

# Evidence-Based Psychotherapy Practices for Preschool Children: A Brief Review for Clinicians

**Marina A. Zhukova**

*Saint-Petersburg State University, Saint-Petersburg, Russia,*

*ORCID: <https://orcid.org/0000-0002-3069-570X>, e-mail: [marina.zhukova@times.uh.edu](mailto:marina.zhukova@times.uh.edu)*

**Erika S. Trent**

*University of Houston, Houston, TX, USA,*

*ORCID: <https://orcid.org/0000-0003-4775-5999>, e-mail: [estrent@central.uh.edu](mailto:estrent@central.uh.edu)*

---

Despite growing consensus that clinical interventions must be supported by empirical evidence, preschool-aged children are more likely than older children to receive services with little to no empirical support. The dissemination of research findings on the efficacy of specific interventions is constrained by clinicians' limited access to peer-reviewed research journals and treatment manuals. The current paper provides a synthesis on the literature of psychological treatment for children with externalizing or internalizing problems and their parents or families. The review highlights key principles and treatment approaches that are supported by the evidence so that clinicians may readily implement these evidence-based treatments. The approaches that have the most empirical support for externalizing problems are parent behavior management training (PBMT), parent-child interaction therapy (PCIT), and cognitive behavioral therapy (CBT; in individual or group format, including social skills groups). For internalizing problems, research suggests that family-based CBT, group parent CBT (alone or in combination with group child CBT), trauma-focused CBT, and adapted versions of PCIT are the most evidence-supported treatments in preschool children. Common principles and techniques that are shared by a number of evidence-based treatments for preschool-aged children, and recommendations for clinicians and for the research community are discussed.

**Keywords:** Evidence-based treatments, internalizing, externalizing, preschool children.

**Funding.** The manuscript conceptualization and literature search were supported by the Grant from the President of Russian Federation MK-4217.2021.2 (P.I.: Marina A. Zhukova); result synthesis, interpretation and manuscript preparation were funded in part by Sirius University of Science and Technology, Sochi, Russia.

**For citation:** Zhukova M.A., Trent E.S. Evidence-Based Psychotherapy Practices for Preschool Children: A Brief Review for Clinicians. *Klinicheskaja i spetsial'naja psichologija=Clinical Psychology and Special Education*, 2022. Vol. 11, no. 2, pp. 22–42. DOI: 10.17759/cpse.2022110202

---

# Научно обоснованные методы психотерапии для детей дошкольного возраста: краткий обзор для клиницистов

**Жукова М.А.**

*Санкт-Петербургский государственный университет, Санкт-Петербург, Россия,  
ORCID: <https://orcid.org/0000-0002-3069-570X>, e-mail: [marina.zhukova@times.uh.edu](mailto:marina.zhukova@times.uh.edu)*

**Трент Э.С.**

*Хьюстонский университет, Хьюстон, Техас, США,  
ORCID: <https://orcid.org/0000-0003-4775-5999>, e-mail: [estrent@central.uh.edu](mailto:estrent@central.uh.edu)*

---

Несмотря на растущий консенсус в отношении того, что клинические вмешательства должны подкрепляться эмпирическими данными, дети дошкольного возраста чаще, чем дети более старшего возраста, получают психологическую помощь с минимальной эмпирической поддержкой или без нее. Распространение результатов исследований об эффективности конкретных вмешательств сдерживается ограниченным доступом клиницистов к рецензируемым научным журналам и руководствам по лечению. Настоящая статья представляет собой обобщение литературы по психологическому лечению детей с проблемами интернализации и экстернализации поведения, а также помощи их родителям или семьям. В обзоре освещаются ключевые принципы и подходы к лечению, подтвержденные фактическими данными, чтобы клиницисты могли легко применять эти доказательные методы. Подходы, которые имеют наибольшую эмпирическую поддержку для проблем экстернализации, — это обучение управлению поведением родителей (РВМТ), терапия взаимодействия родителей и детей (РСИТ) и когнитивно-поведенческая терапия (КПТ (СВТ); в индивидуальном или групповом формате, включая группы по социальным навыкам). Что касается проблем интернализации, исследования показывают, что семейная и групповая родительская КПТ (отдельно или в сочетании с групповой детской КПТ), ориентированная на травму КПТ и адаптированные версии РСИТ являются наиболее научно обоснованными методами психологической помощи детям дошкольного возраста. Обсуждаются общие принципы, которые входят в ряд научно обоснованных методов лечения детей дошкольного возраста, рекомендации для врачей и для научного сообщества.

**Ключевые слова:** доказательная терапия, интернализация, экстернализация, дети дошкольного возраста.

**Финансирование.** Разработка идеи исследования и поиск литературы были поддержаны Грантом Президента Российской Федерации МК-4217.2021.2 (Ведущий исследователь: Марина А. Жукова). Финансирование анализа, синтеза результатов и подготовки манускрипта частично осуществлялось из средств Научно-технологического университета «Сириус».

**Для цитаты:** Жукова М.А., Трент Э.С. Научно обоснованные методы психотерапии для детей дошкольного возраста: краткий обзор для клиницистов [Электронный ресурс] // Клиническая и специальная психология. 2022. Том 11. № 2. С. 22–42. DOI: 10.17759/cpse.2022110202

---

## Introduction

Early childhood is a key developmental period during which many mental health problems emerge for the first time [12]. Mental health difficulties at this point in life are predictive of continued problems later in development [e.g., 56]; as such, early and effective intervention is critical. As preschool-aged children are highly sensitive to their environment (e.g., household organization, parenting style, and peer relationships) [35], early intervention at this stage can have a clinically meaningful and long-lasting impact on preschoolers' wellbeing [10].

Externalizing and internalizing problems represent two clusters of psychological disorders requiring early identification and intervention in this age group. Externalizing problems characterized by behavioral dysregulation, poor impulse control, aggression, and defiance are the most common reason for parents of preschoolers to seek therapy and counseling [36; 74]. Internalizing problems are characterized by negative affectivity. They include depressive and anxiety symptoms [22], which also commonly prompt parents to seek professional help for their preschool-aged children, with prevalence rates of about 10% in this age group [25]. While intervention research for these two clusters of psychological problems among school-aged children and adolescents is extensive [e.g., 32; 53; 82], such intervention research efforts for preschoolers are relatively lagging in comparison. As this body of literature has developed in recent years, a synthesis of the current state of science is called for.

Despite growing consensus that clinical interventions must be supported by empirical evidence, preschool-aged children are more likely than older children to receive services with little to no empirical support [1; 79]. This can be attributed, in part, to a gap between research and implementation in clinical practice [14; 84]. A number of published randomized controlled trials and meta-analyses have demonstrated the efficacy (or lack thereof) of interventions for externalizing and internalizing problems in preschoolers [3; 27; 28; 34; 77].

However, the dissemination of these findings is constrained by clinicians' limited access to peer-reviewed research journals. In addition, journal articles reporting on clinical trials typically do not include sufficient detail required for clinicians to apply the techniques in their routine interventions. Moreover, treatment manuals that do include such details may not be readily available or accessible to clinicians wishing to implement evidence-based approaches due to financial, organizational, or geographic barriers. Treatment manuals are numerous, and many are based on overlapping behavioral principles and mechanisms of change (i.e., "common elements"; [40; 60]). Thus, a synthesis of the literature highlighting key principles and treatment approaches that are supported by the evidence may allow clinicians to readily implement them.

Existing reviews of evidence-based treatments for childhood internalizing and externalizing problems have typically categorized any child under the age of 13 years as “children” ([e.g., 29; 32; 72; 82; 87]; with the exception of a review by Eyberg et al. [28] on disruptive behavior treatment, which identified programs geared towards 2–5-year-olds). Most existing reviews thus have not examined specific treatment effects for preschool-aged children younger than 6 years. Given significant developmental differences between preschool-aged children and school-aged children, this is a gap that warrants attention. Among reviews that have specifically focused on preschool-aged children, these reviews have focused on a particular disorder (e.g., anxiety disorders [18]) or treatment approach (e.g., cognitive-behavioral intervention for anxiety [77]). Furthermore, describing the principles and shared elements of these evidence-based interventions has typically been outside the scope of these existing reviews (e.g., [83]). The present review fulfills an unmet need for a synthesis of the literature on evidence-based treatments for preschoolers that details their shared principles in sufficient detail to be implemented by clinicians.

The aims of this review are to: 1) inform clinicians on the current state of the literature; 2) provide clinicians with the information needed to evaluate available treatment approaches and make informed decisions in selecting evidence-based interventions; and 3) describe principles and techniques underlying these evidence-based interventions.

### **Evidence-Based Practices for Externalizing Problems in Preschool Children**

Externalizing behavior problems refer to a group of aggressive or impulsive behaviors that are aimed at the outward (or external, as the term suggests) environment. They include disruptive behavior, hyperactivity, and aggression [48]. The process of gaining autonomy from an attachment figure and exploration typically involves testing boundaries [17; 52]. Therefore, in the context of preschool-age children, it is important to distinguish between developmentally appropriate manifestations of defiance and problematic behaviors. Typically, when the magnitude and/or frequency of temper tantrums, aggressive behaviors, or disobedience are significant, parents tend to seek professional advice [64]. The mean prevalence of externalizing behavior problems in preschool children is estimated at 9% [25].

Generally, mental health problems of young children are viewed through the dimensional lens of developmental psychopathology that focuses on symptoms rather than distinct diagnostic categories. Preschool children rarely receive formal diagnoses such as attention-deficit/hyperactivity disorder (ADHD) or oppositional defiant disorder (ODD) prior to placement in a more rigorous academic environment [86]; however, they may exhibit poor impulse control, defiance, outward aggression, and behavioral dysregulation, which fall under the umbrella of externalizing behavior problems. Importantly, evidence-based techniques that are applied to externalizing behavior problems can be used regardless of the magnitude of the problem or the presence of a diagnosis. Below, we review evidence-based principles and interventions for ADHD and temper tantrums, as well as aggression and defiance (for further information about externalizing problems in children, see [8]).

### ***Parent Behavior Management Training***

In severe cases in which children fail to pay attention or control their motor agitation, parents may seek intervention before children begin school, even though the ADHD diagnosis is typically given after children have entered structured classroom instruction. Parent management training and behavioral classroom interventions (if children are attending preschool) are considered frontline interventions for ADHD in this age group.

The common underlying principle of all evidence-based interventions for ADHD is the implementation of structure and consistency [26]. Strategies aimed at the attentional component of ADHD include establishing eye contact, using visual reminders, creating checklists, scheduling breaks, and alternating between activities using timers. Techniques that address hyperactivity include establishing explicit rules, ignoring mild misbehavior, and providing labeled praise for desired behavior [71]. As working memory is implicated in ADHD, the use of simple, specific instructions that do not include multiple steps is encouraged to minimize information overload. Parent training for ADHD is a brief intervention (up to 10 sessions) that is done either in a group format or individually and includes behavior modification [86]. Given that ADHD is highly heritable [42], parent training has the added value of teaching parents themselves how to structure their environment and establish routines; such parenting practices play an important role in remediating the symptoms of ADHD in children.

For older age groups (ages 6–12 years), the combination of behavioral interventions and medication may lead to maximized treatment gains of ADHD: specifically, adding medication secondary to initial behavior modification results in better outcomes in oppositional behavior [62]. However, for preschoolers (ages younger than 6 years), the recommendation remains to start with behavioral interventions and later supplement these with medications (i.e., methylphenidate in particular [86]) if behavioral interventions alone do not lead to significant improvement [2]. However, given recent concerns with the overprescription of stimulants to youth [4] and the potential neurological and psychiatric side effects of long-term methylphenidate use in preschoolers (see [41] for a review), caution is advised when prescribing stimulant medication to this population.

To address temper tantrums and defiance, the use of parent training in behavior modification (PTBM) is recommended [37]. PTBM is an evidence-based approach that can be used regardless of the presence of the diagnoses. In fact, it is advised to intervene before the diagnosis of ODD is given. In PTBM, parents are taught how to handle specific behaviors and how to effectively set limits. It utilizes principles of behavioral psychology, such as the use of contingencies, reinforcement, negotiation, and contracts, among others.<sup>1</sup> First, the intervention focuses on repairing the relationship between children and parents by engaging in “special time.” Special time is a period of time set aside each day, during which

---

<sup>1</sup> Contingencies refer to consequences that immediately follow a behavior. They are broadly categorized into reinforcers, which aim to increase the frequency of desired behaviors (e.g., verbal praise, material reward), and punishment, which aims to decrease the frequency of undesired behaviors (e.g., reprimand, removal of a toy, time-out). Negotiating refers to the process of establishing explicit rules about rewards for following rules and costs of not adhering to them. A behavior contract outlines parents’ expectations for their child’s behavior and specifies the privileges attached to desired behavior. For an in-depth description of behavioral principles and their application in PTBM [42].

children are provided with a unique opportunity for positive attention and freedom of choice in activities. Providing positive attention and putting children in charge allow parents to provide children a sense of agency and trust, which is the first step in rebuilding the parent-child relationship. Parents are advised to refrain from using questions or directions during the special time. Special time is implemented on a consistent basis regardless of how a child behaves during the day.

Next, behavior modification techniques are introduced. Generally, all behavioral techniques capitalize on the principles of operant conditioning [37]. They postulate that the consequences of behavior either increase or decrease the frequency of future behaviors. The first step in modifying undesired behaviors involves ignoring. Parents are encouraged not to engage with children in any way until they stop undesired behavior. When ignoring is used, parents are prepared for an extinction burst, which refers to an increase in the undesired behavior. Like all other behavior techniques, ignoring needs to be applied systematically and consistently (across time and settings) until the behavior is extinguished. Ignoring problematic behaviors is paired with praising desired behaviors. Importantly, ignoring is *not* recommended when the child is posing a danger to themselves or others (e.g., hurting others, running onto a street); in such instances, parents are taught to set firm limits using time-outs (i.e., placing the child in a setting without reinforcements for a specified number of minutes) and time-out warnings (i.e., a statement warning the child of an impending time-out unless they follow directions).

Parents are also taught behavioral techniques to increase desired behaviors. For example, how to provide labeled praise so that children know what specific behavior triggered it. Another effective technique is the token economy, which is a system to reward children for behaving in desired ways. To establish a token economy, parents and children collaboratively assign certain values to different chores and activities that the child is supposed to do, for which they receive points/tokens. Children can exchange their acquired points/tokens for rewards from a predetermined list of activities, prizes, or privileges. After the token system is in place, parents are encouraged to have a conversation about the behavior response cost, which is the removal of privileges after specific undesired behaviors (which are also negotiated with the child in advance).

A recent meta-meta-analysis, in which the authors combined all meta-analyses published on the topic until 2018 [57], evaluated the effectiveness of parent training interventions for children with externalizing behaviors. A moderate effect size (standardized mean difference [SMD]=0.45, 95% confidence interval [CI]: 0.35 to 0.55,  $p<.0001$ ) was found for parent-based interventions for externalizing behavior problems of children under 13 years of age, and this effect was stable at follow-up from 1 to 72 months post-treatment.

### ***Parent-Child Interaction Therapy (PCIT)***

An alternative intervention for externalizing behaviors is Parent-Child Interaction Therapy (PCIT), which is parent training done in vivo [46]. PCIT typically consists of two phases. In the child-directed interaction phase, parents are taught selective attending for the purpose of improving the parent-child relationship. The main approach in this phase focuses on ignoring undesired behaviors (e.g., tantrums) and reinforcing positive,

appropriate behaviors (e.g., verbalizing anger). Next, during the parent-directed interaction phase, parents are taught how to implement effective discipline strategies. Both phases typically begin with a didactic, followed by parent-child interaction in which parents put these lessons into action; a clinician observes the parent-child interaction and provides recommendations and feedback to parents in real-time using a “bug in the ear” device. The intervention is typically used with children from 2 to 7 years of age. A meta-analysis demonstrated that PCIT is effective in decreasing problematic externalizing behaviors (standardized mean difference [SMD]=-0.87, 95% CI: -1.17 to -0.58) [75]. One example of programs that include components of both PCIT and PTBM is the Incredible Years Program [81]. The goals of the Incredible Years Program are to promote the values of positive parenting and to coach parents how to effectively communicate with their children. This is accomplished by providing parents didactics and by watching and discussing videos of parents’ interactions with their children. The Incredible Years program has been successfully implemented with families of diverse cultural backgrounds [44].

### ***Social Skills Groups***

Social skills groups are an intervention frequently used with children with aggressive and defiant behavior [43]. Social skills interventions for preschool-aged children typically teach children effective communication skills by exposing them to ecologically valid stressors. These include negotiating with peers, taking turns, being assertive, and understanding boundaries. Social skills groups teach children emotion regulation techniques such as taking breaks and verbalizing frustration instead of acting out physically. Groups typically range in size from 6 to 10 children. In social skills groups, children receive instant feedback from their peers and the therapists. The benefits of social skills groups have been widely studied in the context of ODD and CD in older youth. A recent meta-analysis on the efficacy of social skills training for externalizing problems examined 98 studies, of which 22 studies included children under the age of six [9]. This meta-analysis found that, in general, adolescents (ages 16 and above) benefited more from the interventions than younger youth. However, a small positive effect of social skills groups on aggressiveness, antisocial behavior, delinquency, and oppositional behavior was also observed in preschool-aged children (Cohen’s  $d=0.15\pm 0.18$ ) [9]. The findings from the literature regarding the efficacy of social skills groups are mixed; some studies have found a “peer contagion effect,” which refers to the exacerbation of aggressive behavior in youth who are placed in environments with deviant peers [24]. The peer contagion effect is observed especially when aggressive children are clustered together into intervention groups in a homogenous manner [45]. While studies reporting peer contagion typically involve samples of adolescents, there is also evidence that young children can learn aggressive behavior through modeling [61]. As such, more research is needed to better understand the mechanisms and the circumstances in which peer contagion is more likely.

Of note, the cognitive component is not emphasized in the evidence-based interventions for preschool-children with externalizing behavior problems. A recent meta-analysis on the effectiveness of cognitive-behavioral therapy (CBT) for externalizing problems demonstrated that the cognitive aspect of therapy is introduced in most studies once children reach school age [7]. As such, when treating externalizing behaviors in younger children, it is commonly the parents’ maladaptive cognitions that are addressed in lieu of the child’s (e.g., encouraging a parent to cognitively reframe their child’s acting out

as a request for attention, rather than an attempt to upset the parent). Taken together, behavioral interventions have the strongest evidence for treating preschool-aged children with externalizing behaviors. These interventions are relatively cost-effective and brief.

Some interventions that do not have sufficient evidence of effectiveness for treating externalizing behaviors in preschool children include play therapy, pet therapy [38], sensory integration (which is especially popular in the context of ADHD), and dietary modifications [13]. While the listed approaches are not harmful [88], their efficacy is inconclusive or has not been demonstrated for externalizing behavior problems.

### **Evidence-Based Practices for Internalizing Problems in Preschool Children**

Early identification and intervention for internalizing problems (i.e., anxiety and related problems and depression) in preschool children are critical, given that untreated internalizing problems are chronic and impairing [50; 78]. When assessing anxiety-related problems in preschool children, it is important that clinicians distinguish between developmentally appropriate fears and problematic anxiety. Fear of the dark may be expected of a 2-year-old child, whereas this same fear may be less appropriate for a 10-year-old child, for instance.

The four most common anxiety disorders in preschool-aged children are separation anxiety disorder (fear of separation from attachment figures), social anxiety disorder (fear of one or more social situations), generalized anxiety disorder (excessive anxiety and worry about a number of events), and specific phobia (marked fear of a specific object or situation) [22; 83]. Notably, separation anxiety problems typically manifest between the ages of 5–7 years (i.e., when children begin attending school) in the form of school refusal [20]. While less common, selective mutism (failure to speak in specific social situations where speaking is expected) is another anxiety disorder that onsets typically in the preschool years [80] (for additional information about childhood anxiety disorders, see [55]).

Contrary to initial beliefs that preschoolers are not cognitively capable of experiencing depression, research has found that depression can indeed affront children as young as 3 years [83]. Depression in preschoolers may present differently from depression in older youth that clinicians typically encounter, but several key markers distinguish depressed preschoolers from their non-depressed peers: decreased energy, increased anhedonia, irritability, excessive guilt, and engagement in activities or “play themes” related to death or suicide [51; 83] (for additional information about childhood depressive disorders, see [65]).

Below, we review evidence-based approaches for treating anxiety and related problems and depression in preschoolers. The DSM-5 no longer categorizes obsessive-compulsive disorder (OCD) and posttraumatic stress disorder (PTSD) as anxiety disorders; however, symptoms of these two disorders can onset in preschool [19; 70], and the principles of evidence-based treatment of these problems overlap with those for anxiety disorders. As such, in this review, we conceptualize these problems as falling under the umbrella of “anxiety and related problems.”



### ***Cognitive Behavioral Therapy***

The past two decades have seen an increase in research testing the efficacy of psychotherapy treatments for preschool anxiety and related problems. CBT-based treatments have the greatest empirical support for treating this cluster of internalizing problems in preschool children. Specifically, family-based CBT is efficacious in treating various types of anxiety and related problems, including separation anxiety, social anxiety, behavioral inhibition, generalized anxiety, phobias, selective mutism, mixed anxiety symptoms, traumatic stress, and OCD symptoms [18]. Family-based CBT primarily involves only the therapist and the child's parents, although it can also involve the child (e.g., "Being Brave" program; [33]). Other CBT-based treatments for preschool anxiety and related problems include group parent CBT (alone or in combination with group child CBT) and trauma-focused CBT [18].

*Family-based CBT.* One of the key principles of family-based CBT for anxiety-related problems is reducing problematic parenting behaviors that (inadvertently) contribute to young children's anxiety. A common example of such parenting behaviors includes parental overprotection, in which parents attempt to shield their child from anxiety-provoking experiences. Although this decreases the child's anxiety in the short term, it interferes with the child's normative development of autonomy and self-efficacy in the process (e.g., a mother accompanying her child on all social outings; [16]). Another common example of problematic parenting behaviors is family accommodation, which allows the child to avoid situations that cause anxiety (e.g., allowing the child to sleep with a light every night; [76]). These parenting behaviors may provide the child (and parent) relief in the short term but actually maintains the child's anxiety in the long term.

In family-based CBT, the therapist first teaches the parent about these problematic parenting practices and their effect on the child's anxiety. Thereafter, the therapist teaches the parent how to encourage the child to face their fears instead, in an effort to teach the child that their fears are manageable and/or unsubstantiated. Parents and children develop a fear hierarchy (or "fear ladder"), which allows them to complete exposure exercises starting with relatively low fear-provoking stimuli (e.g., for a child with a dog phobia, seeing a photograph of a dog) to greater fear-provoking stimuli (e.g., petting a dog).

In a recent systematic review, 38 treatments in samples of children with a mean age of under 8 years (N=2,228 children) were evaluated and classified according to one of five levels of empirical support: well-established, probably efficacious, possibly efficacious, experimental, or of questionable efficacy [18]. The first three levels of treatments have demonstrated varying degrees of efficacy in randomized controlled trials (see [73] for details), "experimental" treatments have not been tested in a randomized controlled trial or otherwise do not meet the criteria to be possibly efficacious, and treatments of "questionable" efficacy are found to be inferior to other treatments or control groups. In this review, family-based CBT was the only treatment classified as "well-established" [18]. Indeed, the efficacy of CBT for preschool anxiety is supported by a recent meta-analysis of 42 samples (N=2,611; SMD=-0.81 compared to control conditions) [77].

Family-based CBT is also the most strongly empirically supported treatment for early-onset OCD in children aged 5–8 years [31]. It draws on the principles of CBT for OCD

in older youth; as such, a core component of treatment is exposure and response prevention (ERP; [31]). ERP involves the therapist and parent assisting children to challenge fears through facing obsession-provoking situations (“exposure”) while reducing or eliminating compensatory compulsions and avoidance (“response prevention”). For example, in treating a child with cleanliness-related obsessions and compulsions, the therapist may coach the parent to assist their child to touch a restroom floor (exposure) without washing their hands for a specified amount of time (response prevention).

Family-based CBT for early-onset OCD differs from CBT for OCD in older youth in several ways. First, the therapist uses concrete and “child-friendly” metaphors to educate children on the connections between obsessions and compulsions (e.g., obsessions are a “worry monster” and tell one to do things) and explain the benefits of ERP exercises (e.g., akin to a “yucky” medicine that makes one feel better; [5]). Second, therapists extensively involve parents as “coaches” who ensure the child adheres to treatment outside of sessions. Third, therapists address parental accommodation of child OCD behaviors. Finally, therapists address parents’ own exposure to their own distress in response to their child’s distress during ERP exercises [5].

*Group CBT.* CBT for preschool anxiety and related disorders has also been adapted to group formats to allow treatment delivery to multiple families at once. Group CBT, whether it involves only parents, or involves parents and children, is classified as a “possibly efficacious” treatment for preschool anxiety and related problems [18]. Group parent CBT is efficacious for social anxiety/behavioral inhibition and mixed anxiety symptoms, and group parent CBT in combination with group child CBT is efficacious for separation anxiety, social anxiety/behavioral inhibition, worry/fear/generalized anxiety, phobias, and mixed anxiety symptoms (e.g., Fun FRIENDS program, Turtle Program; [5; 15; 18]). Group parent CBT and group child CBT address much of the same domains as family-based CBT, in addition to addressing parents’ own anxiety. Another key feature of group parent CBT sans children is that exposure exercises are assigned to parents to conduct in between sessions, rather than conducting exposure *in vivo* (i.e., within the session with the child).

*Trauma-focused CBT (TF-CBT).* TF-CBT is the most strongly empirically supported treatment for preschool PTSD [69]. TF-CBT is a short-term, structured treatment developed for young children impacted by trauma and their caregivers. It addresses posttraumatic symptoms and other affective symptoms related to the trauma by teaching children skills to manage difficult emotions and reduce negative patterns of behavior stemming from the trauma. Specifically, TF-CBT has been tailored for preschool-age children by 1) using a cartoon-based narrative to address the trauma; 2) co-constructing a book with the child’s narrative of the trauma; 3) considering the parent’s own trauma and trauma recovery; and 4) showing the parents a videotape of their child narrating the trauma, in later stages of treatment [68]. Variants of TF-CBT for preschool PTSD, which also have empirical support, include family-based TF-CBT (i.e., joint child-parent sessions) with or without a trauma narrative component [21] and *stepped-care* TF-CBT [67], which titrates the intensity of treatment according to the child’s level of severity or need (and thus, reduces delivery costs as compared to typical TF-CBT). A recent systematic review of trials of TF-CBT for PTSD in preschoolers ages 3–6 years concluded that TF-CBT meets the criteria as a “possibly efficacious” intervention for PTSD in this age group [54].

### ***Parent-Child Interaction Therapy (PCIT)***

PCIT was originally developed for young children with externalizing problems (see above for a detailed description) but has been adapted for preschool children with separation anxiety [63] and for preschool children with depression [49]. PCIT modified for preschool separation anxiety adds a third phase to the typical two-phase sequence described above. This third phase, titled the “bravery-directed interaction” phase, includes a didactic session that provides parental psychoeducation on the nature of anxiety and the utility of graduated exposure [63]. This session also involves developing a hierarchy of activities the child typically avoids (titled the “bravery ladder”) and a reinforcement system to reward the child for completing exposures (titled “reward stones”). The didactic session is followed by two “coaching” sessions which implement graduated exposure in vivo. As such, this modified PCIT for separation anxiety disorder incorporates elements of family-based CBT while also making use of PCIT’s live coaching model.

To date, PCIT-Emotion Development (PCIT-ED) is the only evidence-based psychotherapy treatment for preschool depression [49]. PCIT-ED is an adaptation of PCIT that is specifically tailored for preschool depression, which adds a third phase titled the “emotion development” module. The ED module aims to improve children’s emotional competence (i.e., ability to identify and understand emotions) and emotion regulation skills. This is done by teaching parents in vivo how to serve as an “emotion coach” and regulate their children’s intense emotions that are specifically related to depression (e.g., persistent negative affect, sadness, or guilt). A randomized controlled trial found that, compared to a waiting list condition, PCIT-ED lowered rates of depression (odds ratio=9.52, 95% CI [8.44, 10.74]), depression severity (Cohen’s  $d=1.01$ , 95% CI not reported), and levels of impairment (Cohen’s  $d=1.16$ , 95% CI not reported [49]).

### ***Treatments with Insufficient Support for Preschool Internalizing Problems***

Clinicians are cautioned against using treatments with insufficient empirical support. While play therapy is currently widely used with young children with a range of difficulties, including internalizing problems, there is little evidence supporting the efficacy of play therapy for preschool anxiety and depression [83]. While clinical trials have tested play therapy in the treatment of preschool anxiety and related problems, it is currently classified as “experimental” given insufficient empirical support for its efficacy [18]. Likewise, attachment-based therapy is also currently classified as “experimental” in the treatment of preschool anxiety and related problems [18].

It is important to note that CBT, and some CBT-related techniques, are also insufficiently supported for *certain* internalizing problems in preschoolers. Specifically, relaxation therapy has been classified as having “questionable” efficacy in the treatment of preschool OCD; relaxation therapy was found to be inferior to other treatment groups and waitlist control groups [18]. Moreover, CBT has yet to be adapted and tested for depression in preschool children [83]; this is in part due to the fact that depression was only recently recognized in this age group, and intervention research is still lagging.

Finally, a recent systematic review of 11 studies testing the use of medication treatment for internalizing problems in preschool children noted that this literature is

extremely limited and weak in terms of methodological rigor [6]. Additionally, although a growing number of children ages 2–5 years are being prescribed antipsychotic medication to manage mood, no published clinical trial to date has tested the efficacy and potential harm of antipsychotic medication for very young children with depression [59]. As such, empirically supported psychotherapy is recommended as a first-line treatment, with pharmacologic interventions considered in unique cases and with caution [6].

## **Discussion**

The first aim of the current review was to synthesize the literature on evidence-based approaches to treating externalizing and internalizing problems in preschoolers. The approaches that have the most empirical support for externalizing problems are parent behavior management training (PBMT), parent-child interaction therapy (PCIT), and cognitive behavioral therapy (CBT; in individual or group format, including social skills groups). For internalizing problems, research suggests that family-based CBT, group parent CBT (alone or in combination with group child CBT), trauma-focused CBT, and adapted versions of PCIT are the most evidence-supported treatments in preschool children.

Importantly, an integral component in both internalizing and externalizing interventions for preschoolers is the heavy involvement of parents. Parents are the main figures in the environment of preschool children and thus are the key to their successful socialization and adaptive functioning; therefore, their active involvement in therapy with preschoolers is important. Many parents inadvertently contribute to the exacerbation of problematic behaviors [e.g., 68]; for example, parents of clinically anxious children may enable avoidance of feared stimuli, and parents of children with externalizing problems may reinforce tantrums by responding with attention. For these reasons, the first component of many evidence-based treatments with preschoolers is providing psychoeducation to parents and teaching them new interaction strategies.

The synthesis of the literature revealed several gaps that warrant attention from the research community. First, more clinical trials testing potentially efficacious treatments for preschool depression are needed. Intervention research for preschool depression lags behind that for externalizing problems and anxiety problems, with PCID-ED being the only evidence-based treatment currently available for preschool depression. Adapting and testing CBT for depression in preschool children is an important next step for intervention research. Another future direction for research is studying the efficacy and potential side effects of medication for internalizing problems in preschoolers. Additionally, the research community is recommended to engage in dissemination efforts. Despite research studies that demonstrate the inefficacy of certain treatments (e.g., play therapy) for externalizing and internalizing problems, in practice, such treatments continue to be used in lieu of evidence-based treatments. While this issue is observed in healthcare research as a whole and is not unique to psychotherapy research (e.g., [85]), the research community is encouraged to utilize dissemination practices where possible [66], study the effectiveness of treatments in routine clinical practice, and identify barriers in the implementation of evidence-based treatment for preschool children.

The second aim of this review was to provide clinicians with information to make informed decisions to select evidence-based interventions. To date, there is widespread

use of interventions for preschoolers that have little to no empirical support. Such interventions include play therapy, attachment-based therapy, relaxation therapy (in the case of early-onset OCD), sensory integration, animal therapies, and biofeedback. Regarding play therapy, it should be noted that given that play is one of the leading activities for preschool children, elements of play therapy are incorporated into several evidence-based approaches. For instance, PMBT utilizes “special time,” which in essence is a child-centered non-directive play therapy. The first phase of PCIT also uses unstructured play to repair the parent–child relationship. While play is a necessary component of these interventions, the evidence suggests that it is not sufficient to produce the behavioral change needed to alleviate internalizing and externalizing problems. There is growing research in the field examining the efficacy of play therapy and animal-assisted therapy, among others [11; 23; 47; 58]. While it is possible that these interventions may demonstrate an evidence base in the future, currently, they are *not* recommended for the treatment of internalizing and externalizing problems in preschoolers. Clinicians are strongly encouraged to use empirically supported treatments instead. Professional training to implement several of the empirically supported treatments discussed in this article are available through resources such as *Evidence-Based Behavioral Practice* (<https://ebpp.org>), *PracticeWise* (<https://practicewise.com>), the Beck Institute (<https://beckinstitute.org>), and PCIT International (<https://pcit.org>).<sup>2</sup>

The field of research on intervention for preschool internalizing and externalizing problems is still evolving. As new findings from upcoming clinical trials emerge, recommendations may be adjusted. As such, it is important for clinicians to stay up-to-date with the literature as much as possible through methods such as: reading peer-reviewed journal articles through an institutional subscription, in open-access journals, or available from the authors; and reading resources identified in online resource centers (e.g., Substance Abuse and Mental Health Services Administration’s Evidence-Based Practices Resource Center; <https://www.samhsa.gov/resource-search/ebp>). The American Psychological Association Society of Clinical Psychology (Division 12) provides a free online resource detailing various treatments and their level of empirical support (<https://div12.org/treatments/>). Additionally, the Blueprints for Healthy Youth Development offers an online database of evidence-based treatment programs for youth (<https://www.blueprintsprograms.org>).

Finally, the third aim of this review was to provide clinicians with a framework for implementing evidence-based approaches. In this review, we described the principles underlying evidence-based interventions. Treatment manuals and treatment programs frequently share a common treatment approach and techniques at their core [60]. In describing the shared treatment approaches, we highlight that an evidence-based approach to intervention does not necessarily equate to manual-based therapy. While manualized treatments are important in psychotherapy research and helpful in clinical practice, clinicians may be advised to adopt a stance of “flexibility within fidelity” [39]. Fidelity to the treatment approach that is supported by empirical evidence, combined with the flexible application of the approach to the needs and presentation of each patient, will likely yield the best therapeutic outcomes. This is especially the case with treating internalizing and externalizing problems with preschoolers, whose symptom presentations and

---

<sup>2</sup> Resources are provided for informational purposes only and do not constitute an endorsement.

environments vary widely and represents a still-emerging area of intervention research. To provide the best care possible to this population in need, clinicians are encouraged to apply evidence-based approaches described above in a way that appropriately addresses each child's and parent's needs.

## References

1. Ali M.M., Teich J., Lynch S. et al. Utilization of mental health services by preschool-aged children with private insurance coverage. *Administration and Policy in Mental Health and Mental Health Services Research*, 2018, vol. 45, no. 5, pp. 731–740. DOI: 10.1007/s10488-018-0858-x
2. APA working group on psychoactive medications for children and adolescents. Report of the working group on psychoactive medications for children and adolescents: psychopharmacological, psychosocial, and combined interventions for childhood disorders: evidence base, contextual factors, and future directions. American Psychological Association, 2006. 245 p.
3. Barch D.M., Whalen D., Gilbert K. et al. Neural indicators of anhedonia: Predictors and mechanisms of treatment change in a randomized clinical trial in early childhood depression. *Biological Psychiatry*, 2019, vol. 85, no. 10, pp. 863–871. DOI: 10.1016/j.biopsych.2020.06.032
4. Barnett E.R., Trepman A.Z., Fuson H.A. et al. Deprescribing psychotropic medications in children: results of a national qualitative study. *BMJ Quality & Safety*, 2020, vol. 29, no. 8, pp. 655–663. DOI:10.1136/bmjqs-2019-010033
5. Barrett P., Fisak B., Cooper M. The treatment of anxiety in young children: Results of an open trial of the Fun FRIENDS program. *Behaviour Change*, 2015, vol. 32, no. 4, pp. 231–242. DOI: 10.1017/bec.2015.12
6. Barterian J.A., Rappuhn E., Seif E.L. et al. Current state of evidence for medication treatment of preschool internalizing disorders. *The Scientific World Journal*, 2014, vol. 2014, article ID 286085. DOI: 10.1155/2014/286085
7. Battagliese G., Caccetta M., Luppino O.I. et al. Cognitive-behavioral therapy for externalizing disorders: A meta-analysis of treatment effectiveness. *Behaviour Research and Therapy*, 2015, vol. 75, pp. 60–71. DOI: 10.1016/j.brat.2015.10.008
8. Beauchaine T.P., Hinshaw S.P. (eds.) *The Oxford handbook of externalizing spectrum disorders*. Oxford University Press, 2015. 544 p.
9. Beelmann A., Lösel F.A. Comprehensive meta-analysis of randomized evaluations of the effect of child social skills training on antisocial development. *Journal of Developmental and Life-Course Criminology*, 2020, vol. 7, pp. 41–65. DOI:10.1007/s40865-020-00142-8
10. Blackman J.A. Early intervention: A global perspective. *Infants & Young Children*, 2002, vol. 15, no. 2, pp. 11–19. DOI:10.1097/00001163-200210000-00004

11. Bratton S.C., Ray D., Rhine T. et al. The efficacy of play therapy with children: A meta-analytic review of treatment outcomes. *Professional Psychology: Research and Practice*, 2005, vol. 36, no. 4, pp. 376–390. DOI: 10.1037/0735-7028.36.4.376
12. Brauner C.B., Stephens C.B. Estimating the prevalence of early childhood serious emotional/behavioral disorders: Challenges and recommendations. *Public Health Reports*, 2006, vol. 121, no. 3, pp. 303–310. DOI: 10.1177/003335490612100314
13. Caye A., Swanson J.M., Coghil D. et al. Treatment strategies for ADHD: an evidence-based guide to select optimal treatment. *Molecular Psychiatry*, 2019, vol. 24, no. 3, pp. 390–408. DOI: 10.1038/s41380-018-0116-3
14. Chorpita B.F. The frontier of evidence-based practice. In A.E. Kazdin, J.R. Weisz (eds.), *Evidence-Based Psychotherapies for Children and Adolescents*. New York, NY: The Guilford Press, 2003, pp. 42–59.
15. Chronis-Tuscano A., Rubin K.H., O'Brien K.A. et al. Preliminary evaluation of a multimodal early intervention program for behaviorally inhibited preschoolers. *Journal of Consulting and Clinical Psychology*, 2015, vol. 83, no. 3, pp. 534–540. DOI: 10.1037/a0039043
16. Clarke K., Cooper P., Creswell C. The Parental Overprotection Scale: Associations with child and parental anxiety. *Journal of Affective Disorders*, 2013, vol. 151, no. 2, pp. 618–624. DOI: 10.1016/j.jad.2013.07.007
17. Colson E.R., Dworkin P.H. Toddler development. *Pediatrics in Review*, 1997, vol. 18, pp. 255–259. DOI: 10.1542/pir.18-8-255
18. Comer J.S., Hong N., Poznanski B. et al. Evidence base update on the treatment of early childhood anxiety and related problems. *Journal of Clinical Child & Adolescent Psychology*, 2019, vol. 48, no. 1, pp. 1–15. DOI: 10.1080/15374416.2018.1534208
19. Coskun M., Zoroglu S., Ozturk M. Phenomenology, psychiatric comorbidity and family history in referred preschool children with obsessive-compulsive disorder. *Child and Adolescent Psychiatry and Mental Health*, 2012, vol. 6, no. 1, pp. 1–9. DOI: 10.1186/1753-2000-6-36
20. Csoti M. (ed.) *School phobia, panic attacks and anxiety in children*. London; Philadelphia: Jessica Kingsley Publishers, 2003. 267 p.
21. Deblinger E., Mannarino A.P., Cohen J.A. et al. Trauma-focused cognitive behavioral therapy for children: impact of the trauma narrative and treatment length. *Depression and Anxiety*, 2011, vol. 28, no. 1, pp. 67–75. DOI: 10.1002/da.20744
22. *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington, VA: American Psychiatric Association, 2013.
23. Dietz T.J., Davis D., Pennings J. Evaluating animal-assisted therapy in group treatment for child sexual abuse. *Journal of Child Sexual Abuse*, 2012, vol. 21, no. 6, pp. 665–683. DOI: 10.1080/10538712.2012.726700

24. Dishion T.J., Dodge K.A. Peer contagion in interventions for children and adolescents: Moving towards an understanding of the ecology and dynamics of change. *Journal of Abnormal Child Psychology*, 2005, vol. 33, no. 3, pp. 395–400. DOI: 10.1007/s10802-005-3579-Z
25. Egger H.L., Angold A. Common emotional and behavioral disorders in preschool children: presentation, nosology, and epidemiology. *Journal of Child Psychology and Psychiatry*, 2006, vol. 47, no. 3–4, pp. 313–337. DOI: 10.1111/j.1469-7610.2006.01618.x
26. Evans S.W., Owens J.S., Bunford N. Evidence-based psychosocial treatments for children and adolescents with attention-deficit/hyperactivity disorder. *Journal of Clinical Child & Adolescent Psychology*, 2014, vol. 43, no. 4, pp. 527–551. DOI: 10.1080/15374416.2013.850700
27. Evans S.W., Owens J.S., Wymbs B.T. et al. Evidence-based psychosocial treatments for children and adolescents with attention deficit/hyperactivity disorder. *Journal of Clinical Child & Adolescent Psychology*, 2018, vol. 47, no. 2, pp. 157–198. DOI: 10.1080/15374416.2017.1390757
28. Eyberg S.M., Nelson M.M., Boggs S.R. Evidence-based psychosocial treatments for children and adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology*, 2008, vol. 37, no. 1, pp. 215–237. DOI: 10.1080/15374410701820117
29. Forti-Buratti M.A., Saikia R., Wilkinson E.L. et al. Psychological treatments for depression in pre-adolescent children (12 years and younger): Systematic review and meta-analysis of randomised controlled trials. *European Child & Adolescent Psychiatry*, 2016, vol. 25, no. 10, pp. 1045–1054. DOI: 10.1007/s00787-016-0834-5
30. Freeman J.B., Garcia A.M., Fucci C. et al. Family-based treatment of early-onset obsessive-compulsive disorder. *Journal of Child and Adolescent Psychopharmacology*, 2003, vol. 13, no. 2, suppl. 1, S71–S80. DOI: 10.1089/104454603322126368
31. Freeman J., Sapyta J., Garcia A. et al. Family-based treatment of early childhood obsessive-compulsive disorder: the Pediatric Obsessive-Compulsive Disorder Treatment Study for Young Children (POTS Jr) — a randomized clinical trial. *JAMA Psychiatry*, 2014, vol. 71, no. 6, pp. 689–698. DOI: 10.1001/jamapsychiatry.2014.170
32. Higa-McMillan C.K., Francis S.E., Rith-Najarian L. et al. Evidence base update: 50 years of research on treatment for child and adolescent anxiety. *Journal of Clinical Child & Adolescent Psychology*, 2016, vol. 45, no. 2, pp. 91–113. DOI: 10.1080/15374416.2015.1046177
33. Hirshfeld-Becker D.R., Masek B., Henin A. et al. Cognitive behavioral therapy for 4- to 7-year-old children with anxiety disorders: a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 2010, vol. 78, no. 4, pp. 498–510. DOI: 10.1037/a0019055
34. Högström J., Olofsson V., Özdemir M. et al. Two-year findings from a national effectiveness trial: Effectiveness of behavioral and non-behavioral parenting programs. *Journal of Abnormal Child Psychology*, 2017, vol. 45, no. 3, pp. 527–542. DOI: 10.1007/s10802-016-0178-0



35. Inguaggiato E., Sgandurra G., Cioni G. Brain plasticity and early development: implications for early intervention in neurodevelopmental disorders. *Neuropsychiatrie de l'Enfance et de l'Adolescence*, 2017, vol. 65, no. 5, pp. 299–306. DOI: 10.1016/J.NEURENF.2017.03.009
36. Kazdin A.E. Child, parent, and family-based treatment of aggressive and antisocial child behavior. In E.D. Hibbs, P.S. Jensen (eds.), *Psychosocial Treatments for Child and Adolescent Disorders: Empirically Based Strategies for Clinical Practice*. American Psychological Association, 2005, pp. 445–476.
37. Kazdin A.E. (ed.) Parent management training: Treatment for oppositional, aggressive, and antisocial behavior in children and adolescents. New York, NY: Oxford University Press, 2008. 424 p.
38. Kazdin A.E. Methodological standards and strategies for establishing the evidence base of animal-assisted therapies. In A. Fine (ed.), *Handbook on Animal-Assisted Therapy*. 3rd ed. New York, NY: Academic Press, 2010, pp. 519–546. DOI: 10.1016/B978-0-12-381453-1.10025-X
39. Kendall P.C., Beidas R.S. Smoothing the trail for dissemination of evidence-based practices for youth: flexibility within fidelity. *Professional Psychology: Research and Practice*, 2007, vol. 38, no. 1, pp. 13–20. DOI: 10.1037/0735-7028.38.1.13
40. Kendall P.C. (ed.) Child and adolescent therapy: Cognitive-behavioral procedures. New York, NY: Guilford Press, 2011. 528 p.
41. Krinzinger H., Hall C.L., Groom M.J. et al. Neurological and psychiatric adverse effects of long-term methylphenidate treatment in ADHD: A map of the current evidence. *Neuroscience & Biobehavioral Reviews*, 2019, vol. 107, pp. 945–968. DOI: 10.1016/j.neubiorev.2019.09.023
42. Larsson H., Chang Z., D'Onofrio B.M. et al. The heritability of clinically diagnosed attention deficit hyperactivity disorder across the lifespan. *Psychological Medicine*, 2014, vol. 44, no. 10, pp. 2223–2229. DOI: 10.1017/S0033291713002493
43. Lee A.H., DiGiuseppe R. Anger and aggression treatments: a review of meta-analyses. *Current Opinion in Psychology*, 2018, vol. 19, pp. 65–74. DOI: 10.1016/j.copsyc.2017.04.004
44. Leijten P., Raaijmakers M.A., Orobio de Castro B. et al. Effectiveness of the incredible years parenting program for families with socioeconomically disadvantaged and ethnic minority backgrounds. *Journal of Clinical Child & Adolescent Psychology*, 2017, vol. 46, no. 1, pp. 59–73. DOI: 10.1080/15374416.2015.1038823
45. Leve L.D., Chamberlain P. Association with delinquent peers: Intervention effects for youth in the juvenile justice system. *Journal of Abnormal Child Psychology*, 2005, vol. 33, no. 3, pp. 339–347. DOI: 10.1007/s10802-005-3571-7
46. Lieneman C.C., Brabson L.A., Highlander A. et al. Parent–child interaction therapy: Current perspectives. *Psychology Research and Behavior Management*, 2017, vol. 10, pp. 239–256. DOI: 10.2147/PRBM.S91200

47. Lin Y.W., Bratton S.C. A meta-analytic review of child-centered play therapy approaches. *Journal of Counseling & Development*, 2015, vol. 93, no. 1, pp. 45–58. DOI: 10.1002/J.1556-6676.2015.00180.X
48. Liu J. Childhood externalizing behavior: Theory and implications. *Journal of Child and Adolescent Psychiatric Nursing*, 2004, vol. 17, no. 3, pp. 93–103. DOI: 10.1111/j.1744-6171.2004.tb00003.x
49. Luby J.L., Barch D.M., Whalen D. et al. A randomized controlled trial of parent-child psychotherapy targeting emotion development for early childhood depression. *American Journal of Psychiatry*, 2018, vol. 175, no. 11, pp. 1102–1110. DOI: 10.1176/appi.ajp.2018.18030321
50. Luby J.L., Si X., Belden A. C. et al. Preschool depression: homotypic continuity and course over 24 months. *Archives of General Psychiatry*, 2009, vol. 66, no. 8, pp. 897–905. DOI: 10.1001/archgenpsychiatry.2009.97
51. Luby J.L. Treatment of anxiety and depression in the preschool period. *Journal of the American Academy of Child & Adolescent Psychiatry*, 2013, vol. 52, no. 4, pp. 346–358. DOI: 10.1016/j.jaac.2013.01.011
52. Mahler M.S., Furur M. Certain aspects of the separation-individuation phase. *The Psychoanalytic Quarterly*, 1963, vol. 32, no. 1, pp. 1–14. DOI: 10.1080/21674086.1963.11926268
53. McCart M.R., Sheidow A.J. Evidence-based psychosocial treatments for adolescents with disruptive behavior. *Journal of Clinical Child & Adolescent Psychology*, 2016, vol. 45, no. 5, pp. 529–563. DOI: 10.1080/15374416.2016.1146990
54. McGuire A., Steele R.G., Singh M.N. Systematic review on the application of trauma-focused cognitive behavioral therapy (TF-CBT) for preschool-aged children. *Clinical Child and Family Psychology Review*, 2021, vol. 24, no. 1, pp. 20–37. DOI: 10.1007/s10567-020-00334-0
55. McKay D., Storch E.A. (eds.) *Handbook of child and adolescent anxiety disorders*. New York, NY: Springer, 2011.
56. Mesman J., Koot H.M. Early preschool predictors of preadolescent internalizing and externalizing DSM-IV diagnoses. *Journal of the American Academy of Child & Adolescent Psychiatry*, 2001, vol. 40, no. 9, pp. 1029–1036. DOI: 10.1097/00004583-200109000-00011
57. Mingebach T., Kamp-Becker I., Christiansen H. et al. Meta-meta-analysis on the effectiveness of parent-based interventions for the treatment of child externalizing behavior problems. *PloS One*, 2018, vol. 13, no. 9. DOI: 10.1371/journal.pone.0202855
58. Nimer J., Lundahl B. Animal-assisted therapy: A meta-analysis. *Anthrozoös*, 2007, vol. 20, no. 3, pp. 225–238. DOI: 10.2752/089279307X224773
59. Olfson M., Crystal S., Huang C. et al. Trends in antipsychotic drug use by very young, privately insured children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 2010, vol. 49, no. 1, pp. 13–23. DOI: 10.1097/00004583-201001000-00005

60. Ollendick T.H., King N.J. Evidence-based treatments for children and adolescents. In P.C. Kendall (ed.), *Child and Adolescent Therapy: Cognitive-Behavioral Procedures*. New York, NY: Guilford Press, 2011, pp. 499–520.
61. Patterson G.R., Littman R.A., Bricker W. Assertive behavior in children: A step toward a theory of aggression. *Monographs of the Society for Research in Child Development*, 1967, vol. 32, no. 5, pp. 1–43.
62. Pelham Jr W.E., Fabiano G.A., Waxmonsky J.G. et al. Treatment sequencing for childhood ADHD: A multiple-randomization study of adaptive medication and behavioral interventions. *Journal of Clinical Child & Adolescent Psychology*, 2016, vol. 45, no. 4, pp. 396–415. DOI: 10.1080/15374416.2015.1105138
63. Pincus D.B., Santucci L.C., Ehrenreich J.T. et al. The implementation of modified parent-child interaction therapy for youth with separation anxiety disorder. *Cognitive and Behavioral Practice*, 2008, vol. 15, no. 2, pp. 118–125. DOI: 10.1016/J.CBPRA.2007.08.002
64. Reid J.B., Patterson G.R., Snyder J.E. (eds.). *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention*. Washington, DC: American Psychological Association, 2002. DOI: 10.1037/10468-000
65. Reynolds W.M., Johnston H.F. (eds.) *Handbook of depression in children and adolescents*. Springer Science & Business Media, 2013. 620 p.
66. Ross-Hellauer T., Tennant J.P., Banelytė V. et al. Ten simple rules for innovative dissemination of research. *PLoS Computational Biology*, 2020, pp. e1007704. DOI: 10.1371/journal.pcbi.1007704
67. Salloum A., Wang W., Robst J. et al. Stepped care versus standard trauma-focused cognitive behavioral therapy for young children. *Journal of Child Psychology and Psychiatry*, 2016, vol. 57, no. 5, pp. 614–622. DOI: 10.1111/jcpp.12471
68. Scheeringa M.S., Amaya-Jackson L., Cohen J. Preschool PTSD treatment. Unpublished manuscript. New Orleans, LA: Department of Psychiatry and Neurology, Tulane University Health Sciences Center, 2010.
69. Scheeringa M.S., Weems C.F., Cohen J.A. Trauma-focused cognitive-behavioral therapy for posttraumatic stress disorder in three-through six year-old children: A randomized clinical trial. *Journal of Child Psychology and Psychiatry*, 2011, vol. 52 (8), pp. 853–860. DOI: 10.1111/j.1469-7610.2010.02354.x
70. Scheeringa M.S., Zeanah C.H., Myers L. et al. New findings on alternative criteria for PTSD in preschool children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 2003, vol. 42, no. 5, pp. 561–570. DOI: 10.1097/01.CHI.0000046822.95464.14
71. Schultz B.K., Storer J., Watabe Y. et al. School-based treatment of attention-deficit/hyperactivity disorder. *Psychology in the Schools*, 2011, vol. 48, no. 3, pp. 254–262. DOI: 10.1002/PITS.20553
72. Sibley M.H., Kuriyan A.B., Evans S.W. et al. Pharmacological and psychosocial treatments for adolescents with ADHD: An updated systematic review of the literature.

*Clinical Psychology Review*, 2014, vol. 34, no. 3, pp. 218–232. DOI: 10.1016/j.cpr.2014.02.001

73. Southam-Gerow M.A., Prinstein M.J. Evidence base updates: The evolution of the evaluation of psychological treatments for children and adolescents. *Journal of Clinical Child & Adolescent Psychology*, 2014, vol. 43, no. 1, pp. 1–6. DOI: 10.1080/15374416.2013.855128

74. Steiner H., Remsing L. Practice parameter for the assessment and treatment of children and adolescents with oppositional defiant disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 2007, vol. 46, no. 1, pp. 126–141. DOI: 10.1097/01.chi.0000246060.62706.af

75. Thomas R., Abell B., Webb H.J. et al. Parent-child interaction therapy: a meta-analysis. *Pediatrics*, 2017, vol. 140, no. 3, e20170352. DOI: 10.1542/peds.2017-0352

76. Thompson-Hollands J., Kerns C.E., Pincus D.B. et al. Parental accommodation of child anxiety and related symptoms: Range, impact, and correlates. *Journal of Anxiety Disorders*, 2014, vol. 28, no. 8, pp. 765–773. DOI: 10.1016/j.janxdis.2014.09.007

77. Vallis E.H., Zwicker A., Uher R. et al. Cognitive-behavioural interventions for prevention and treatment of anxiety in young children: A systematic review and meta-analysis. *Clinical Psychology Review*, 2020, vol. 81, 101904. DOI: 10.1016/j.cpr.2020.101904

78. Van Ameringen M., Mancini C., Farvolden P. The impact of anxiety disorders on educational achievement. *Journal of Anxiety Disorders*, 2003, vol. 17, no. 5, pp. 561–571. DOI: 10.1016/s0887-6185(02)00228-1

79. Veerman J.W., van Yperen T.A. Degrees of freedom and degrees of certainty: A developmental model for the establishment of evidence-based youth care. *Evaluation and Program Planning*, 2007, vol. 30, no. 2, pp. 212–221. DOI: 10.1016/j.evalprogplan.2007.01.011

80. Viana A.G., Beidel D.C., Rabian B. Selective mutism: A review and integration of the last 15 years. *Clinical Psychology Review*, 2009, vol. 29, no. 1, pp. 57–67. DOI: 10.1016/j.cpr.2008.09.009

81. Webster-Stratton C. The Incredible Years: A Training Series for the Prevention and Treatment of Conduct Problems in Young Children. In E.D. Hibbs, P.S. Jensen (eds.), *Psychosocial Treatments for Child and Adolescent Disorders: Empirically Based Strategies for Clinical Practice*. American Psychological Association, 2005, pp. 507–555.

82. Weersing V.R., Jeffreys M., Do M.-C.T. et al. Evidence base update of psychosocial treatments for child and adolescent depression. *Journal of Clinical Child & Adolescent Psychology*, 2017, vol. 46, no. 1, pp. 11–43. DOI: 10.1080/15374416.2016.1220310

83. Whalen D.J., Sylvester C.M., Luby J.L. Depression and anxiety in preschoolers: A review of the past 7 years. *Child and Adolescent Psychiatric Clinics*, 2017, vol. 26, no. 3, pp. 503–522. DOI: 10.1016/j.chc.2017.02.006

84. Williams N.J., Beidas R.S. Annual research review: The state of implementation science in child psychology and psychiatry: a review and suggestions to advance the field. *Journal of Child Psychology and Psychiatry*, 2019, vol. 60, no. 4, pp. 430–450. DOI: 10.1111/jcpp.12960
85. Wilson P.M., Petticrew M., Calnan M.W. et al. Disseminating research findings: what should researchers do? A systematic scoping review of conceptual frameworks. *Implementation Science*, 2010, vol. 5, no. 1. DOI: 10.1186/1748-5908-5-91
86. Wolraich M.L., Hagan J.F., Allan C. Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*, 2019, vol. 144, no. 4, e20192528. DOI: 10.1542/peds.2019-2528
87. Yang L., Zhou X., Zhou C. et al. Efficacy and acceptability of cognitive behavioral therapy for depression in children: A systematic review and meta-analysis. *Academic Pediatrics*, 2017, vol. 17, no. 1, pp. 9–16. DOI: 10.1016/j.acap.2016.08.002
88. Zhukova M.A., Talantseva O.I., Logvinenko T.I. et al. Complementary and Alternative Treatments for Autism Spectrum Disorders: A Review for Parents and Clinicians. *Clinical Psychology and Special Education*, 2020, vol. 9, no. 3, pp. 142–173. DOI: 10.17759/cpse.2020090310

### Information about the authors

*Marina A. Zhukova*, PhD (Psychology), Research Fellow, Laboratory of Translational Developmental Sciences, Saint-Petersburg State University, Saint-Petersburg, Russia; Senior Research Fellow, Center for Cognitive Sciences, Sirius University, Federal territory "Sirius", Russia; Research Assistant, Department of Psychology, University of Houston, Houston, TX, USA; ORCID: <https://orcid.org/0000-0002-3069-570X>, e-mail: [marina.zhukova@times.uh.edu](mailto:marina.zhukova@times.uh.edu)

*Erika S. Trent*, M.A. (Psychology), Doctoral Student, Department of Psychology, University of Houston, Houston, TX, USA, ORCID: <https://orcid.org/0000-0003-4775-5999>, e-mail: [estrent@central.uh.edu](mailto:estrent@central.uh.edu)

### Информация об авторах

*Жукова Марина Андреевна*, кандидат психологических наук, научный сотрудник, Лаборатория междисциплинарных исследований развития человека, Санкт-Петербургский государственный Университет, Россия; старший научный сотрудник, Центр когнитивных исследований, Университет «Сириус», ФТ «Сириус», Россия; ассистент-исследователь, департамент психологии, Хьюстонский университет, Хьюстон, Техас, США; ORCID: <https://orcid.org/0000-0002-3069-570X>, e-mail: [marina.zhukova@times.uh.edu](mailto:marina.zhukova@times.uh.edu)

Трент Эрика С., магистр (психология), аспирант, департамент психологии, Хьюстонский университет, Хьюстон, Техас, США, ORCID: <https://orcid.org/0000-0003-4775-5999>, e-mail: [estrent@central.uh.edu](mailto:estrent@central.uh.edu)

Received: 01.10.2021

Получена: 01.10.2021

Accepted: 30.04.2022

Принята в печать: 30.04.2022