

## State of the Research & Literature Address: ACT with Children, Adolescents and Parents

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Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) has been found effective in treating a wide number of psychological conditions affecting adults. To date, however, little research has been done on the use of ACT with youth and parents. Few efforts have been made at summarizing the literature that does exist. This article, therefore, is a review of empirical and theoretical work with these populations. Online databases, ACT-related websites, and personal communication were used to collect information about published and unpublished, ongoing work. Recommendations for future research are also mentioned.

*Keywords:* ACT, youth, parents, review, research recommendations.

To date, Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) has been shown effective with adults who experience a number of conditions, including work-related stress (Bond & Bunce, 2000), professional burnout (Hayes, Bissett et al., 2004), and anxiety with marital distress (Luciano & Gutierrez, 2001). ACT has also been used to effectively treat several common forms of psychopathology among adults, such as major depressive disorder (Lopez & Arco, 2002), panic disorder (Carrascoso, 2000), and poly-substance abuse (Hayes, Wilson et al., 2002). In addition, ACT has been shown to be an effective treatment of serious mental illness, such as schizophrenia (Bach & Hayes, 2002), and medical disorders—e.g., diabetes (Gregg, 2004). A good deal of time and effort has gone into the summarization of ACT conducted with adults. Several international presentations, an empirical review paper (Hayes, Masuda, Bissett, Luoma, & Guerrero, 2004), and a meta-analysis (Hayes, Luoma, Bond, Masuda, & Lillis, 2006) have summarized such theoretical and empirical work.

Thus far, there has been little focus on summarizing the state of ACT work conducted with children, adolescents, and their parents. To rectify this need, theoretical papers and empirical research conducted with these populations will be reviewed. Prior to this review, the authors will provide a list of general considerations for using ACT with youth and parents.

Then, a brief introduction to each problem currently addressed by the ACT research community, followed by: published empirical studies, published theoretical papers that pose specific considerations for working with individuals with that problem, and any applicable unpublished works will be presented. The authors' decision to include unpublished work was based upon two factors: (a) many clinicians and researchers have expressed an interest in ACT with youth and parents; however, (b) because the area of study is fairly recent, little published work has come to fruition. After individual problems are addressed, the published research will be briefly summarized. Finally, further questions and recommendations for ACT researchers will be offered.

### *General Considerations for use of ACT with Youth*

ACT can be incorporated into existing treatment protocols for children, adolescents and/or parents. In addition, ACT shows promising results as the primary treatment for these populations; although, the special challenges of working with children need to be kept in mind (Murrell, Coyne & Wilson, 2005). Case conceptualizations of children, like adults, require a functional analysis and assessment of both values and avoidance. However, using multiple sources of information is especially important with young children. In addition to meeting ethical requirements, in order to maintain the integrity of the collaborative spirit of ACT, therapists should obtain fully informed consent from children as well as their parents. An additional concern is developmental propriety. Although children and adolescents are able to benefit from most components of the ACT model, some pieces of the work are more difficult than others. Developing a sense of self-as-context and making contact with the present moment may be too abstract for children—especially young children—to grasp. Murrell et al. suggest concretizing metaphors such as the mud-in-a-glass and the box-of-stuff as well as including many physical activities in efforts to increase effectiveness. These adaptations allow for developmentally appropriate exercises for children and teens of various capabilities. For example, the complicated idea of valuing is made clearer through the vital or poison activity. In this activity, youth are encouraged to sort their attempts at alleviating distress into one of two boxes, one with a heart that represents moving closer towards values and the other with a poison bottle that represents moving away from values. Murrell et al. also note that parental involvement may increase effectiveness, and they make suggestions about ways in which to address parents' support of their children's treatment.

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### **METHOD**

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Published articles were located using the PsychINFO database search engine provided by EBSCO and the Con-

textual Psychology website. Search terms included “(acceptance or ACT) and (child\* or adolesc\* or parent\*).” Information about unpublished work was found in published articles or the research labs link on the Contextual Psychology website, or solicited directly from prominent researchers in the area of ACT with youth. Only articles written in English were included in this review, although an article written in Spanish is mentioned.

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## REVIEW RESULTS: CHILDREN AND ADOLESCENTS

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### *Anorexia Nervosa*

Anorexia nervosa is a disorder characterized by refusal to maintain higher than 85% of expected body weight, distorted perception of body image—i.e., denial of the seriousness of current weight or placing considerable emphasis of self-evaluation on body weight, intense fear of gaining weight/becoming fat, amenorrhea, and either excessive restriction and/or binge/purging behavior (DSM-IV-TR; APA, 2000). Anorexia occurs disproportionately among 0.5-1% of females, which is at a ratio of nearly 20 females for every one male (Kronenberger & Meyer, 2001; Williamson, Bentz, & Rabalis, 1998). Consequences of anorexia include social problems and impaired physical functioning—i.e., organ failure or death (Heffner, Sperry, Eifert & Detweiler, 2002).

Heffner et al. (2002) published a case study that included ACT, traditional CBT, and family interventions to treat a 15-year-old Caucasian girl diagnosed with the restricting subtype of anorexia nervosa. The referenced article focused exclusively on the ACT components of the treatment package. These components were used to address the teen’s attempts to eliminate negativity by controlling her body weight. The Chinese finger trap was used to establish control is a problem; the chessboard metaphor was utilized to foster a sense of self-as-context, and thought parade and the bus driver metaphor were reviewed to assist in the process of defusion. The funeral meditation was used to identify values; while the valued directions map and journaling exercises were used to aid commitment to valued action.

“Emily” completed the Eating Disorders Inventory-2 (EDI-2) and was weighed before every session, at the conclusion of therapy and at follow-up sessions. Over the course of 14 therapy and four follow-up sessions, Heffner et al. noted anorectic symptom reduction. Emily’s EDI-2 scores on the drive for thinness and ineffectiveness subscales were reduced from baseline measures at the 71<sup>st</sup> and 73<sup>rd</sup> percentile, respectively, to the non-clinical range. Her weight proceeded to increase to normal range and her menses returned. Emily continued to pursue her values of improving social relations, working with animals, writing, and swimming. Despite all of these positive changes, it should be noted that Emily’s score on the body dissatisfaction subscale was still at a clinical level at termination.

Three theoretical responses to Heffner et al.’s work were also published. Hayes and Pankey (2002) explain the goals

of ACT as a comprehensive treatment model. They note that ACT seeks to increase valued action in a person’s life and to reduce maladaptive control strategies that attempt to reduce/eliminate private experiences, since such attempts are doomed to failure by the laws of verbal behavior outlined by Relational Frame Theory (RFT; Hayes, Barnes-Holmes, & Roche, 2001). Furthermore, Hayes and Pankey outline assessment of maladaptive verbal behaviors—i.e., fusion and experiential avoidance, explain why ACT is an appropriate treatment model to address the unique problems found with anorexia, and offer alternative intervention strategies. Orsillo and Batten (2002) critiqued and clarified technical errors in Heffner et al.’s explanations of ACT interventions. For example, they noted that defusion of the literal meaning of thoughts is important for not only negative, but also positive content. Additionally, Orsillo and Batten state that anorexia is an obstinate problem that may require a focus on the client creating a meaningful life that is not centered on his or her physical appearance. Wilson and Roberts (2002) explain the goal of ACT in behavioral terms - to increase the number of potential responses in the face of private experiences, thus weakening stimulus control which results in experiential avoidance or detrimental behavior. Wilson and Roberts recommend that practitioners of any orientation assess important frequent co-variables such as a client’s physical health, psychosocial functioning, mood, obsessive thoughts, history of weight regulation, and body image. Finally, they outline the key principles to follow while conducting ACT. They stress the importance of attending to values, as well as doing exposure, defusion, and empowerment during all phases of treatment.

### *Anxiety Disorders*

Anxiety disorders—such as generalized anxiety disorder (GAD), obsessive compulsive disorder (OCD), panic disorder, post-traumatic stress disorder, separation anxiety disorder, and specific phobias—are among the most prevalent disorders for children, with a combined prevalence rate ranging from 11-25% (Greco, Blackledge, Coyne & Ehrenreich, 2005; Kronenberger & Meyer, 2001). Typical symptoms include distress—i.e., excessive worry or difficulty concentrating, and aversion upon presentation of external stimuli—i.e., avoiding school or social withdrawal, and physiological symptomatology—i.e., insomnia, abdominal pain, rapid heart beat and/or muscular tension (DSM-IV-TR; APA, 2000). These symptoms may interfere with a child or adolescent’s ability to complete schoolwork, maintain positive peer relations, and perform age-appropriate autonomous tasks in the home (Kronenberger & Meyer, 2001).

Greco et al. published a theoretical article that explains CBT interventions, spells out the differences between traditional cognitive-behavioral therapy (CBT) and ACT, conceptualizes anxiety, and explains how ACT may be applied to child/adolescent clients. CBT interventions tend to be used in a package that may include gradual exposure to reduce fear, relaxation or distraction to decrease physical symptomatology, and either modeling or social skills training to

facilitate daily functioning. Whereas traditional CBT interventions emphasize anxiety management and symptom reduction, ACT interventions target the function of these private events to facilitate functioning and living a worthwhile life. Therefore, traditional CBT aims to eliminate the private experiences of anxiety, while ACT aims to eliminate the constrictive nature that private events can take on, in order to allow for a better quality of life. ACT assumes symptom reduction will occur, although it recognizes that living a valued life may not be possible without some symptoms of anxiety. Greco et al. conceptualize anxiety as a combination of fusion—the assumption that highly-emotional and catastrophic worries are accurate depictions of reality, and experiential control—an unwillingness to experience anxiety symptoms and attempts to avoid or alter these worries, physical symptoms or other private experiences. Greco et al. offer various exercises for each treatment component of ACT—i.e., tin can monster to aid in defusion and Chinese finger trap to establish that control is a problem. Greco et al. also propose concrete interventions to recruit parents to aid therapy, such as assessing rules, contracting and “making room” for children to participate in the therapeutic procedure.

To date, no published studies have addressed anxiety disorders, although there is current work being done. They are several unpublished papers. Coyne and colleagues recently conducted a trial using ACT in the treatment of pediatric OCD. Greco et al. (2005) cited a successful reduction in school refusal of an 11-year-old-male, which was maintained even after a two-year follow up (Heffner, Sperry, Eifert, & Detweiler, 2002). The authors reported reductions in social anxiety, as well as increases in school attendance and valued behavior in an 8-year old girl with social phobia and GAD. Her treatment protocol included a combination of eight individual and four family treatment sessions (Greco, 2002). Some of the most current research on anxiety is investigating the impact of ACT in non-pathological populations. Ruiz-Jimenez & Luciano-Soriano (2006) recently presented data that showed that sub-clinical symptoms of adolescents’ anxiety associated with chess performance were reduced or alleviated.

### Chronic Pain

Children with chronic pain typically experience physical limitations, poor school attendance, and comorbid psychopathology. Chronic pain has been described as either recurrent or persistent pain that remains after an injury has healed (e.g, after a bone has mended; McGrath & Hillier, 1996). The Biopsychosocial Perspective on chronic pain (Turk, 1996) states that pain is a subjective experience, which is a product of genetics, biology, learning, beliefs, cognitive processes, emotions, and coping. Campo et al. (2004) found that 79% of children with recurrent abdominal pain in a primary care sample had an anxiety disorder, while 43% had a diagnosable mood disorder (Campo et al., 2004). Approximately 15-20% of children and adolescents in the United States are afflicted by chronic pain (Zeltzer, Tsao, Stelling, Powers, Levy, & Waterhouse, 2002).

Two empirical articles have been published. Wicksell, Dahl, Magnusson, and Olsson (2005) conducted a case study of a 14-year-old girl who was diagnosed with idiopathic generalized pain. She was treated using an ACT protocol designed to build her ability to live in accordance with her values, rather than to reduce pain or distress. Measures of functional ability, value-based goals, school attendance, pain, and pain-coping were assessed at pretreatment, post-treatment, and longitudinally—i.e., 3-months and 6-months post-treatment. A depression screener, parental encouragement of illness-behavior, and an analysis of pain behavior were also conducted. Results showed that the girl’s pain-behavior evoked detrimentally supportive behavior from her social circle at home and school. Therapy included 10 sessions that initially included education about the nature of chronic pain and reassurance from the girl’s doctor. Treatment focused on a shift in perspective from reliance upon unworkable pain control strategies to acceptance, and used exposure (defusion) to fear of pain to aid construction of a values-based repertoire. Three sessions were conducted with the girl’s parents. These sessions centered around the parents coaching their daughter to pursue value-based living rather than focus on pain reduction. Furthermore, the avoidant function and workability of previous strategies as well as parental fusion were addressed. Results indicate that the patient went from 100% absenteeism from school for the 60 days prior to treatment to enrolling in school without absences throughout the 6-month follow-up period. In addition, emotional-avoidance coping was reduced (from a 2.2 to a 1.1 on a 5-point scale), and all of her value-based goals were achieved and maintained at 6-month follow-up. Functional disability and pain were reduced at post-treatment and eliminated at 6-month post-treatment.

Wicksell, Melin, and Olsson (2006) used a virtually identical procedure in an uncontrolled pilot study that included 14 adolescents who experienced various chronic, debilitating pain syndromes. Instead of assessing pain-coping, and encouragement for illness-behavior, the researchers measured frequency of medication use and catastrophesizing.

Adolescent therapy sessions used the same procedure. Parental involvement sessions were virtually identical, yet were supplemented with instruction, exposure, and values work. Results showed improvements in functioning, with a 68% reduction in number of school days missed due to pain, and a 63% decrease in functional disability, which continued to grow until the 6-month follow-up. Symptom reduction also occurred, with a clinically significant reduction in pain intensity in 46% of participants.

An unpublished, pre-pilot project was conducted by Greco (2006). In this study, ACT was used to address functional abdominal pain in 11 adolescent girls (aged 11 to 14) who also had clinical anxiety and/or depression. Assessments were conducted pre-treatment, post-treatment, and 1-month follow-up. The goals of therapy were to improve functionality and increase valued-living. Adolescent sessions were conducted in a group format over a 12 to 14 week time period. Sessions consisted of all basic ACT components—a basic introduction, creative hopelessness, control as the prob-

lem, willingness, valued living, mindfulness, exposure, self-as-context, self-compassion (acceptance), and committed action. Parents met for several sessions (ranged from 1-4), during which they focused on acceptance of their child's distress and personal values work. At follow-up, there were significant improvements as measured by quality of life (group mean changed from 4.8 to 7.75 on a 10-point scale) and functional disability (mean decreased from 33 to 17 on a 60-point scale), and school absenteeism was reduced by nearly 60%. In addition, decreases were found in emotional symptomatology (i.e., somatization and emotional distress).

### **Medical Settings**

Robinson, Gregg, Dahl, and Lundgren (2005) explain the use of the ACT Health Care model (ACT-HC) in medical settings. In this model, patients are assisted from either an individual or programmatic level. This assistance is geared toward living a meaningful life in the presence of difficult private events tied to their illnesses. The authors give an in-depth explanation of how fusion with private content and excessive experiential avoidance not only drive healthcare seeking behavior, but also pose a barrier to appropriate health care behaviors. Therefore, these processes are costly both in terms of resources and personal quality of life. Several treatment protocols are outlined. The authors sketch out details of an intervention that included mindfulness, visualization of a valued-future, and behavioral techniques to successfully manage a 7-year-old boy's comorbid insomnia and abdominal pain.

### **Risk Behavior in Adolescents**

Approximately 11% of adolescents in the United States admit to using drugs (National Survey; SAMSHA, 2004). There are multiple, well-known, negative consequences associated with drug use and other risky behavior. Each year, there are approximately 9 million new cases of sexually transmitted diseases diagnosed in American teenagers (Weinstock, Berman, & Cates, 2004).

Metzler, Biglan, Noell, Ary, and Ochs (2000) conducted a randomized controlled trial in a diverse sample ( $N = 339$ ) of adolescents (ages 15-19) recruited from sexually transmitted disease (STD) clinics. The reported 5-session intervention targeted decision-making and social skills that promote safer sex, as well as acceptance of negative experience that accompanies changes in sexual behavior. Although the intervention was based on social-cognitive theories, the treatment had several ACT-like components and was heavily acceptance-based. Metaphors and exercises were used to foster willingness and set value-consistent goals. At 6 month follow-up, the treatment group did not report fewer STDs; despite this, treatment group participants reported significantly (a) fewer sexual contacts with strangers or non-monogamous partners in a 3-month period, (b) less alcohol or marijuana use before sex, and (c) higher acceptance of emotions than did the control group participants. Treatment group members also

suggested more safer-sex alternatives during a videotaped sexual-situation roleplay test.

Several investigators have researched, but not yet published, the use of ACT with middle and high school students who are at-risk for academic failure and delinquent behaviors. These studies have been conducted in a number of countries and have included measures of smoking and other substance use, self-injurious behavior, academic success, acceptance and valued living. Taken together, these studies yield promising results.

### **Schizophreniform Disorders**

Schizophrenia and other psychotic disorders typically emerge between the ages of 15-35 years of age; hence, it very rarely occurs in children, emerges in adolescence, and prevalence rates peak at 1-1.5% of adults (Kronenberger & Mayer, 2001). Schizophrenia is characterized by delusional beliefs, hallucinations, and negative symptoms—i.e., disorganized speech, avolition, alogia, flat affect (DSM-IV-TR; APA, 2000). A case study by Montes and Pérez Álvarez was published in Spanish in 2001. Abstracts of this article noted that a 17-year-old adolescent male was treated with satisfactory results.

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## **REVIEW RESULTS: PARENTS**

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### **The Early Years**

In 1989, a book entitled *Support for caregiving families: Enabling positive adaptation to disability* was edited by Singer and Irvin. This book included two chapters, one by Biglan and the other by Singer, Irvine, and Irvin, that focused on the need to study context and address broad contextual factors in the treatment of parents who have children with severe handicaps. Although these chapters predated the use of the term "ACT," the treatments proposed within them are highly ACT consistent. In Singer et al., the authors review parent group data. They state that treatment included educating parents on how to conduct functional assessments, appropriately use reinforcement and discipline, and how to teach their children skills. Parents in this treatment group evidenced greater reductions in distress than parents who were in a less intensive case program. Biglan writes specifically about Comprehensive Distancing, the precursor to ACT. He suggests that problem-specific approaches are often not effective. He outlines a treatment which includes work on feeling hopeless (i.e., creative hopelessness), seeing control as a problem, and setting valued goals. The use of ACT (and ACT-consistent) treatments and ACT-consistent theoretical work on the subject of parenting are becoming more common; several problems have recently been addressed.

### **Autism**

Autism in children afflicts an estimated 5-20 of every 10,000 children in the United States. This disorder develops by the

Table 1  
 Summary of Published ACT Literature with Children, Adolescents and Parents

ACT with Children and/or Adolescents					
Focus	Authors	Type	Parents	N	Age <sup>1</sup>
Anorexia	Heffner et al. 2002	Case Study	Yes	1	15
	Hayes & Pankey 2002	Theoretical	No	–	All
	Orsillo & Batten 2002	Theoretical	No	–	All
	Wilson & Roberts 2002	Theoretical	No	–	All
Anxiety	Greco et al. 2002	Theoretical	Yes	–	All
Chronic Pain	Wicksell, Dahl et al. 2005	Case Study	Yes	1	14
	Wicksell, Melin, Olsson 2005	Uncontrolled Pilot	Yes	14	13–20
General	Murrell, Coyne, Wilson 2005	Theoretical	Yes	–	All
Medical Settings	Robinson et al. 2005	Theoretical	No	–	All
		& Case Study		1	7
Sexual Risk Behavior	Metzler et al. 2000	Randomized Controlled Trial	No	339	15–19
ACT with Parents					
Focus	Authors	Type		N	Child Age <sup>1</sup>
Autism	Blackledge & Hayes 2006	Uncontrolled Group Study		20	All
Handicaps	Biglan 1989 Singer et al. 1989	Theoretical & Case Study		1	All
		Theoretical & Review of Controlled Groups		49	All
Impaired Parenting	Coyne & Wilson 2004	Theoretical & Case Study		– 1	All 7
	Greco & Eifert 2004	Theoretical		–	

<sup>1</sup>Note. Age in years.

age of three (DSM-IV-TR, 2000; Kronenberger & Meyer, 2001), and is characterized by bizarre behavior patterns and an impaired ability to communicate and develop relationships with people (Schreibman & Charlop-Christy, 1998). Parents of children with autism are affected by their child's disordered behavior; rates of both developmentally typical and inappropriate behavior in children with autism are related to maternal stress (Tomanik, Harris, & Hawkins, 2004). In fact, maternal stress levels are higher among mothers of preschool children with autism than children with other developmental disorders (Eisenhower, Baker, & Blacher, 2005). Keeping such knowledge in mind, Blackledge and Hayes (2006) designed a two-day, 14-hour group experiential ACT workshop for 20 parents of children with autism. In the overall sample, significant but not large improvements were found on measures of depression (i.e., BDI-II scores changed an average of 4 points), psychiatric symptomatology, and psychological distress from the initial assessment 3 weeks before treatment to 3 month follow-up session. Changes in depression were larger and most pronounced among parents who scored at or above the clinical cut-off. Avoidance and fusion were likewise impacted from pre-treatment to follow-up; results suggested that fusion may have mediated the relationship between treatment and symptom reduction.

### *Impaired Parenting*

Coyne and Wilson (2004) gave an RFT consistent account of impaired parenting and offered a case study that relies upon ACT to broaden psychological flexibility and reduce rule-governed parental behavior. The authors emphasize the importance of analyzing the function—rather than the form—of a parent's behavior. Perhaps the function of a parent avoiding homework from a parenting class is to avoid the negative emotions evoked while thinking about his/her child's misbehavior, even though avoidance of the homework may appear to be an aversion to reading and writing. This is important to consider when developing parenting treatments. Coyne and Wilson state that attempts to avoid feeling incompetent may impair a parent's ability to develop new parenting skills. Furthermore, fusion with verbal rules, such as "I can't tolerate my child's misbehavior," would be dominated by the urge to escape such a situation in any way possible. Inflexible parenting techniques intended to squelch misbehavior on a short-term basis may actually function to maintain such behavior, or lend themselves to worse behavior in the long run.

This RFT account of impaired parenting seems likely. There are two yet unpublished studies that provide matching-to-sample evidence for this inflexibility in responding (Mur-

rell, in review; Murrell, in progress). There is also data that show that experiential avoidance in parents, as theorized by Coyne and Wilson, is related to parental well-being and adjustment (Greco, Heffner, Poe, Ritchie, Polak, & Lynch, 2005) and to child outcome (Berlin, Sato, Jastrowski, Woods, & Davis, in preparation).

The case presented in the reviewed article involved a 6-year-old boy child with severe aggressive behavior toward others and his punitive mother. The mother reported that she felt embarrassed and anxious about her son's aggression. Treatment included a combination of Parent-Child Interaction Therapy (PCIT; Hembree-Kigin & McNeil, 1995)—an in vivo parent behavior training protocol used to teach new skills, and ACT used as a way to reduce the psychological barriers that would restrict new skill acquisition. Examples of ACT interventions, such as “In a world where it is possible for you to choose what sort of life your son would have, what would that look like,” were given to illustrate valuing, willingness, commitment, and self-as-context. Mindfulness and defusion procedures were incorporated with the planned ignoring and other components of the PCIT. Treatment continued for approximately 3 months. At both termination and 1-year follow-up, overt behavioral outcomes included a decrease in “Andrew’s” levels of aggression and non-compliant behavior, as well as an increase in his mother’s pursuit of valued activities. In terms of symptomatology, the mother reportedly felt less anxiety and more confident out in public with him.

Greco and Eifert (2004) also laid the theoretical groundwork for integration of ACT and/or acceptance-based methods into existent family therapies for parent-adolescent conflict. First, they discuss the traditional CBT-based, Problem-Solving and Communication Training (PS/CT), which is a means to build interpersonal family skills. PS/CT has been shown to be more efficacious than a wait-list control, although it does not appear to work well in families with children that have attention-deficit hyperactivity disorder (ADHD). Since Greco and Eifert conceptualize the function of many forms of family conflict as avoidance of negative private experience, they propose that acceptance and exposure would facilitate positive outcomes with PS/CT. Furthermore, they go on to explain various ways that Integrative Family Therapy (IFT) may incorporate acceptance procedures. Although IFT protocols may utilize reframing adapted from empathic joining or unified detachment exercises found in Integrative Couples Therapy, treatment could just as easily incorporate creative hopelessness, mindfulness, and valuing interventions frequently used in ACT. Alternative acceptance practices, such as mindfulness skills taught in Dialectical Behavioral Therapy (DBT), are also introduced. Greco and Eifert expand on the notion that change-based interventions—such as PS/CT—may be more efficacious if they are integrated with acceptance- and/or values-based interventions.

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## CONCLUSION AND DISCUSSION

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### Summary

The ACT community has a good start on published research with youth and parents and results seem promising. Table 1 presents the work to date. Information about the psychopathology/problem behavior studied, type of article, study design, whether it is published, sample size, age range, treatment population, whether the protocol includes a parenting component, and citation are included. All together, there are four empirical articles published using ACT with adolescents, and there are two which used children in young- or middle- childhood. Of these, four are case studies, one is an uncontrolled study, and one is a randomized controlled trial.

A common trend is to rely upon parents in therapy, given their vital role in the lives of children and adolescence. The only exception to inclusion of parents in published studies has been with adolescent sexual risk behavior, perhaps because of confidentiality and the delicate nature of the issue. Whether or not their children have a diagnosis, though, parents significantly contribute to the environment that their child grows in. In the context of therapy, parents can create an environment that promotes treatment

goals; that is, if they are included in adjunct or conjoint therapy with their child. The published studies to date have supported the use of parents as an aid to therapeutic progress—it seems appropriate to continue this tradition.

### Recommendations

The body of research on ACT with children, adolescents, and parents has come a long way in the past decade, although there is plenty of room for expansion. Current ACT interventions have been designed for several disorders and risk behaviors that are costly to the life of youth. Despite this, no interventions to date have been published that directly address several major childhood disorders, such as depression, anxiety, ADHD, or oppositional-defiant behavior. Fortunately, theoretical groundwork has been laid out for many of these problems, which will make the work of implementing these programs easier.

One factor that has slowed the progress of empirical outcome work is the issue of measurement. Treatment measures should reflect the acceptance and valuing components of ACT, not just traditional measures of symptomatology. Clients often present for the purpose of alleviating distress; however, the main treatment goals in ACT are to further develop repertoires of valued behavior, as well as to decrease avoidance and fusion. Therefore, any assessment package used to evaluate the treatment should include not only symptomatology—the current standard of treatment efficacy in scientific literature—but also relevant measures of functional impairment, valued-living, avoidance, and fusion. Many treatment protocols did include measures of functionality, although some did not. A related concern is measures to track

such progress. There are few validated assessments to measure change in avoidance, fusion, and valuing in ACT for children. Adequate reliability and validity has been found for the Child Acceptance and Mindfulness Measure (CAMM; Greco, Dew & Baer, 2005), and the Avoidance and Fusion Questionnaire for Youth (AFQ-Y; Greco, Murrell, & Coyne, 2005). For a review of the development and properties of each of these measures, see Greco, Ball, Dew, Lambert, & Baer, (in review). It appears there are no standardized measures of valuing for children, although several methodologies were proposed in Murrell, Coyne, and Wilson or have been used (Heffner et al., 2002; Wicksell, Dahl et al., 2005). Several other measures of for use with ACT and adults have been assembled in a package by Ciarrochi and Bilich (no date), although none of the instruments specifically address the uniqueness of the situations presented for parents.

The most frequent study designs have been case studies and uncontrolled group-design studies. However, in order to compare to gold-standard for treatment studies found in the bulwark of psychology journals, researchers need to use larger samples and controlled designs, such as the integrative model created by Metzler et al. (2000). Although this may be expensive and is not always feasible, such treatment studies provide the highly-credible standard that is lacking in research on ACT with children, adolescents, and parents.

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