynolds Adolescent Depression Scale-2 (RADS-2) showed:  
 - Significant treatment effect :  $p = 0.008$   
 - Effectsize: Large  $Cohen's d = 0.86$

Intention To Treat (ITT) analysis with Mixed Model Repeated Measures (MMRM)

### Results Australia:

Intention To Treat (ITT) analysis with MMRM

#### Secondary outcomes:

RADS-2 Dysphoric subscale showed:

- Significant treatment effect:  $p = 0.017$
- Effect size: Medium  $Cohen's d = 0.77$

RADS-2 Anhedonia/Negative Affect subscale showed:

- Significant treatment effect:  $p = 0.006$
- Effect size: Large:  $Cohen's d = 0.89$

RADS-2 Negative Self-Evaluation subscale:

- Significant treatment effect:  $p = 0.037$
- Effect size: Medium:  $Cohen's d = 0.67$



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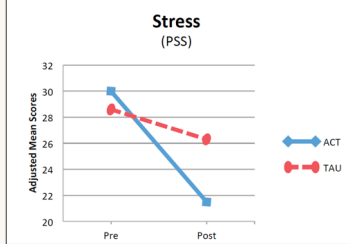
### Swedish study



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### Results Sweden:

Figure 4. Primary outcome Sweden, Intervention Effects on stress



#### Primary outcome:

Results for the Perceived Stress Scale (PSS) showed:

- Significant treatment effect :  $p = 0.009$
- Effectsize: Large  $Cohen's d = 1.20$

Intention To Treat (ITT) analysis with Mixed Model Repeated Measures (MMRM)

### Results Sweden:

Intention To Treat (ITT) analysis with MMRM

#### Secondary outcome:

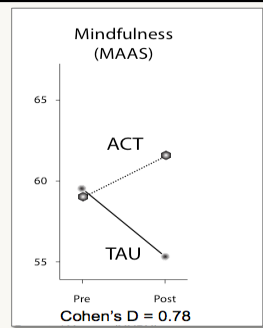
Anxiety (subscale in DAS-S) showed:

- Marginally significant treatment effect:  $p = 0.057$
- Effect size: Large  $Cohen's d = 0.80$



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### Results Sweden:



#### Process measure MAAS:

- Marginally Significant effect :  $p = 0.067$
- Effectsize: Medium  $Cohen's d = 0.78$

(this is really cool since we did not do any mindfulness!)

### ACT as an Early Intervention Group Program for Adolescents - Summary

**Conclusions:** Taken together, the ACT-intervention seems to be a promising intervention for reducing stress and depressive symptoms among young adolescents in school and should be tested in full-sized studies.



Depression, anxiety and stress are common problems among adolescents. Teaching young people coping strategies in school-based intervention programs is one promising approach.

## The ACT treatment for inpatient Swedish youth

### "ACT – Living life full out"



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"ACT – Living life full out" - *What is it about?*

**Extremely simplified, working with:**

1. *What do I want in life?*
2. *How can I handle what is stopping me?*

A side effect of living a more functional life is often that self reported psychological symptoms usually decline (Biglan et al. 2008).



"ACT – Living life full out" - *What is it about?*

**We have:**

- ✓ Created a detailed protocol (160 pages)
- ✓ Tested the intervention in two pilot studies:
  - RCT on screened high-school students (16-18yrs)
  - Pilot (pre-, post) within SiS May-August 2010



**Swedish national news about the study:**

*"- New method helps youth!"*



### What did the youth say?

- ✓ Youth with long sentences wanted the intervention individually or 2 at the most.
- ✓ A 19-year old girl:  
*"- I think a lot about what I have learnt. Thanks ACT!"*
- ✓ It's been fairly common that:
  - youth ask for more ACT when they are done
  - youth recommends other youth to go
- ✓ On several occasions youth have been "nagging" to get the full intervention if they moved before the end



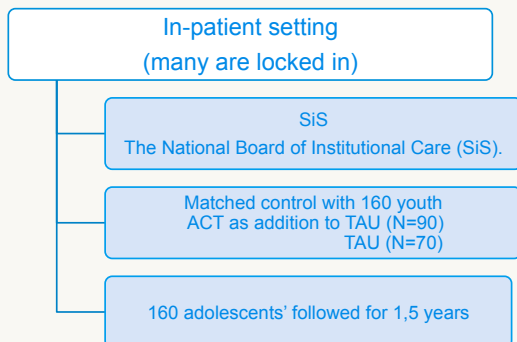
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**Please tell me about the study and the results!!!**



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## How and where?



## A matched controlled trial in inpatient setting at 12 different treatment facilities, (SiS).

### Preparations and site:

- ✓ The ACT-group treatment was tested at 6 different treatment facilities
- ✓ 6 different treatment facilities were recruited for TAU.
- ✓ Tested both for young persons with problems that are in for longer treatments <sup>(1-4 years)</sup> and for young persons that are in for assessment or acute placements <sup>(on average 8 weeks)</sup>.
- ✓ 46 group leaders and one psychologist at all sites were trained in the ACT-method <sup>(more education needed = expensive)</sup>

## Outcome measures and statistically significant results in favor of ACT (in green)

<b>Anxiety</b>	(Beck, 20)	Yes, small effect
<b>Depression</b>	(Beck, 20)	Yes, small effect
<b>Anger</b>	(Beck, 20)	Yes, medium effect
Antisocial behaviour	(Beck, 20)	Border significant
<b>Self-Concept</b>	(BUS-S, 20)	Yes, small effect
<b>Alcohol</b>	(AUDIT)	Yes, small effect
<b>Drugs</b>	(DUDIT)	Yes, medium effect



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## Outcome measures and statistically significant results in favor of ACT (in green)

Psychological flexibility (AAQ-II)

**Psychological flexibility (AFQ-Y)** Yes, small effect

Strength and difficulties questionnaire (25itmes, youth)

- **Full scale** Yes, small effect

- Emotional symptoms

- Conduct problems

- **Hyperactivity** Yes, small effect

- Problems with friends

Border significant

- Prosocial behavior

## Outcome measures and statistically significant results in favor of ACT (in green)

Strength and difficulties questionnaire (25itmes, TEACHER)

- Full scale

- Emotional symptoms

- Conduct problems

- Hyperactivity

- **Problems with friends** Yes, small effect

- Prosocial behavior

**Criminality, antisociality (SRD,41 fr.)**

Yes, small effect

## 1.5 year follow up

1,5-year follow ups we have **sent**:

**144**

1,5-year follow ups we have **recieved**:

**80**

That gives 55% answers



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## What happens now?

### Preparing the study for publication

Hopefully it will be submitted november 2016

### We are implementing ACT in youth prisons

I am currently training psychologist to train this method within SiS.

I have started to train other professionals.



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## Youth learns how to take control over their lives

10 NYHETER

### Ungdomar lär sig ta makten över sitt liv

Nya behandlingsmetoder ska hjälpa unga med allvariga problem

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## Thank you!

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