evidence Base Most evidence supporting the efficacy of PST for youth is indirect, deriving from studies evaluating multimodal treatments that include it as one component (see Table 4.1 for a summary of PST applications in evidence-based treatment manuals for internalizing disorders in youth).More specifically, in efforts to identify evidence-based treat- ments, PST is a component of those labeled as "well established" for depression (David-Ferdon & Kaslow, 2008), "probably efficacious" for bipolar disorder (Fristad & McPherson, 2014), and "probably effica- cious" for anxiety disorders (Freeman et al., 2014; Silverman, Pina, et al., 2008). In the closest approximation of a stand-alone evaluation, Stark and his colleagues compared behavioral problem-solving therapy (BPS), self-control therapy (SC), and waitlist conditions in a sample of 29 children (mean age = 11.17 years) scoring in the moderately to severely depressed range on a self-report measure of depression (Stark et al., 1987). The initial four sessions of both active 12-session group treatments were quite similar (e.g., rationale, self-monitoring, group4. Problem-Solving Training & Goldfried, 1971; D'Zurilla & Nezu, 2010). Negative thinking patterns may make it more difficult for depressed youth to be objective and specific when addressing their problems (Nezu, 1987). For example, an adolescent who tends to blame him- or herself for everything will be less able to accurately define a problem, identify its true source, and generate possible solutions. The generation of alternatives stage involves coming up with pos- sible solutions to a particular problem in a way that maximizes the likelihood that the most effective response is included among them (D'Zurilla & Goldfried, 1971). Depression is associated with the genera- tion of a restricted range of response alternatives that results in ineffec- tive responding (Nezu, 1987). The goal of the decision-making stage is to select the most effective response alternative. Effective responses alter the situation, maximizing positive consequences while minimizing negative ones. Depression hampers decision making. Cognitive biases, such as selectively attending to the negative, can lead to the inaccurate assessment of response alternatives and their potential consequences (Nezu, 1987). Of course, having fewer quality response options to choose from makes ineffective responding more likely for depressed youth regardless of their decision-making abilities. The final stage of problem solving occurs after the chosen response alternative has been enacted. Verification, later referred to as solution implementation and verification (D'Zurilla & Nezu, 1982), involves an assessment of the actual outcome and whether any self-correction is needed (D'Zurilla & Goldfried, 1971). The key question is whether the actual consequences of a solution match those anticipated during the decision-making stage (Nezu, 1987). For youth experiencing depres- sion, biased thinking may preclude objectivity in assessing outcomes. They may focus on the negative, set very high expectations for them- selves, and be more swayed by the short-term, rather than long-term, consequences of their actions (Nezu, 1987; Rehm, 1977). Overall, despite ample evidence relating depression and more gen- eral problem-solving deficits in child and adolescent samples (e.g., Mul- lins, Siegel, & Hodges, 1985; Sacco & Graves, 1984), there is surprisingly little empirical support for the particular stage-related deficits pro- posed by Nezu (1987) other than that found for orientation variables in studies of adolescents. Positive problem orientation has been found to moderate the relation between negative life stress and depression, and, conversely, negative problem orientation and impulsive and avoid- ant response styles predict depression (e.g., Frye & Goodman, 2000; Reinecke, DuBois, & Schultz, 2001). Beyond that, there is some evidencelinking depressive

symptoms and the generation of fewer solutions (Frye & Goodman, 2000; Levendosky, Okun, & Parker, 1995). Though the types of deficits proposed by Nezu (1987) may well exist, research- ers have tended not to assess them, instead relying on self-reports of more global attitudes and abilities. Research examining problem solving and anxiety is much less advanced, but the Nezu (1987) formulation seems readily adaptable. Studies with adults have documented links between anxiety and less effective problem solving (e.g., Dugas, Letarte, Rheaume, Freeston, & Ladouceur, 1995) and evidence of a moderating role for problem- solving ability in the relationship between negative life stress and anxiety (Nezu, 1986). Anxious youth present with a range of cognitive biases that would appear to adversely impact their problem-solving ability. For example, Chorpita, Albano, and Barlow (1996) found that anxious children had a distinct tendency to interpret ambiguous situ- ations as threatening, endorse more avoidant plans in response, and assign higher probability to the occurrence of threatening events. Problem situations are inherently ambiguous, and perceiving them as threats may impede the ability to objectively define them, discourage the generation of solutions, and prevent decision making and imple- mentation (Dugas et al., 1995).TaBle 4.1 The Problem-solving Training element in representative eBT Manuals Coping Cat (Kendall & Hedtke, 2006) o Problem solving is explicitly mentioned and integrated throughout this treatment, with a specific session dedicated to developing problem-solving skills. The therapist is also encouraged to model problem solving in anxiety-provoking situations of increasing intensity. C.A.T. Project (Kendall, Choudhury, Hudson, & Webb, 2002) o As with Coping Cat, problem solving is integrated throughout the treatment and is also the focus of a particular session about coping and problem solving. The therapist is encouraged to help adolescents acquire skills for problem solving in anxiety-provoking situations. Family-Based Treatment for Young Children with OCD (Freeman & Garcia, 2009) o Problem solving is explicitly incorporated into parental scaffolding for teaching ERP in one section of the treatment. o The parents also problem-solve potential barriers to homework completion (child and parent assignments) with the therapist. CBT of Childhood OCD: It's Only a False Alarm (Piacentini, Langley, & Roblek, 2007) o Although problem solving is not a specific skill taught in this treatment, the parents and/or the therapists are encouraged to help the youth use it in several places throughout this treatment (e.g., in problem solving obstacles to homework compliance or engaging in exposure exercises). When Children Refuse School: A CBT Approach (Kearney & Albano, 2007): Chapters 4 and 5 on internalizing symptoms o Though covered in detail as part of parent-child negotiation and contracting in a chapter devoted to reward-based school refusal (Chapter 7), there is no clear teaching of problem-solving skills in the two chapters on internalizing symptoms. Treating Trauma and Traumatic Grief in Children and Adolescents (Cohen, Mannarino, & Deblinger, 2006) o Problem solving is explicitly mentioned, with one section devoted to enhancing problem solving and social skills, including related worksheets for youth to complete. o Problem solving is also referenced at other points in the treatment through the use of an acronym (i.e., CRAFTS) for the types of problems addressed in treatment (Cognitive, Relationship, Affective, Family, Traumatic behavior, Somatic). Adolescent Coping with Depression (Clarke, Lewinsohn, & Hops, 1990) o Problem solving is an explicit focus of this treatment, with an entire section devoted to learning negotiation and problem solving.TaBle 4.1. (continued) Interpersonal Psychotherapy for Depressed Adolescents, 2nd edition (Mufson, Pollack Dorta,

Moreau, & Weissman, 2011) o Teaching problem solving is an explicit component of this treatment, with the therapist assisting the client in each of the formal steps involved in problem solving. Treating Depressed Children: Therapist Manual for "Taking Action" (Stark & Kendall, 1996) o Problem solving is explicitly discussed in this treatment, with a specific section dedicated to it. The therapist is also encouraged to model the use of problem solving to overcome impediments the client encounters.Treating Depressed Youth: Therapist Manual for "Action" (Stark et al., 2007) o Problem solving is an explicit component of this treatment, with a section focused on this skill and the steps one takes to learn it, as well as a separate appendix describing the steps. Psychotherapy for Children with Bipolar and Depressive Disorders (Fristad, Arnold, & Leffler, 2011) o Problem solving is explicitly discussed and integrated throughout this treatment, including several related activities and handouts. o Additionally, there are separate problem-solving skills chapters intended to address parents' and children's problem-solving deficits. Note. Some book titles are shortened to conserve space. See the References at the back of the book for full titles. problem solving to increase frequency of pleasurable activities). The remaining sessions in the BPS condition were devoted to teaching problem-solving skills and developing strategies for increasing the occurrence of pleasant activities. In the SC condition, the remaining sessions targeted self-monitoring of pleasant activities and positive self-statements, setting more realistic performance standards, adap- tive attributions, and self-consequating. Both of the active treatments were effective relative to the waitlist condition, producing statistically and clinically significant improvements in depression. The BPS condi- tion fared a bit better than the SC condition on the parent ratings, with mothers reporting significant improvements in internalizing behavior at posttreatment and in social withdrawal, depression, and internal- izing behavior at an 8-week follow-up. Multimodal treatments that include PST as a component are effec- tive in treating child and adolescent depression (e.g., Clarke et al., 1999; Kahn, Kehle, Jenson, & Clark, 1990; Lewinsohn et al., 1990; Mufson et al., 2004; Mufson, Weissman, Moreau, & Garfinkel, 1999). Most of these are cognitive-behavioral treatments that also include psycho- education, cognitive restructuring, pleasant events scheduling, and skills training (e.g., coping, emotion regulation, and social skills). Forexample, in a study with 59 depressed adolescents (mean age = 16.23 years), Lewinsohn and colleagues compared adolescent-only and ado- lescent and parent versions of their CWD-A (Lewinsohn et al., 1990). The CWD-A consisted of 14 group skills training sessions targeting teaching of relaxation skills, increasing pleasant events, controlling negative thoughts, and improving social skills, as well as a conflict resolution component addressing communication and problem solv- ing with parents. In the PST component, adolescents were taught to concisely define problems, brainstorm alternative solutions, decide on one or more mutually satisfactory solutions, and specify the details for implementing the agreed-upon solution. In the adolescent-and-parent version, seven parent sessions overviewing what was taught to the teens were added to promote acceptance and support for the interven- tion. Both versions resulted in significant reductions in depression that were maintained at a 2-year follow-up assessment, whereas adolescents in the waitlist control condition showed very little improvement. No significant differences between the two versions of the CWD-A course were found. PST is also included in the only "first line" psychosocial treat- ment for pediatric bipolar disorders (Fristad & McPherson, 2014).Fristad et al. (2009)

conducted a randomized controlled trial (RCT) with youth (N = 165; ages 8–12 years) meeting the criteria for depression or bipolar disorder that compared multifamily psychoeducational psychother- apy plus treatment as usual (MF-PEP + TAU) and waitlist control plus treatment as usual (WLC + TAU) conditions. After two sessions devoted to psychoeducation, the remaining six ses- sions targeted a variety of coping skills, including emotion regulation, problem solving, and nonverbal and verbal communication. CBT for Social Phobia: Stand Up, Speak Out (Albano & DiBartolo, 2007) o Problem solving is explicitly mentioned in a section on "problem solving and skills training," a series of three sessions, one of which is dedicated jointly to social problem solving and cognitive restructuring (the other two sessions focusing on social skills training and assertiveness training). Fam- ily psychoeducation plus skill building interventions provide families with information on the symptoms, course, and treatment of bipolar disorders while also teaching coping skills helpful in symptom man- agement (e.g., Fristad, Verducci, K. Walters, & Young, 2009). MF-PEP was evaluated as an adjunctive intervention, and all youth were allowed to continue with TAU, including medication. The MF-PEP condition consisted of eight 90-minute sessions with concurrent parent and child groups.