

# Development of adaptable and flexible treatment manuals for externalizing and internalizing disorders in children and adolescents

## Desenvolvimento de manuais adaptáveis e flexíveis para transtornos de externalização e internalização em crianças e adolescentes

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### Abstract

*In this paper we describe the process used to develop treatment manuals for internalizing and externalizing disorders in children and adolescents. These manuals were developed to offer health care providers and others working in child mental health a flexible intervention that could be adapted to different countries and localities based on: 1) the amount of health care and school resources that are available; 2) the nature and severity of the types of problems children have; and 3) the preferences and cultural factors that are important within these communities. We also discuss the experiences and cultural issues faced by sites in Egypt, Lebanon, Israel, and Brazil who volunteered to implement the manualized treatment programs. The feedback received from these sites indicates that the manuals can be implemented to help children with internalizing and externalizing problems*

**Keywords:** Evidence-based medicine; Behavior therapy; Therapy; Affective symptoms; Disruptive behavior disorders

### Resumo

*Neste artigo, descrevemos o processo utilizado para elaborar manuais de tratamento para transtornos de externalização e internalização em crianças e adolescentes. Esses manuais foram elaborados para oferecer uma intervenção flexível para provedores de atenção à saúde e demais profissionais que trabalham com a saúde mental da criança, podendo ser adaptados a diferentes países e localidades, com base: 1) no nível de atenção médica e de recursos educacionais disponíveis; 2) na natureza e na gravidade dos tipos de problemas que as crianças apresentam; e 3) nas preferências e fatores culturais que são importantes nessas comunidades. Discutimos, também, as experiências e os problemas culturais enfrentados pelas localidades no Egito, Líbano, Israel e Brasil que foram voluntárias em implementar os programas de tratamento especificados nos manuais. O retorno recebido dessas localidades indica que os manuais podem ser implementados para auxiliar as crianças com problemas de externalização e internalização.*

**Descritores:** Medicina baseada em evidências; Terapia comportamental; Terapia; Sintomas afetivos; Transtorno do comportamento disruptivo

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## Introduction

A significant number of children and adolescents around the world, from 10% to 16%, suffer from one or more impairing psychiatric disorders.<sup>1-4</sup> This elevated prevalence rate of mental disorders has a considerable impact on children, families, and countries and accounts for a significant percent of the global burden of disease.<sup>5</sup>

Given the potential persistence and developmental continuity of externalizing (disruptive) and internalizing (emotional) disorders in children, and their significant risks of future negative consequences for the child and society in general, we undertook the task of developing treatment manuals for each of these two major classes of disorders.<sup>6-8</sup> In this paper we provide a summary of the conceptual approach and criteria our group adopted for developing these manuals and the cultural and related adaptation issues that were identified during their implementation in a small feasibility study.

### 1. Evidence-based treatments

There was a consensus that manuals should be developed for treatment interventions that have been proven to be effective in the clinical research literature. A review of this literature yielded reassuring evidence that stimulant medication is a highly efficacious treatment for attention-deficit hyperactivity disorder (ADHD).<sup>9-10</sup> Medication and behavioral parent training (BPT) programs can be considerably effective for treatment of externalizing disorders and related behavior problems.<sup>11</sup> The addition of child training (CT) to BPT programs can enhance the effectiveness of the latter.<sup>12</sup> Combination of medication treatment, BPT, and teacher training can produce more comprehensive effects.<sup>9</sup> Although not as amply researched, cognitive behavior therapy (CBT) and pharmacological interventions have shown to be effective in reducing symptoms of internalizing disorders, i.e., symptoms of childhood depression, phobias, and anxiety disorder.<sup>13</sup>

**Table 1 – Content of training modules in the treatment manuals for professional groups**

Target	Sessions/length	Content
Supervisors	1-2/2-3 hours	Discuss manuals, implementation issues, and roles and responsibilities.
Mental health clinicians	1-2 days	Training on the theoretical background therapeutic and techniques of BPT, CT, and CBT and discussion of their roles and responsibilities.
Administrators	1/45-60 min.	Overview on child mental health problems, availability of effective interventions, and proposed treatment manuals.
Non-mental health professionals (teachers, nurses, physician, etc.)	1 day	Overview and screening of child mental health problems and discussion of managing strategies of behavior and emotional problems.

BPT = Behavioral Parent Training; CT = Child Training; and CBT = Cognitive Behavior Therapy

### 2. Manuals' development

Our group proceeded to carefully study the BPT, CT, and CBT manuals published for possible modifications. For the externalizing disorders treatment manual, materials were adapted from Cheryl So's detailed and comprehensive manuals developed for parents<sup>14</sup> and children.<sup>15</sup> Other materials were adapted from Barkley<sup>7</sup> and MTA Study's manuals.<sup>16</sup> The internalizing disorders treatment manual was derived from a synthesis of evidence-based treatment manuals first developed by Stark et al., Wood, Harrington and Moore, and Layne et al.<sup>17-19</sup> The externalizing manual was targeted primarily for children aged 6 to 12 years, whereas the internalizing manual was aimed at children aged 8 to 14 years. Both manuals were designed for youths with mild to moderate problems.

### 3. Flexible and adaptable interventions

We decided that the treatment manuals need to be adaptable and potentially tailored to the resources of each country. Our group also decided that the manuals should be designed to be implemented by health and/or educational personnel with varying levels of training.

Consistent with this approach, each manual includes necessary materials divided into three sections. The first one includes a general background, description of the purpose of the manual, and for whom it is intended. The second section presents relevant training material to professional groups (Table 1) who may use the manuals. The last section of the manuals include the actual content of the sessions of BPT, CT, and CBT that are delivered by trained persons to children and their parents, in either individual or group format (Table 2). If a given locality has few resources, the manuals can be used to guide the implementation of a fairly modest psycho-education intervention for children with mild problems whether in school, health care, or community settings by non-mental health professionals. Stimulant medication could be used for

**Table 2 – Content and number of therapy sessions for externalizing and internalizing treatment manuals**

Level	No. <sup>a</sup>	Content
<b>Externalizing Treatment Manual</b>		
Psychoeducational (parent)	2	Overview on behavior problems in children, on basic positive parenting techniques, and on ADHD (optional session).
BPT	7	Attending and special "playtime"; rewarding and ignoring skills; effective commands; token economy; response cost and time-out; stress, anger, and mood management; planning for future. Optional: homework coaching skills; managing misbehavior outside home.
CT	8	Train children on problem-solving process and emotional coping skills.
<b>Internalizing Treatment Manual</b>		
Psychoeducational (parental and child)	3	Overview on anxiety and depression problems in children and basic positive parenting techniques; introduction to coping strategies to child; recognition and tracking emotions.
CBT	5	Relaxation techniques, coping strategies, conflict resolution, how thoughts affect feeling; how to change and talk back to negative thoughts

ADHD = Attention-Deficit Hyperactivity Disorder; BPT = Behavior Parent Training; CT = Child Training; CBT = Cognitive Behavior Therapy

<sup>a</sup> Length of sessions: 90 to 120 min.

the treatment of children with ADHD. However, if a particular site has additional health care resources, more extensive evaluation and treatment could be provided. For children with moderate to severe problems, the manuals can be used alongside with more comprehensive treatment that includes medication treatment, particularly those who present with ADHD or are depressed. In brief, the treatment manuals are intended to be flexible and to use treatment modalities as befits the professional level of training and the nature of the child's need.

#### 4. Cultural adaptations

Our work group emphasized that each site should adapt the treatment manuals to the values, beliefs, and practices of the culture of the family and work with them based on a collaborative approach.<sup>20-21</sup> The treatment manuals were implemented in four sites that volunteered their participation: Porto Alegre, Brazil; Alexandria, Egypt; Beirut, Lebanon, and a Bedouin community in Israel.<sup>22</sup> While in some localities, such as Porto Alegre, few adaptations were needed, in others several modifications were made or recommended. These adaptations (see below) point out to the importance of being sensitive to the beliefs and practices of participating families, as well as possibly important site-to-site variations, both within and across different cultures.

##### 1) Language

Although the manuals were translated into Arabic by the Alexandria site, the other two Arabic sites needed to modify the translation in varying degrees to convey the intended meaning. Also, it was necessary to change idiomatic expressions that were understandable in one location (Egypt) but not in other (Lebanon). As would be expected there were terms, such as "snow man", in the English version, that had little meaning for the participants in most sites and needed to be excluded or replaced. Some concepts in the treatment manuals were not easily managed by participating children. The Lebanon site addressed this issue by using stories that explained misunderstood words. The Alexandria staff modified the 10-point "mood meter" used in the internalizing manual with a simpler terminology to help children rate their mood levels for the day.

##### 2) Stigma and motivation to seek treatment

The stigma associated with those with mental disorders can be considered a universal phenomena and a significant barrier to treatment. For the BPT program, two of the sites decided to use an individual rather than a group treatment format to protect the confidentiality of participating parents. One site (Bedouin village) conducted the therapy in a community setting instead of a clinic to eliminate the stigma associated with treatment. Also, some locations provided the CT and CBT to children in a school setting for the same reasons but in a group format. Given the reluctance of parents to seek treatment for their children, the staff of the Bedouin site decided to stage a couple of preliminary sessions with the parents in order to explain and convince them about the importance of psychological interventions and their benefits. Finally, given the reluctance of parents to attend therapy and the presence of physical barriers to treatment (transportation, conflicting schedules, etc.) two sites recommended shortening the length of the treatment or increasing the duration of each session or both.

Interestingly, acceptance of medication treatment varied considerably. In locations where the programs were implemented in clinical settings such as in Beirut and Porto Alegre, medication acceptance was higher. In contrast,

medication acceptance was low in school and community settings, such as Alexandria and the Bedouin village in Israel. It is also possible that negative attitudes toward medication are more evident in rural and traditional cultures, regardless of country.

#### 5. Adaptation of parents' sessions

The sites did not experience the need for major cultural modifications of the content of the parents' sessions. Parents were, in general, receptive and willing to implement new techniques at home. However, the topic of using non-physical means of modifying inappropriate behavior instead of corporal punishment required special discussion in most locations and additional time in others. Parents and teachers at some sites viewed physical punishment as a legitimate disciplinary practice. The concept of parental physical discipline (spanking) is characterized by its complexity and significant implications for treatment. There is evidence, for example, that the association between this type of punishment and disruptive disorders is not universal but mediated by culture.<sup>23-24</sup> Nevertheless, from a clinical point of view it is important that parents replace physical discipline with alternative punishment strategies.<sup>24</sup>

The importance of being sensitive to cultural values in parent training is further illustrated by the observation that in the Bedouin site in Israel the time-out (TO) punishment technique can be perceived as harsher than the more familiar and accepted physical punishment. Parents administered TO for shorter time or less frequently than needed. This perception might be related to the fact that people live in extended families where social cohesion and acceptance are significant social forces. Consequently, isolation and social rejection are powerful sanctions and perceived as such. Thus, it is possible that for some cultures BPT might need to assign more time for the discussion of punishment procedures and perhaps give more emphasis to response cost than TO.

Finally, the participating sites reported different experiences with regard to the PBT "attending and special playtime" session (# 3). While parents in Egypt had difficulty to implement this technique, parents in Beirut did not. Therapists in the Bedouin site reported that topics on positive parenting skills need more emphasis since parents' interactions with their children are more centered on satisfying basic and daily needs. In their view, "there is a need to emphasize the importance and meaning of personal and significant interactions between parents and their children, and allocate more time for it in the protocol".

#### 6. Adaptation of children's sessions

The staff of the Arabic sites expressed, in varied degrees, the difficulties participating children faced to understand the concepts of feelings and to express them. Emphasis was given to the fact that males in these cultures are not expected to express emotions. Several modifications were accomplished to address these difficulties. For example, in the Alexandria site the content of the CBT session (#3) on recognizing emotions and coping strategies was discussed in two sessions. In the Bedouin site, the session (#4) of the CT program on understanding one's emotion and emotional expression was modified. The therapist read a story depicting feelings and their expression and conducted a short discussion afterward. This change in the protocol helped accomplish the therapeutic objectives of the session.

It is important to remember that the experiences reported by the participating sites in this feasibility study are illustrative but cannot be construed as findings that can be generalized to their cultures. Socio-economic and individual differences, rather than cultural factors, could explain some of the experiences reported. Furthermore, some of these issues may not be specific to the cultural backgrounds of the sites but shared by many other cultural groups.<sup>20</sup>

### Conclusion

The feedback from the staff of the participating sites consistently point out that the treatment programs developed and their accompanying manuals can be successfully implemented to help children with externalizing and internalizing behavior problems. This is associated with the fact that therapists shared the same cultural background of the participants and could promptly identify cultural issues that will require adjustments to the manuals. Therapists were also supervised by experienced clinicians and participated in international conference calls designed to provide consultation, supervision and support.<sup>25</sup>

Future work will need to address the translation of the treatment manuals to other languages using formal techniques, such as back translation procedures, and their adaptation to other cultures. Issues of feasibility, palatability, sensitivity, and flexibility should be considered in this process.<sup>26</sup> The efficacy and cost-effectiveness of the programs have to be tested in different cultures since the treatment programs developed by our group cannot be indiscriminately viewed as empirically sound. The fact that our manuals were developed from evidence-based treatment programs and that the techniques chosen are extensively supported in the research literature does not mean that the effectiveness of the manuals has been demonstrated.

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