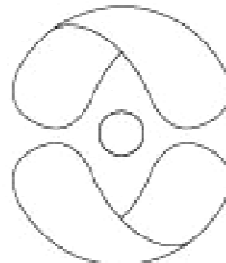


The effects of a group based stress treatment program (the Kalmia concept) targeting stress reduction and return to work.

A randomized, wait-list controlled trial



COPESTRESS
copenhagen stress
treatment project

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Funded by: **TrygFonden**

AIM

Evaluating the effect of a multidisciplinary stress treatment programme on reduction in symptom level and return to work (RTW) rate

Background:

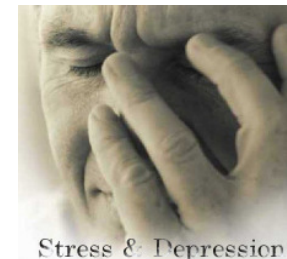
- The number of persons on sick leave due to stress and stress related disorders has increased rapidly in the last two decades and is considered a major source of societal costs
- In recent years an increasing number of patients have been referred to the medical sector with stress symptoms
 - Increased interest in stress management interventions and evaluation of their effectiveness

Target population:

Employees on sick leave due to work-related stress referred by their GP

Inclusion criteria

- On full time or part time sick leave
- Employed, self employment also accepted
- Significant symptoms of work-related stress during months
- Motivation for participation



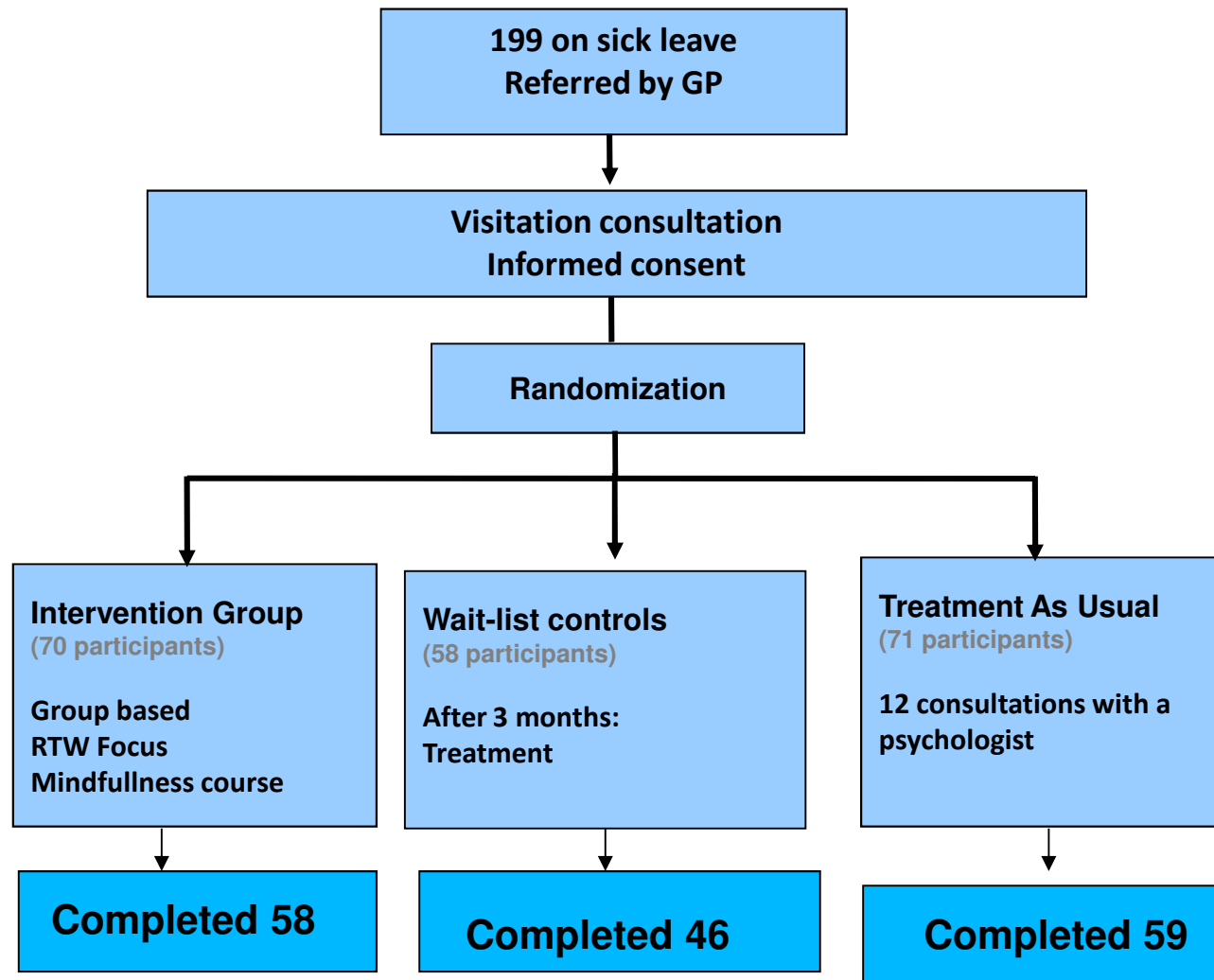
Employees on sick leave due to work-related stress referred by their GP

Exclusion criteria

- **No employment**
- **Current abuse of alcohol- or psychoactive stimulants**
- **Major psychiatric disorder**
- **Significant somatic disorder assumed to be the primary cause of the stress condition**

Design

A randomized, wait-list controlled trial



Intervention:

- **Initial medical and psychological interview,**
- **10 group based psychotherapy for 2.5 hours per week focusing on:**
- **Stress Therapy Concept of Kalmia, which consists of an integrative approach of group and, which runs in a parallel process**
 - Identification of relevant stressors both at work and at home
 - Changing the coping strategies of the participant
 - Restoring balance
 - Identifying obstacles for return to work
 - Adjustment of work load and tasks throughout treatment
 - Gradual increase in working hours
- **Dialogue with the workplace is advocated, but only performed if the participant agrees**
- **Basic Body Awareness Therapy (BBAT) with mindfulness meditation for 1.5 hours per week**
- **Assessment by a psychiatrist when needed** (eg. high score on MDI or suspected personality disorder)

Effect measures

- **Changes in symptom level (SCL-92 og WHO's MDI) after treatment**
- **Return to work rate**
- **Length of sick leave (self reported and register based)**
- **Labor market attachment (register based) after 1 year**

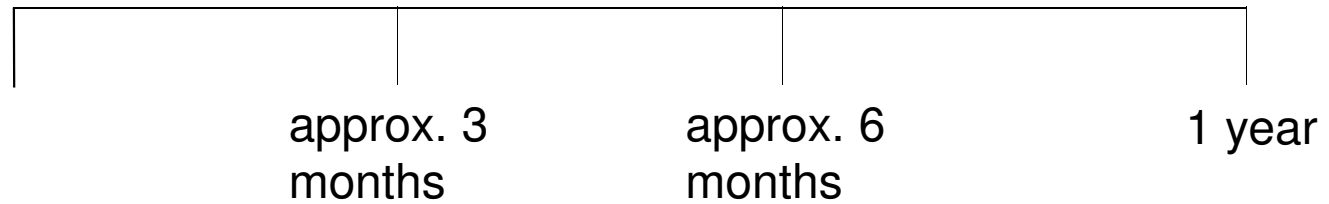
Design

Baseline:
IG, TAU, CG

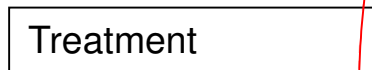
Follow up:
IG, TAU, CG

Follow up:
CG:

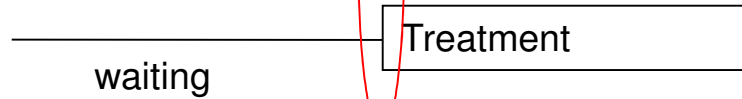
Follow up:



IG & TAU:



Wait-list CG:



Participants

| | IG | TAU | Control | |
|--|-----------|-----------|-----------|--|
| Included | 70 | 71 | 58 | |
| Completed | 58 | 59 | 46 | |
| Did not show up | 3 | 4 | 8 | |
| Excl. due to illness during treatment | 6 | 3 | 2 | |
| Lack of participation | 3 | 5 | 2 | |

Baseline characteristics

| (N) | IG (60) | TAU (59) | Control (46) | p |
|--|------------|-------------|-----------------|--------------|
| Women % | 75 | 78 | 85 | NS |
| Age | 43 | 45 | 45 | NS |
| Occupation Code Academics % | 9 | 11 | 26 | NS (0.09) |
| Antidepress med % | 19 | 15 | 17 | NS |
| Sick leave (days) at start (full/part time) | 62 | 62 | 56 | NS |
| Symptom level: MDI score | 22 | 26 | 23 | NS (0.06) |
| SCL-92 (GSI) score | 1.12 | 1.31 | 1.21 | |

Preliminary results

Changes in symptom level:

MDI score:

| | Mean Baseline | Mean 3 month follow-up | P (change unadjusted) | Change (adjusted for sex, age, occupational code, baseline score) |
|-------------------------|----------------------|-------------------------------|---------------------------------|---|
| IG: | 21 | 11 | <0.001 | -12 |
| TAU: | 26 | 12 | <0.001 | -12 |
| Wait list CG | 23 | 17 | <0.001 | -6 |
| P between groups | 0.06 | 0.001 | | <0.001 |

MDI score: range 0-50

Depression: >20

Preliminary results

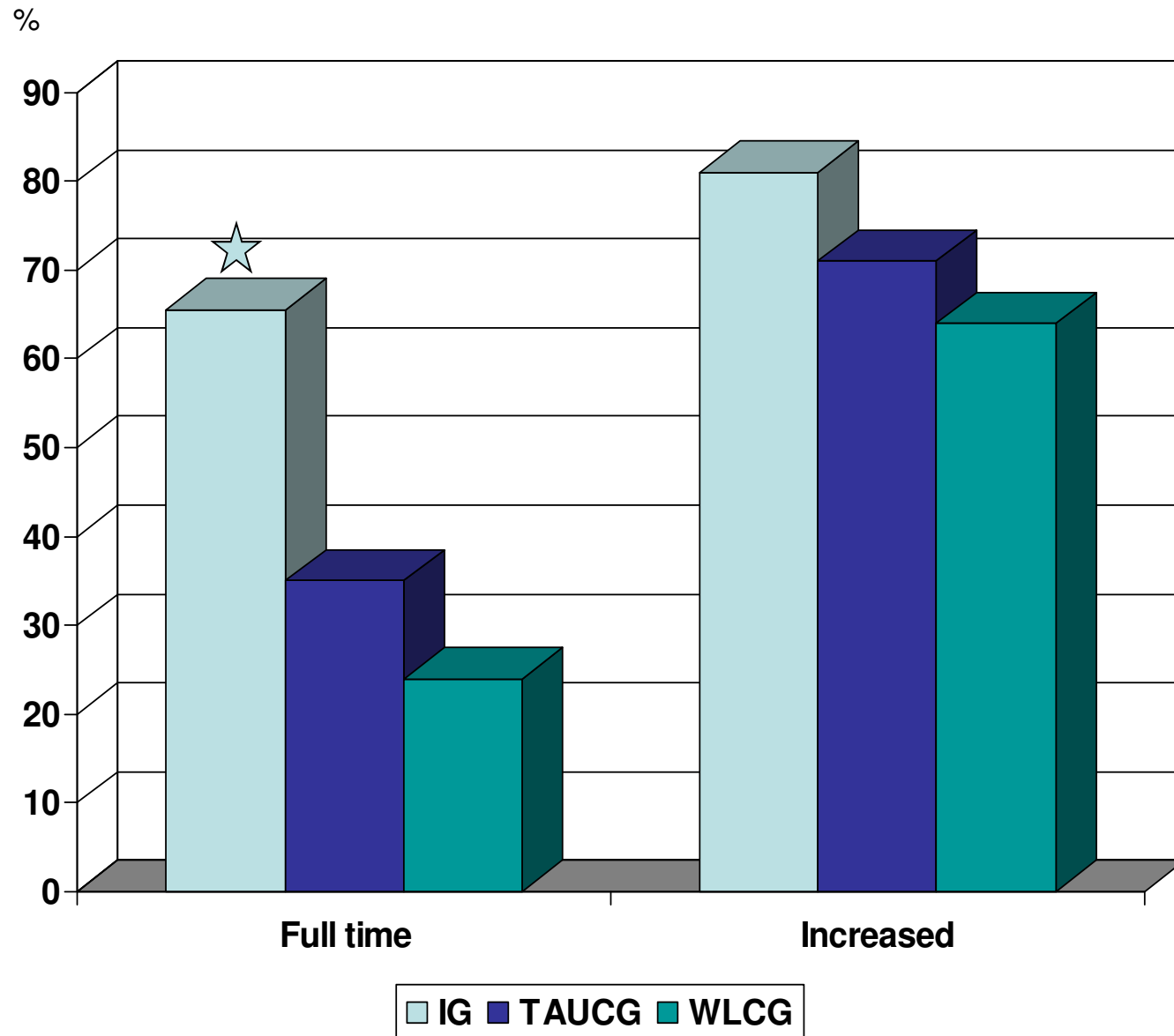
Changes in symptom level:

SCL-92 GSI score:

| | Mean Baseline | Mean 3 month follow-up | P (change unadjusted) | Change (adjusted for sex, age, occupational code, baseline score) |
|-----------------------------|--------------------------|---------------------------------------|------------------------------------|---|
| IG: | 1.13 | 0.54 | <0.001 | -0.62 |
| TAU: | 1.37 | 0.68 | <0.001 | -0.63 |
| Wait list CG | 1.21 | 0.85 | <0.001 | -0.37 |
| P between groups | 0.15 | 0.006 | | 0.001 |

SCL-92 GSI score: range 0-4

Danish normal population: 0,45



Conclusion

- Improvement of mental symptoms was significantly larger in the IG and TAU group compared to Control group
- Full time return to work rate was significantly higher in the IG compared to TAU and Control group

Discussion

- Participants with no well defined condition
- Controls (64%) received treatment elsewhere in the waiting periode

Thank you for your attention!

References:

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Borg, V.; Andersen Nexø, M.; Kolte, I.V. & Andersen, M.F. (2010): *Hvidbog om mentalt helbred, sygefravær og tilbagevenden til arbejde*. Det Nationale Forskningscenter for Arbejdsmiljø, København

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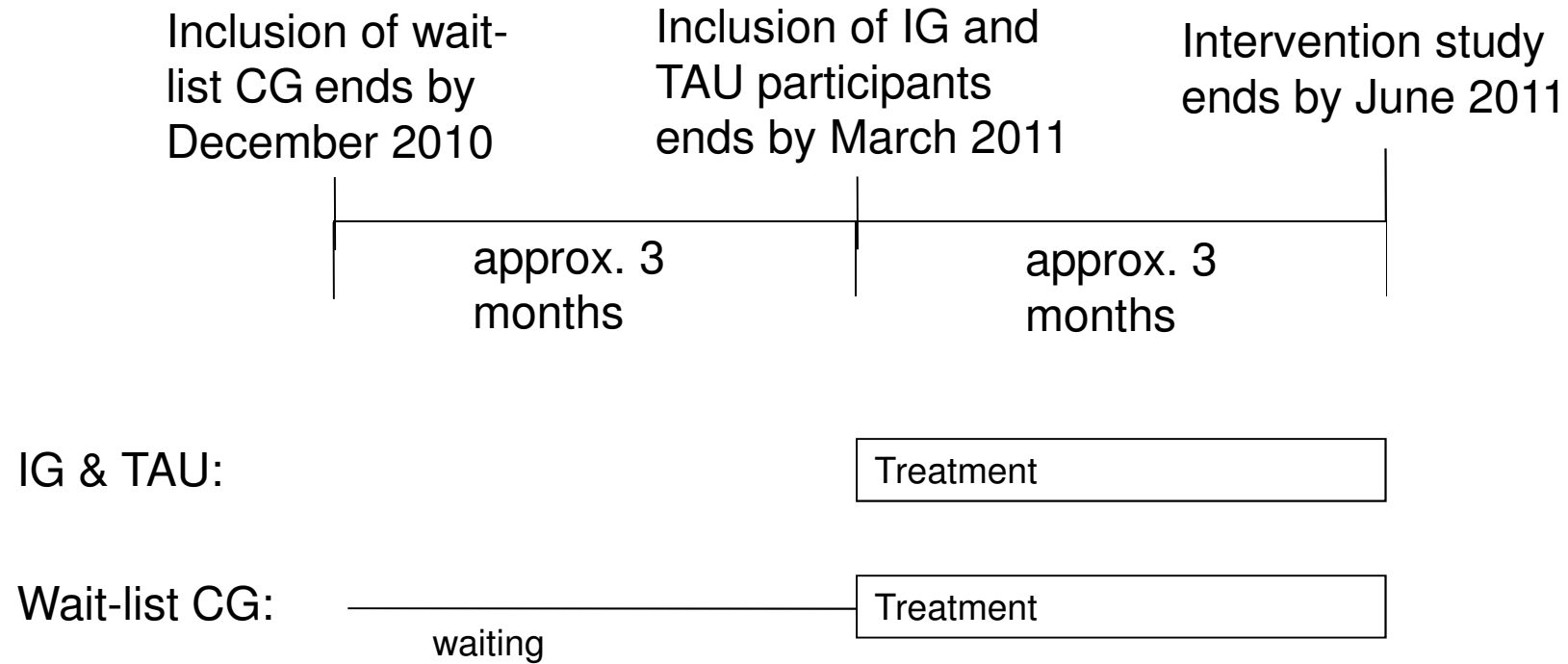
Willert MV , Thulstrup AM, Hertz J, Bonde JP. (2009): Changes in stress and coping from a randomized controlled trial a three month stress management intervention. *Scand J Work Environ Health*. Vol. 35(2):145-52

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Referred and participants

| | |
|---|------------|
| Referred from GP | 238 |
| Did not show up to visitation consultation | 9 |
| Inclusion criteria not met | 27 |
| Will not participate | 4 |
| Included in the project | 198 |
| | |

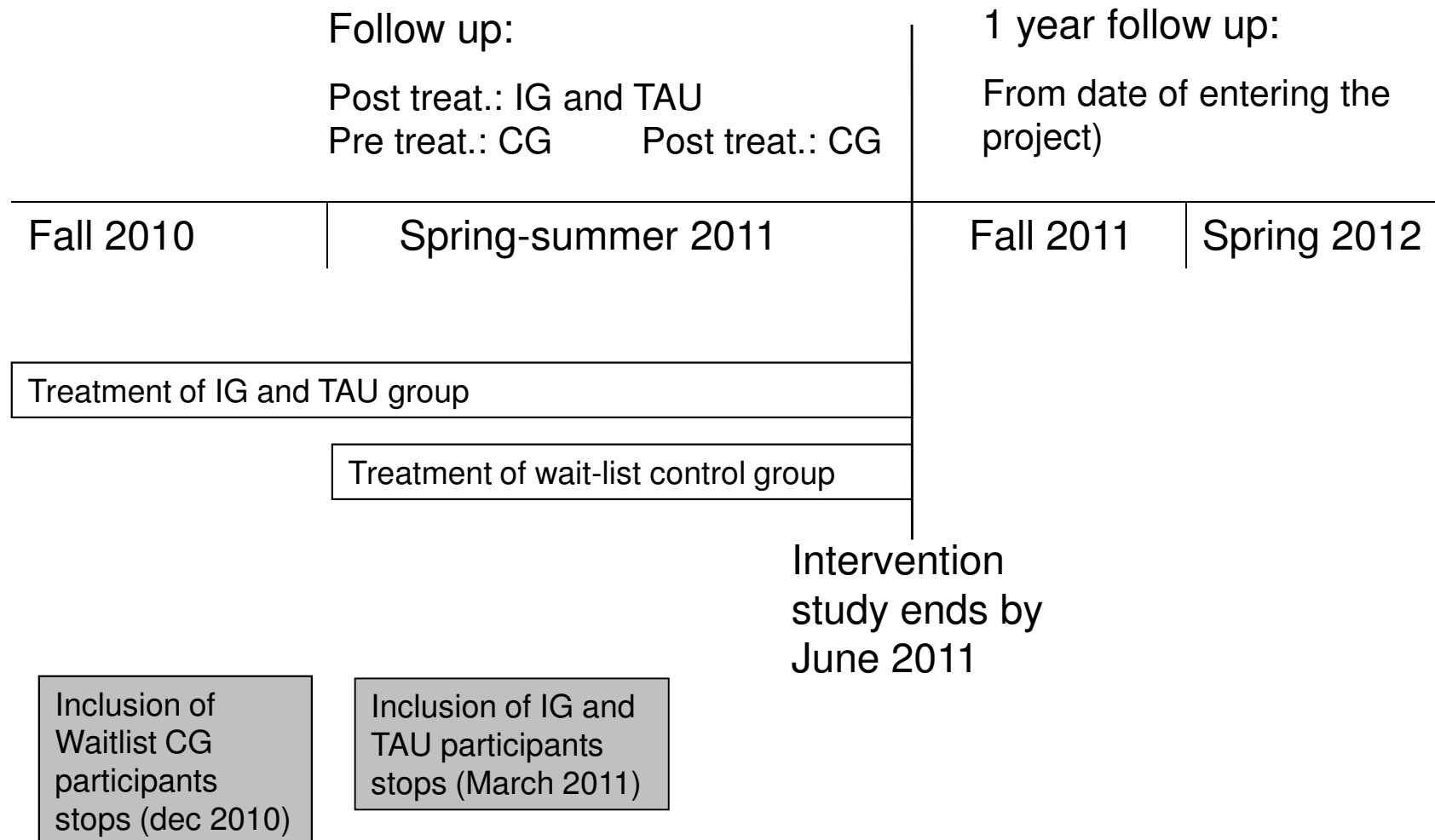
Design



Change i SCL92 scores adjusted for sex, age and baseline score

| SCL92-scores | IG | TAU | Control | p IG/C |
|---------------------------------|------|------|---------|-----------|
| Delta-depression | 0.93 | 0.83 | 0.49 | 0.001 |
| Delta-anxiety | 0.79 | 0.81 | 0.54 | 0.02 |
| Delta-fobia | 0.34 | 0.37 | 0.22 | 0.09 |
| Delta-obsession | 0.91 | 0.86 | 0.60 | 0.005 |
| Delta-anger | 0.49 | 0.40 | 0.21 | 0.001 |
| Delta-mistrust | 0.45 | 0.48 | 0.26 | 0.04 |
| Delta-psychotism | 0.30 | 0.27 | 0.21 | 0.15 |
| Delta-somatism | 0.67 | 0.75 | 0.52 | 0.13 |
| Delta-interpersonal sensibility | 0.60 | 0.51 | 0.27 | 0.001 |

Schedule



Baseline and Follow up of treatment:

**SCL92, MDI, COPSOQ, CBI, Perceived stress, Medication,
Sickness absence (incl.register based) and RTW information**

1 year follow up:

**SCL92, MDI, Additional treatment, Sickness absence,
Register based labor market attachment**