

# Psychological Intervention for Adolescents Diagnosed with Learning Disorders - I Can Succeed (ICS): Six Month Follow-up of an Open Treatment Trial



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#### INTRODUCTION

Learning Disorders (LD) often co-occur with other psychiatric disorders. Only a few studies have examined psychological interventions for adolescents with LD. I Can Succeed (ICS) is a manual-based psychological intervention which focuses on developing intrapersonal, interpersonal and school/community skills, and addresses both emotional and academic executive functions aspects of LD (Kopelman-Rubin., et al., 2012a). Pre-post changes indicated a significant decrease on both the externalizing and internalizing scales of the Child Behavior Checklist (CBCL) (Achenbach, 1991), as well as on various subscales (Kopelman-Rubin et al., 2012b). The current analysis will be the first to examine the intervention's impact on psychopathology at a six month follow-up.

#### METHOD

psychiatric co-morbidity, socio-economic level and medication.

### Participants:

Participants were 40 junior high school students (28 boys, 12 girls) with various types of Participants were 40 junior high school students (28 boys, 12 girls) with various types of LD (77.5% had LD co-morbidity including ADD/ADHD) and other co-morbid psychiatric disorders (27.5% anxiety, 7.5% Major Depression Disorder, 7.5% Oppositional Deficient Disorder, 2.5% Tourette Syndrome and Tic Disorder) and their parents.

40 Parents completed the CBCL about their adolescents before the intervention, 37 after the acute phase, and 27 at the 6 month follow-up. Those who did not complete the 6 month follow-up did not differ significantly in their adolescent's age, gender, LD,

## Procedure:

ICS was delivered in an open treatment trial in an outpatient psychiatric clinic by nine therapists (who were trained in a 6 separate day long workshops). Bi-weekly group supervision led by the first author, an expert educational psychologist, and was used to enhance adherence.

#### Instruments:

Child Behavior Checklist (CBCL) (Achenbach, 1991).

# STATISTICAL ANALYSIS

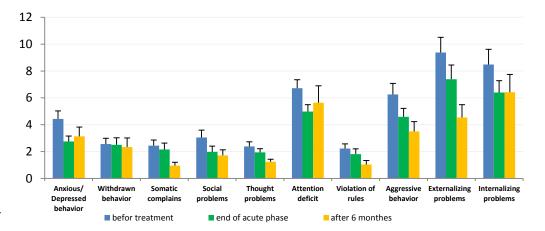
All analyses were undertaken using mixed-model analyses with assessment time point as a repeated factor.

#### RESULTS

Significant improvement between baseline and end of acute phase as well as between end of acute phase and 6 months follow-up was found on the externalizing problem scale of the CBCL (F(2,34)=10.3, P<0.01). On the internalizing problem scale, however, significant improvement was found only between base line and 6 months follow-up (F(2,34)=4.6, P=0.01). On the CBCL subscales, there were significant improvements between base line and end of acute phase and between base line and follow-up in anxiety/depression and aggression (F(65.73)=6.87, P=0.02; F(2,64.1)=8.98, P<0.01, respectively), but not between end of acute phase and 6 months follow-up. For attention problems, however, a significant improvement was found between base line and end of acute phase of treatment (F(2,34)=2.39, P=0.1) but this improvement was not found at the 6 months follow up (F(2,67.46)=0.6, P=0.1). For somatic complaints, delinquent rule-breaking behavior and thought problems significant improvement were found only between base line and 6 months follow-up (F(2,34)=4.82, P=0.01; (F(2,34)=6.65, P<0.01; F(2,34)=9.76, P<0.01, respectively).

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#### CONCLUSIONS

ICS has demonstrated improvement effects on psychopathology symptoms between baseline and 6 months follow-up in both externalizing and internalizing problem scales of the CBCL. Significant improvement was also found on most CBCL subscales. The improvement achieved at the end of the acute phase of treatment in anxiety/depression and aggression was maintained at follow-up. However, significant improvement was not found at follow up for the attention problems. It seems that maintaining improvement of attention problems may need more follow up ICS sessions or requires an intervention with boosters to keep participants using the strategies that may have proved helpful in the acute phase or a different long term ongoing intervention. Our findings are limited by the small number of participants. In addition, since the treatment was delivered in an open clinical trial rather than a randomized controlled trial, a future RCT is needed to examine effectiveness of the intervention.

# **Bibliography**

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