Psychological Intervention for Adolescents Diagnosed with Learning Disorders-I Can Succeed (ICS) Treatment Model, Feasibility and Acceptability

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INTRODUCTION

Most of the interventions among children and adolescents with Learning Disorders (LD) have focused on enhancing cognitive and learning skills. Fewer intervention programs emphasize the social and emotional domains especially during adolescence (Kavale & Mostert, 2004). To the best of our knowledge there is no unique evidenced based treatment model, which addresses both academic and emotional aspects of LD. The current psychological intervention program (I Can Succeed) focuses on developing skills that strengthen resilience factors in three major areas: Intrapersonal skills (increasing levels of self awareness of both strengths and weaknesses; developing self direction towards setting goals while establishing priorities; and providing organizational strategies), interpersonal skills (interpersonal communication; decision making/problem solving; self advocacy skills; strengthening of adolescent-parent relationship and adolescent-teacher relationship) and school/community skills (i.e. strengthening the family-school relationship). The interpersonal aspects of the intervention are theoretically grounded in Interpersonal Psychotherapy for Depressed Adolescents (Mufson et al., 2004). The manual attempts to provide a certain flexibility that enables the therapist to address the specific needs of every adolescent and his/her parents within the framework of a structured protocol. Most of the sessions are individual sessions, while up to 4 sessions may be held with parents. The intervention integrates on-going work with schools.

METHOD

Participants included 39 adolescents and their parents. The sample manifested high co-morbidity of other psychiatric disorders (Table 1). Inclusion criteria consisted of LD diagnosis normal range IQ and regular class attendance. Exclusion criteria included suicidal ideation and psychosis. The study was approved by the IRB committee. All adolescents went through a comprehensive psycho educational assessment and a semi-structured psychiatric interview (MINI-KID) (Sheehan et al., 1989). The ICS protocol consists of an acute and follow-up phase. The acute phase includes 13 sessions. The modules are implemented in a specific order because the topics are related and acquisition of one skill is based on the acquisition of the preceding skill. One full session is devoted to each of the modules, except for parents training which is two sessions. However, the manual enables the therapist to conduct additional in depth sessions during the acute phase as needed up to three sessions. Therapists decide collaboratively with patients and parents which modules should be addressed more intensively. The follow-up phase includes 6 sessions conducted over an 18 month period, approximately one session every 3 months. At the end of therapy subjects were questioned about their satisfaction from treatment and their estimation of progress using a semi structured questionnaire designed by the investigators and administered by two independent evaluators. 9 Therapists were trained in a 6 days of workshops including theoretical presentations and role plays. Bi-Weekly group supervision was used to enhance adherence. All sessions were recorded. After each session, therapists completed a check list of the session interventions, skills training or strategies that were used.

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RESULTS

39 patients had a full course of the intensive phase of treatment. 4 subjects dropped out after session 3 or 4. These subjects were not significantly different from the other subjects in their characteristics including age, severity of learning disorders, psychiatric co-morbidity and parent's age, educational level and income. 97% of the adolescents reported feeling that ICS was helpful and that they would recommend it to a friend; 84% found that the specific skills acquired through ICS were useful; 91.9% reported that duration was fine; and 89.2% that frequency of sessions was suitable. 91.9% reported an improvement in general coping skills; 89.2% reported improvement in academic grades; 86.5% reported improvement in organizational skills; 78.4% reported improvement in concentration on academic tasks; and 81.8% reported improvement in effective communication. The modules which were chosen to be more intensively addressed were interpersonal skills including parents training, effective communication, problem solving/decision making and self advocacy (Table 2).

Table 1: Demographic and Clinical Characteristics

Patient Characteristics	N= 39	Mean ± SD or Percentage
Female	N=11	28.2%
Male	N=28	71.8%
Age	N=39	12.62 ± 0.88
Years in school (Grade)	6th grade: 1 children, 2.6% 7th grade: 22 children, 56.4% 8th grade: 14 children, 35.9% 9th grade: 2 child, 5.1%	
IQ (Full Scale)	N=39	95.56 ± 7.54
Learning Disability Diagnosis (DSM-IV-TR)		
Reading Disorder	N=26	66.7%
Disorder of Written Expression	N=24	61.5%
Mathematics Disorder	N=11	28.2%
Reading & Writing	N=17	43.6%
Reading & Writing & Mathematics	N=4	10.3%
Reading & Mathematics	N=5	12.8%
Writing & Mathematics	N=5	12.8%
DSM-IV co-morbidity Diagnosis:		
ADHD	N=20	51.28%
Anxiety Disorders	N=11	28.2%
MDD	N=3	7.7%
ODD	N=3	7.7%
Tourette Syndrome and Tic Disorder	N=1	2.6%
20.5% (n=8) had co-morbidity		

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Table 2: Frequency of Modules Use

Modules	No. of Sessions (Module was used), Mean ± SD
Psychoeducation	1.03±0.16
Parents training	2.67±0.62
School staff meeting	1
Self awareness	1.59±0.60
Self direction priorities	1.05±0.22
Organization strategies	1.36±0.63
Interpersonal relations (communication analysis and problem solving/decision making)	1.82±0.82
Self advocacy	1.51±0.51
Termination the intensive phase of treatment	1

CONCLUSIONS

Our results demonstrate that ICS is a feasible treatment to deliver and is acceptable to adolescents with various kinds of learning disorders and other co-morbid psychiatric disorders. Only 4 subjects dropped out and satisfaction was fairly high with 97% of adolescents reporting that ICS was helpful and that they would recommend it to a friend. ICS adopts a comprehensive framework and focuses on developing skills that strengthen resilience factors. Our results support the risk and resilience framework suggesting that interventions should shift from a reductionist, problem-oriented approach to a perspective accentuating and nurturing strengths (Margalit, 2003). Results indicated that the most frequently used modules were interpersonal skills. This is in line with previous studies highlighting the importance of interpersonal functioning in the overall well being of LD population (Murray & Greenberg, 2001). It is also consistent with previous studies reporting that overall functioning of LD kids when followed into adulthood is associated with their emotional and interpersonal functioning more than the severity of their LD (Goldberg et al., 2003). This suggests that interpersonal therapeutic intervention may be a focus of future intervention research with this population. One such option is Interpersonal Psychotherapy for Depressed Adolescents (IPT-A) which conceptualizes disorders within an interpersonal framework (Mufson et al., 2004). The study has several limitations. The treatment was delivered in an open clinical trial rather than a randomized RCT. Therefore, we cannot address questions of the comparative efficacy of our intervention. Furthermore, our findings are limited by the small number of participants.

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