A FEASIBILITY STUDY OF A MODULAR COGNITIVE BEHAVIORAL INTERVENTION FOR YOUTH WITH SCHOOL ATTENDANCE PROBLEMS

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ABSENTEEISM IN DENMARK

- Mandatory for public schools in Denmark to register daily school attendance:
 - Average school absence: 12 days/200 school days (6%)

This increase is also seen in Danish schools of one whole day of absence since 2014/2015 The increase is primarily due to:

- a decrease in lower levels of absence (0-2%)
- an increase in higher levels (i.e., more than ten percent absenteeism during a school year)

(Undervisningsministeriet, 2018)





We developed the Back2School (B2S) program which is a modular transdiagnostic CBT intervention aimed at increasing school attendance and decreasing anxiety, depression, and/or behavior problems among youth with SAPs.



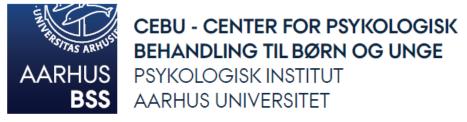
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AIM OF THE STUDY

In preparation, for an RCT of the efficacy of the B2S program, the objectives were to examine the feasibility and acceptability of the B2S program in a non-randomized trial including both qualitative and quantitative data.









AIM OF THE STUDY

The feasibility of B2S was examined by evaluating:

- The recruitment capability and the resulting sample characteristics
- The data gathering procedures and outcome measures
- The resources needed to manage and implement the study and intervention.

The acceptability of the intervention and study procedures was examined by:

- The parent's and youth's satisfaction with B2S
- The participants adherence to intervention.

The feasibility study provided a preliminarily evaluation of the impact of the intervention





PARTICIPANTS AND PROCEDURE

The sample consisted of 24 youths with SAPs, and their parents.

The intervention was managed by the Center for Psychological Treatment for Children and Adolescents (CEBU) at Aarhus University, Denmark and was conducted in the spring of 2017.

The families were required to make initial contact with the CEBU to participate in the study

The youth and one of the parents completed questionnaires administered at four assessment points (baseline, post-treatment, 3-month follow-up, and 12-month follow-up).

The main teacher for the youth also completed questionnaires at three assessment points (baseline, post-treatment, 3-month follow-up).



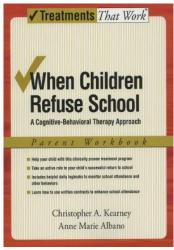


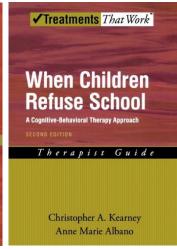


The Back2School manual:

With inspiration from

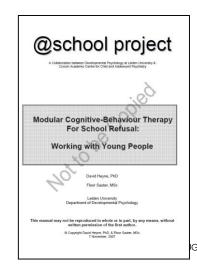
KEARNEY: A FUNCTIONAL APPROACH





Heyne: Anxiety disorder and school refusal - adolescents





Systematic Review

Indicated Truancy Interventions for Chronic Truant Students: A Campbell Systematic Review

Research on Social Work Practice 23(1) 5-21 © The Author(s) 2013 Reprints and permission: sagepub.com/journalsPermissions.nav DOI: 10.1177/1049731512457207 http://rsw.sagepub.com

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Research Article

Treatment for School Refusal Among Children and Adolescents: A Systematic **Review and Meta-Analysis**

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MANUAL 2017

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- PSYKOLOGISK INTERVENTION TIL ELEVER MED BEKYMRENDE FRAVÆR

RCT-UDGAVE 2017-2019



MIND MY MIND **MANUAL**

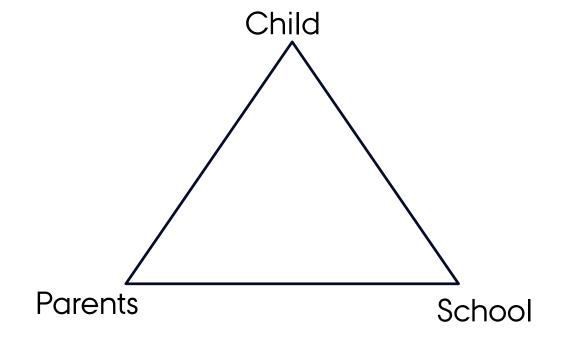
Træning af tanker, følelser og adfærd for skolebørn





THE BACK2SCHOOL: CENTRAL ELEMENTS

- Based on CBT principles
- Manualbased (flexible manual)
- A modular approach evidens-based methods for treatment of anxiety, depression and behaviour with focus on reestablishing normal school attendance.
- Incorporate both child, parents, and the school (includes four school meetings)
- Time-limited (10 sessions and a booster after 3 month)









BACK2SCHOOL: CENTRAL ELEMENTS

- Assessment and caseformulation
- Psykoeducation
- Homework between sessions
- Focus on problem solving
- Specific ideographic goals for the treatment
 - Except main goal returning to normal school attendance
- Stepwise graduation of tasks and challenges





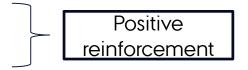
BACK2SCHOOL: THEORETICAL BACKGROUND

A combination of a functional and a cognitive-behavioral approach. The functional approach involves identifying the motivational function of the child's SA:

- 1. avoidance of school-based situations that provoke negative affectivity
- 2. avoidance of aversive school-based social/evaluative situations

Negative

- 3. pursuit of attention from significant others outside of school, and
- 4. pursuit of tangible reinforcement outside of school.



Back2School is based on a descriptive functional analysis obtained by the School Refusal Assessment Scale (SRAS) (Kearney & Silverman, 1993) together with a case formulation approach to planning CBT for attendance problems.







BACK2SCHOOL: CBT PROCEDURES

School attendance problems <u>motivated by positive reinforcement</u> require CBT procedures such as:

- parent management
- contingency management,
- and contracting to minimize incentives for school absence and boost incentives for attendance.

School attendance problems **motivated by negative reinforcement** require CBT procedures such as:

 cognitive restructuring and exposure-based practice to reduce the youth's anxious or depressive physical sensations and thoughts.





RESULTS: RECRUITMENT CAPABILITY AND SAMPLE

CHARACTERISTICS

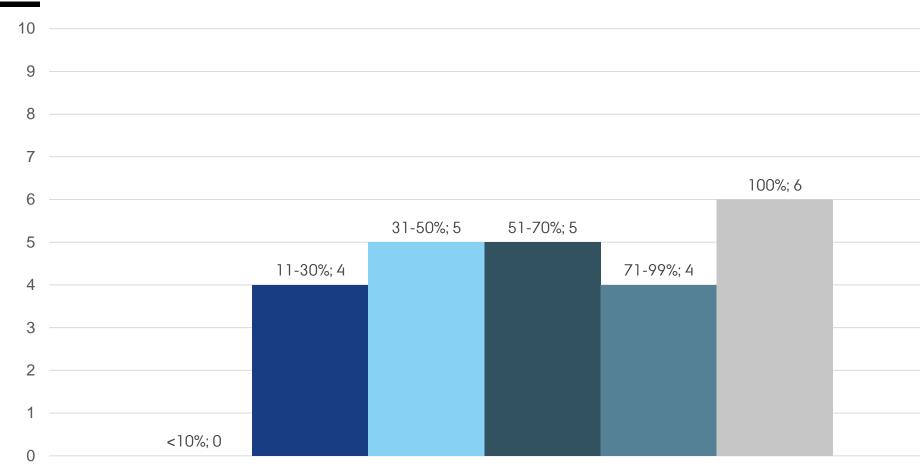
Characteristic	Participants
Age at inclusion, years, mean (SD)	12.7 (2.4)
Gender, males, n (%)	12 (50%)
Academically behind peers (teacher-report), n (%)	8 (33%)
Changed school at least once before inclusion, n (%)	8 (33%)
Former treatment due to absenteeism problems, n (%):	
School psychologist	16 (67%)
Private psychologist	13 (54%)
General practitioner	19 (79%)
No former treatment	0 (0%)
Living with two parents, n (%)	11 (46%)







SCHOOL ABSENTEEISM AT BASELINE







RESULTS: RECRUITMENT CAPABILITY AND SAMPLE

CHARACTERISTICS

Symptoms reported in psychopathology interview, n (%)	Participants	
Anxiety symptoms	18 (75%)	
Obsessive Compulsive Disorder (OCD)	3 (13%)	
Depressive symptoms	11 (46%)	
Post-Traumatic Stress Disorder (PTSD)	2 (8%)	
ADHD	4 (17%)	
Oppositional defiant disorder	5 (21%)	
Conduct disorder	1 (4%)	
Pervasive or specific developmental disorders	6 (25%)	
No symptoms reported	1(8%)	

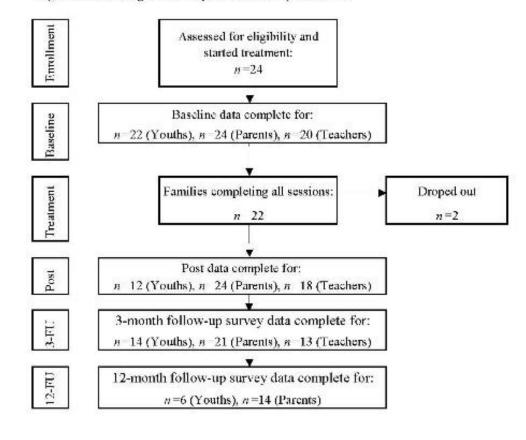






RESULTS: FEASIBILITY OF DATA **GATHERING PROCEDURES**

Figur 1: Flow diagram of response and completion rate









RESULTS: FEASIBILITY OF DATA GATHERING **PROCEDURES**

School absence was measured using two different types of data.

- 1) school absence (registry) data were drawn from official school absence records collected by the schools, provided by the municipality. The registration of students' daily school attendance is mandatory for all primary schools in Denmark.
- 2) school absence (parent-report) data was based on parent reports of the youth's school-absence.

The robustness of the registry data was investigated: the validity of the municipalities registration was questionable for some of the youths.





RESULTS: EVALUATION OF RESOURCES TO MANAGE AND IMPLEMENT THE INTERVENTION AND STUDY PROCEDURES

Based on evaluation with the psychologist two difficulties with the resources to manage the intervention was stated:

- 1) The psychologists spent more time on the cases than initially planned.
- 2) The psychologists reported feeling less competent in cases where youths' primary problems were related to behavioral problems.

Based on evaluation of the resources to manage the study procedures with the staff and research team at CEBU:

- 1) There were enough resources to manage the technical part of the survey collection.
- 2) Office spaces, and administrative capacity were also evaluated as being sufficient.





RESULTS: ACCEPTABILITY OF THE INTERVENTION

- Of the 24 families who agreed to participate, two families withdrew during the intervention after session two and session six, respectively
- Adherence high: 19 of the 22 remaining families (86%) completed all 10 sessions, one family completed nine sessions, and two families completed eight sessions.
- The booster session was conducted with 19 families (86%).
- Thirteen (59%) of the cases included four school meetings as planned. One case did not include any school meetings.
- The mean duration of the B2S treatment (from the first session to the 10th session) was 80 days, with a range of 55-139 days.





RESULTS: TREATMENT SATISFACTION;

Item	Respondent	Response categories		
		Not	Partly	Certainly True
If a friend needed similar help, I would recommend Back2School	Youth	True 3 (25%)	True 3 (25%)	6 (50%)
	Parent	0 (0%)	6 (25%)	18 (75%)
	Teacher	2 (11%)	6 (33%)	10 (56%)
I trusted the therapist	Youth	0 (0%)	2 (17%)	10 (83%)
	Parent	0 (0%)	2 (8%)	22 (92%)
	Teacher	1 (6%)	7 (39%)	10 (56%)
I have been given enough information about the purpose and course of Back2School prior to the start	Parent	0 (0%)	3 (12%)	21 (88%)
	Teacher	2 (11%)	8 (44%)	8 (44%)
The therapist had an understanding of my worries and issues	Youth	0 (0%)	5 (42%)	7 (58%)
The meetings at the school was useful	Teacher	3 (17%)	9 (50%)	6 (33%)

RESULTS: TREATMENT SATISFACTION:

In the evaluation we included open-ended questions to all respondents as well. These were coded.

Most feedback was positive:

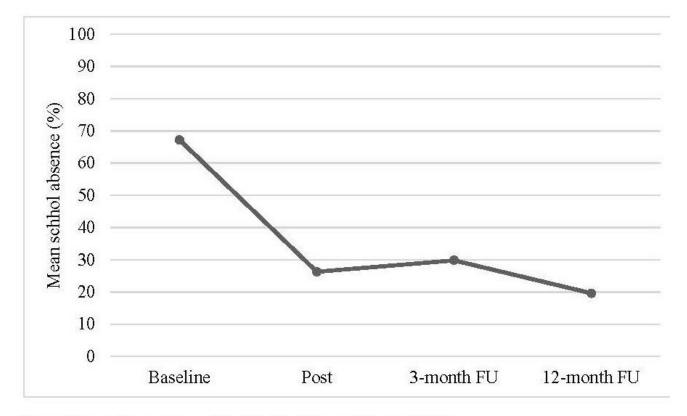
- The family-oriented approach was highlighted as positive
- The parents found the parent management techniques very useful.
- The involvement of the school was mentioned as an important part of the B2S program by parents and teachers.

However, the feedback regarding the school meetings were more negative-> the school meetings will be scheduled earlier in the B2S program for the RCT.





PRELIMINARY EVALUATION OF THE IMPACT OF THE INTERVENTION



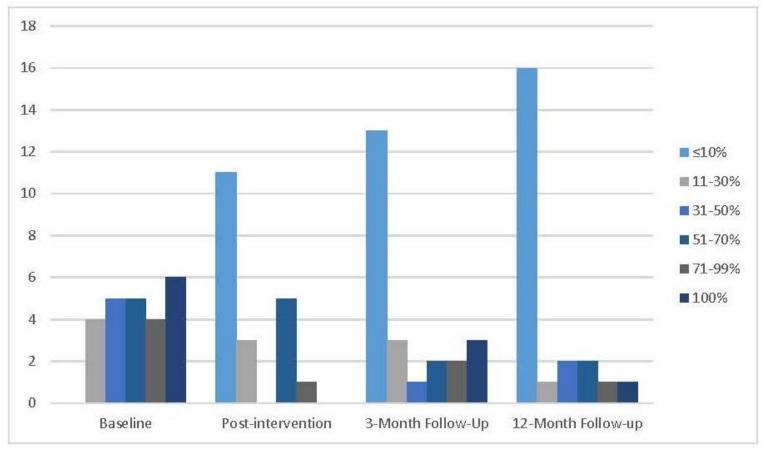
Note: Time x Intervention effect: F = 30.625, p = .001, d = 1.357







PRELIMINARY EVALUATION OF THE IMPACT OF THE INTERVENTION









PRELIMINARY EVALUATION OF THE IMPACT OF THE INTERVENTION

There was a significant average effect over time on several outcomes:

- All informants reported an average significant improvement on the SDQ emotional problem scale (d=0.7-2.0) and the SDQ impact scale (d=0.9-1.9).
- A significant effect on SDQ conduct problems was also found for parent- and youth report (*d*=0.8-0.9)
- For anxiety symptoms (d=1.3-3.2) and depression symptoms (d=0.8-1.0), youth and parents reported on average a significant improvement.
- On average, significant improvement in self-efficacy was also found for both youth and parent (*d*=1.2-1.5).





ADAPTION TO THE RCT

The main adaptation made to the B2S manual was to increase emphasis on the importance of the school meetings and the timing of these.

Several adaptations to the study procedure are also required.

- 1) To ensure adequate recruitment for the RCT more effort will be made to get information about the B2S program to professionals in the municipality and parents.
- 2) Parent-reported school absence data will be collected at all time-points to test the validity of the register based school absence data.
- 3) More psychologist resources were needed as it was more time-consuming for the psychologists to implement B2S than expected.





CONCLUSION

- The newly developed Back2School program is an acceptable and feasible intervention for youths with SAPs.
- Parents and youth rated their satisfaction with Back2School as high.
- Teacher satisfaction was lower than that of youth and parents, but the majority found the school's participation in Back2School useful and helpful.
- The youths' low response rate on surveys indicated challenges in collecting data in this
 population and the school absence data provided from school registers showed low
 validity.
- Preliminary evaluation of treatment outcomes showed promising increases in school attendance and decreases in psychological symptoms.





This presentation was based on the paper:

Lomholt, J. J., Johnsen, D. B., Silverman, W. K., Heyne, D., Jeppesen, P., & Thastum, M.
 (2019). Feasibility study of Back2School, a modular cognitive behavioral intervention for youth with school attendance problems (*In review*)

For more information about the RCT and Back2School intervention:

Thastum, M., Johnsen, D. B., Silverman, W. K., Jeppesen, P., Heyne, D. A., & Lomholt, J. J. (2019). The Back2School modular cognitive behavioral intervention for youths with problematic school absenteeism: study protocol for a randomized controlled trial. *Trials*, 20(1), 29. doi:10.1186/s13063-018-3124-3





THANK YOU FOR YOUR ATTENTION

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17 OCTOBER 2019





