

Running head: COMPARATIVE PCS OF SCHOOL-BASED CBT FOR ANXIETY AND ASD

SCHOOL-BASED CBT FOR ANXIETY IN ADOLESCENTS WITH HIGH-FUNCTIONING
AUTISM SPECTRUM DISORDERS: A COMPARISON OF THE PRAGMATIC CASE

STUDIES OF BRIAN AND BRIDGETTE

A DISSERTATION

SUBMITTED TO THE FACULTY

OF

THE GRADUATE SCHOOL OF APPLIED AND PROFESSIONAL PSYCHOLOGY

OF

RUTGERS,

THE STATE UNIVERSITY OF NEW JERSEY

BY

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IN PARTIAL FULFILLMENT OF THE

REQUIREMENTS FOR THE DEGREE

OF

DOCTOR OF PSYCHOLOGY

NEW BRUNSWICK, NJ

OCTOBER 2017

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Abstract

While a significant body of literature demonstrates the efficacy of cognitive-behavioral therapy (CBT) in treating child and adolescent anxiety, relatively little research has examined its application in youth with autism spectrum disorders (ASD). Previous studies suggest that enhanced CBT benefits this population, but additional information is needed to guide the development and delivery of individualized interventions in natural settings. Towards this end, this project consists of pragmatic case studies of CBT therapy with two 15-year-old adolescents, “Brian” and Bridgette,” who both have ASD—although with different levels of severity, and comorbid anxiety disorder. Together the clients exemplify the diversity and complexity of the needs of relatively high functioning adolescents with the combination of these disorders. The case studies are designed to examine the adaptation of empirically supported practices in order to appropriately address common and idiosyncratic features of ASD within school-based mental health service delivery. The sequence of the clients is noteworthy. Brian, the higher functioning client, was seen short-term for 8 sessions; and a year later, clinical lessons learned from Brian’s therapy were applied to the design of the longer-term treatment of 65 sessions over two years for Bridgette, the lower functioning client. A qualitative and quantitative evaluation of therapy processes and outcomes offers insight into the particular intervention strategies and modifications that helped each client. The benefits and barriers of school-based mental health service delivery are considered.

Acknowledgements

I would like to express my appreciation for a number of people who provided me with invaluable support throughout my graduate training. I would like to thank my dissertation committee, Dan Fishman and Scott Roth, who have shaped my perspective and practice as a clinician. I have valued their mentorship and guidance in utilizing disciplined inquiry and evidence-based practices for students with disabilities. I would like to thank other supervisors who supported my work with the clients presented here, and enriched my graduate school experience. I am deeply grateful to Karen Haboush, Elizabeth Asamoah, David Goldstein, and the faculty in the Applied and Clinical Departments at GSAPP. Their warmth, enthusiasm, and dynamic instruction impassioned and prepared me to make a difference as a school psychologist.

My family and friends have shepherded me through this process with their unconditional love and unwavering support. I appreciate my fiancé, Matthew Sherman, my parents, Barry and Sheila Gartenberg, and sister, Alexandra Gartenberg, who heard the word “dissertation” many, many times. Along with my dearest friends, they helped to keep me focused and indulged me with nourishing self-care. I am also thankful to my extended family, including but not limited to my grandparents, Ruth and Maurice Silverman and Josef and Lilo Gartenberg, who instilled in our family a strong work ethic and a commitment to bettering our lives and those of others. It is with their encouragement and their own example that I have been able to reach this milestone.

Finally, I am thankful for my clients and their families, who are discussed in these case studies. They welcomed me into their lives, and allowed me to reflect upon and share their stories toward the fulfillment of this dissertation requirement and toward my ultimate goal of improving the care and quality of life for adolescents with complex needs.

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Chapter I: Case Context and Method

Rationale for the Pragmatic Case Study of CBT for ASD and Anxiety

The increased prevalence of autism spectrum disorders (ASD) in recent years (Matson & Kozlowski, 2011) is accompanied by increased awareness of the difficulties commonly experienced by youth on the spectrum. These include challenges directly related to features of ASD, as well as comorbid psychiatric conditions, such as anxiety disorders (Leyfer et al., 2006). Although efficacious interventions have been established to treat symptoms of ASD (i.e., Applied Behavior Analysis; Virués-Ortega, 2010) and symptoms of anxiety (i.e., Cognitive Behavioral Therapy [CBT]; Chorpita et al., 2011; Ollendick, King, & Chorpita, 2006; Walkup et al., 2008), there is limited but promising research on treatments for youth with these comorbid conditions.

ASD is a neurodevelopmental disorder characterized by a continuum of pervasive challenges in social communication and interaction, and restrictive repetitive behaviors (American Psychiatric Association [APA], 2013). Individuals with ASD often exhibit distinct styles of information processing, evidenced in atypical sensory perception and cognition. They can become easily overwhelmed due to sensory hypersensitivity (Ashburner, Bennett, Rodger, & Ziviani, 2013; Mayes, Calhoun, Mayes, & Molitoris, 2012) and difficulty with executive functioning, metacognition, and theory of mind (Baron-Cohen, 2001; Charman, Jones, Pickles, Simonoff, Baird, & Happé, 2011; Rajendran & Mitchell, 2007). These challenges frequently lead to higher baseline levels of physiological arousal and negative affectivity, and contribute to life stress (Mazefsky et al., 2013). Many youth with ASD share constellations of these challenges

that manifest in unique and idiosyncratic ways, and interact to shape the nature and development of anxiety symptoms.

Internalizing conditions like anxiety are highly prevalent and severe in children with ASD (Bradley, Summers, Wood, & Bryson, 2004; Mayes, Calhoun, Murray, Ahuja, & Smith, 2011; Simonoff, Pickles, Charman, Chandler, Loucas, & Baird, 2008; Strang et al., 2012). Anxiety disorders are the most commonly co-occurring condition with ASD, present in at least 40-45% of school-aged children (de Bruin, Ferdinand, Meester, de Nijs, & Verheij, 2007; van Steensel, Bögels, & Perin, 2011). Up to 84% of the population has subclinical anxiety symptoms (White, Oswald, Ollendick, & Scahill, 2009). Children with ASD exhibit anxiety more frequently and at least as acutely than their typically developing (TD) peers (e.g., Bellini, 2004; Kim, Szatmari, Bryson, Streiner, & Wilson, 2000; Russell & Sofronoff, 2005; Thede & Coolidge, 2007). The severity of their symptoms is similar to that observed among TD children with clinical anxiety (Farrugia & Hudson, 2006; Russell & Sofronoff, 2005; van Steensel, Bögels, & Dirkson, 2012). Internalizing problems can be particularly painful for higher functioning adolescents with ASD, who show greater interest in social connection (Hintzen, Delespaul, van Os, Myin-Germeys, 2010; Leyfer et al., 2006) and awareness of their social deficits (Bellini, 2004; Mukaddes, Hergner, & Tanidir, 2010).

Studies on the nature of anxiety in youth with ASD highlights some trends, as well as the considerable diversity in the population. Children with ASD experience worries that differ qualitatively from those of TD youth. Relative to their TD peers, children with ASD are more likely to exhibit “unusual fears,” which are atypical in nature or in the degree of their “intensity, obsessiveness, irrationality,” and functional impairment (Mayes et al., 2013). Based on parent reports, children with ASD experience more situation-based phobias and medical fears than TD

children and children with other disabilities (e.g., Down syndrome; Evans et al., 2005). On the other hand, individuals with ASD have different personalities, problems, and fears. Stimuli feared by some children are innocuous to others (e.g., clouds; Mayes et al., 2013).

The anxiety associated with ASD – social, generalized, specific, or unusual – complicates social and school experiences. For instance, higher functioning children and adolescents with ASD perceive their relationships to be of poorer quality than those they observe among their TD peers (Bauminger & Kasari, 2000). They are vulnerable to bullying and victimization (Little 2001, 2002; van Roekel, Scholte, & Didden, 2010), which is associated with additional emotional and behavioral problems. A qualitative study of adolescents with Asperger syndrome (AS) illustrated the universality of bullying and related difficulties in school. Students noted that bullying contributed to feelings of isolation and a sense of “being different” (Church et al., 2000; Humphrey & Lewis, 2008, p. 31; Portway & Johnson, 2005), which can further hinder the development of protective factors, such as a positive self-image and identity (Bauminger & Kasari, 2000; Lopata & Thomeer, 2014). Students with ASD might also struggle academically because of aspects of their environment, sensory and cognitive processing issues, and behavioral problems, which can adversely impact relationships with and the self-efficacy of educators (Hastings & Brown, 2002; Machalicek et al., 2007), who might redirect their energy to more cooperative students (Carr et al., 1991; Cherniss, 1995). Youth with ASD can experience school as immensely stressful due to pervasive social disability and other difficulties associated with ASD.

These challenges often persist into adulthood. Adults with high-functioning ASD continue to struggle with social skill deficits (Rutherford, Baron-Cohen, & Wheelwright, 2002; Tantam, 2003), and related challenges in social and psychological adjustment. Compared to their

TD counterparts, adults with Asperger Syndrome and high-functioning autism are less likely to enjoy satisfying social relationships, and more likely to be unemployed and underemployed, which can be upsetting to intellectually capable individuals who lack vital functional skills (Rao et al., 2008; Szatmari, Bartolucci, & Bremner, 1989; Venter, Lord, & Schopler, 1992). The persistence of such challenges underscores the need for accessible, appropriate, and effective mental health services for young people with high-functioning ASD.

Cognitive-behavioral therapy (CBT) for anxiety has been well-established as efficacious for typically developing children and adolescents (e.g., Chorpita et al., 2011; Ollendick, 2006; Walkup et al., 2008), and promises similar benefits for youth with ASD (Chambless et al., 1998; Rudy, Lewin, & Storch, 2013; Ung et al., 2013). CBT offers a comprehensive and interactional framework for conceptualizing anxiety, and a pragmatic and goal-oriented approach for treatment. It integrates principles of information-processing, social learning, and behavior change principles in conceptualization, and employs hands-on intervention strategies. Common treatment components include psychoeducation, self-monitoring, modeling, relaxation training, cognitive restructuring, and exposure (Kendall, 2012).

These components have been integrated into treatments tailored to meet the unique needs of youth with ASD. Available research suggests that adapted CBT protocols for this population are “probably efficacious” having demonstrated superiority to wait list controls and usual care (Chambless et al., 1998; Rudy, et al., 2013; Ung et al., 2013). The programs evaluated were generally more effective in reducing anxiety than no treatment (Wood et al., 2009) and treatment as usual (Reaven, Blakeley-Smith, Culhane-Shelburne, & Hepburn, 2012; Storch et al., 2013). CBT protocols developed for ASD youth can confer meaningful benefits to children and

adolescents, comparable to those observed in CBT for TD youth (Storch et al., 2013; Wood, Piacentini, Southam-Gerow, Chu, & Sigman, 2006).

The CBT programs for youth with ASD include, but are not limited to, adaptations of the manualized and modular individual treatments designed for TD youth. For example, the “Coping Cat” (Kendall, 2000; Kendall, Choudhury, Hudson, & Webb, 2002; Kendall & Hedtke, 2006a, 2006b; McNally Keehn, Lincoln, Brown, & Chavira, 2013) was originally designed for TD youth, and subsequently adapted and evaluated for children with ASD. Similarly, “Building Confidence” (Wood & McLeod, 2008) was adapted for this population and renamed, “Behavioral Interventions for Anxiety in Children with Autism” (BIACA; Wood, Drahota, Sze, Har, Chui, & Langer, 2009; Wood et al., 2015). Other programs (e.g., “Facing Your Fears: Group Therapy for Managing Anxiety in Children with High-Functioning Autism Spectrum Disorders,” (“Facing Your Fears” [FYF]; Reaven, Blakeley-Smith, Nichols, & Hepburn, 2011); and the “Multimodal Anxiety and Social Skills Intervention” (MASSI, formerly known as Multi-Component Integrated Treatment [MCIT]; White, Ollendick, Scahill, Oswald, & Albano, 2009; White et al., 2010)) include individual, group, and/or parent/dyadic components. These programs have been evaluated in different capacities, and yield encouraging results. Although they vary in modality, dosage, content, and treatment strategies, they all include important modifications to the CBT interventions evaluated in TD populations.

The modifications used in CBT for youth with ASD vary based on the child and treatment, but several adaptations have been used across programs (Moree & David, 2010). These include disorder-specific hierarchies, concrete and visual strategies, integration of circumscribed interests, and parent involvement. Disorder-specific hierarchies facilitate comprehensive conceptualization and treatment planning, and encourage concurrent intervention

for anxiety and other ASD-related problems. These hierarchies might highlight the need to supplement anxiety protocols with “affective education” or social skills training. Additionally, therapists can enhance interventions by minimizing verbal demands, presenting information in accordance with clients’ linguistic abilities and learning styles, integrating clients’ personal interests to increase motivation, and involving parents in treatment to provide them support and promote clients’ skill generalization. Other modifications, such as Applied Behavior Analysis (ABA)-informed practices of systematic prompting and differential reinforcement have been studied less explicitly, but appear helpful (Machalicek et al., 2007). Group studies and case studies of programs including these adaptations have yielded encouraging results, showing fewer anxiety symptoms and greater diagnostic remission after treatment relative to wait list controls (Chalfant et al., 2007; Moree & Davis, 2010; Wood et al., 2009).

The implementation of these modifications has been illustrated in a growing number of case studies on CBT for children, adolescents, and young adults with ASD and comorbid anxiety. Compared to group studies, they provide more detailed accounts of the unique qualities and barriers associated with ASD, and the particular modifications used to reduce anxiety and related social skill deficits. Previous case studies have employed various approaches to individualizing and evaluating treatments. As an example, Sze and Wood (2007) described therapy for a 10-year-old boy with Asperger syndrome and comorbid generalized anxiety disorder (GAD) and social phobia. Their work began with anxiety management training and continued with more targeted social skills intervention. Sze and Wood (2007) noted that procedures for exposure response prevention, which are commonly effective for TD youth, may be insufficient for children on the spectrum, like their client. They coupled standard practices with adaptations to address ASD-related features that can inhibit meaningful functional changes

in behavior (e.g., perspective-taking, help-seeking, behavioral self-monitoring). This study detailed anecdotal observations of incremental growth and incorporated pre- and post-treatment assessments, suggesting sustained reductions in social avoidance up to three months post-treatment.

Other case studies document different treatment strategies and adaptations, and vary in the rigor with which they evaluate progress and outcomes (e.g., Ozsivadjian & Knott, 2011; Reaven & Hepburn, 2003; Schleissmann & Gillis, 2011; Sze & Wood, 2007, 2008). For instance, some provide quantitative data collected on a weekly basis, while others primarily employ qualitative data of present functioning. The case studies also vary in length and specificity, as some case studies summarize the core adaptations briefly, while others illustrate the adaption, like Sze and Wood (2007). Across the case studies, however, children and adolescents have been shown to experience significant anxiety relief when their CBT treatments have incorporated appropriate adaptations that complemented their unique presentations and needs.

Although available research suggests the promise of enhanced CBT for the treatment of anxiety in youth with ASD, additional research is needed to identify the mechanisms of change and isolate the components that are most effective for students with different presentations (Ho, Stephenson, & Carter, 2015; Moree & Davis, 2010). Extant group studies and case studies employ varied methodological strategies to evaluate programs that differ in modality, dosage, content, and technique. Although common adaptations are used across many interventions, they are implemented differently and to varying degrees. Additional research is needed to clarify the core elements and adaptations of CBT that can confer the greatest benefit to children with specific qualities, abilities, and needs. Further, in general, there is a striking paucity of research on CBT for anxiety in children with ASD, despite the salience of social stressors for these

children and the centrality of schools in their lives. Such research can strengthen clinicians' development and their ability to deliver comprehensive and individualized services.

Schools are a uniquely positioned, but underutilized resource for addressing problems related to comorbid ASD and anxiety. Lopata and Thomeer (2014) suggest that anxiety can be treated efficiently within the school, as the existing system for school-based service delivery offers many of the resources needed to implement evidence-based practices. The treatment of anxiety in youth with ASD requires a multimodal approach and a multidisciplinary team, like that utilized in schools (see Lopata & Thomeer, 2014). Schools offer natural exposure to students' anxiety triggers, and thus, opportunities to promote coping skill practice and generalization (Bolton et al., 2012; Gosch et al., 2012; Lopata & Thomeer, 2014; Rotheram-Fuller & MacMullen, 2011). Some research has been conducted to transport CBT for TD youth to schools (See Weissman, Antinoro, & Chu, 2008), and this work documents some of the benefits and barriers of school-based mental health service delivery (Hicks, Shahidullah, Carlson, & Palejwala, 2014; Reinke, Stormont, Herman, Puri, & Goel, 2011). However, very little research has explored the transportability of treatments for anxious youth with ASD (Reaven et al., 2015), and less has examined the possible roles of school-based clinicians in these endeavors.

Effective school-based treatment has important implications beyond adolescence. Importantly, individuals with ASD might struggle to find:

“a skilled therapist, making the role the school psychologist can play much more critical.

The general paucity of research and lack of public awareness concerning anxiety treatment for adolescents and adults with ASD may allow affected individuals to conclude that treatment is either unavailable or ineffective. However, if skills associated

with CBT can be enhanced when students are still in school, they are more likely to seek appropriate treatment when they are adults integrated within the community,” (Scattone & Mong, 2013, p. 933).

Thus, educational settings present important opportunities for comprehensive and practical interventions, and the quality of services delivered within schools is vital in the long-term well-being of students with ASD and anxiety.

The pragmatic case study method offers a systematic framework for illustrating and evaluating the implementation of empirically supported interventions in natural settings. This best practice model of documentation structures cases through a “guiding conception” based on background information, theory, and research, and “disciplined inquiry” (Donald Peterson, 1991). The pragmatic case approach guides clinicians in individualizing treatment to meet their clients’ unique and complex needs, while connecting to the research literature and encouraging continual reconceptualization and adjustment as needed based on concrete empirical feedback from practice. Pragmatic case studies present detailed accounts of treatment, and qualitative and quantitative measurements of treatment processes and outcomes. The in-depth analysis is conducive to consideration of barriers and benefits unique to particular cases, including systemic and contextual factors impeding and facilitating progress. The depth and structure of pragmatic case studies provide critical data for like-minded mental health professionals regarding the treatment of a diverse population of clients suffering from complicated mental health issues, as well as comorbid developmental disabilities.

The goals of the pragmatic case study analysis in this project are multiple: (1) to analyze the clinical application of manualized and modular treatments for anxiety in adolescents with ASD utilizing core elements of CBT and modifications highlighted in the literature; (2) to

record, analyze, and monitor the effectiveness of the treatment overall as well as its individual components and modifications – specifically, determining the ways in which standard treatment was beneficial, and what modifications and deviations from protocols were necessary; (3) to record the development of a novice practitioner, the author, and to identify areas and strategies for professional growth in order to promote improved client wellness; and (4) to consider the impact of environmental and other barriers to implementation of current treatment models in these cases, as they reflect broader issues with dissemination of evidence-based interventions in natural settings. Ultimately, a review of process, content, and qualitative and quantitative outcome data in the context of two pragmatic case studies is intended to provide insight into the challenges in treatment planning and integration of extant literature in sound decision-making for evidence-based practice. These analyses will provide information to better support clinicians and researchers in answering the following questions:

1. How do features of ASD necessitate modifications in CBT for anxiety?
2. What similarities emerge among ASD youth that help orient clinicians to treatment?
3. What unique individual differences may be expected in treatment of youth with different levels of ASD (with Brian diagnosed at Level 1, and Bridgette, at Level 2)?
4. What challenges impede the delivery of manualized or other structured treatments for youth with ASD in school settings?
5. How can school-based clinicians respond to these challenges in treatment?

Rationale for Selecting These Clients for Study

The two clients discussed here, given the names of “Brian” and “Bridgette,” were referred for school-based counseling to supplement services provided in accordance with their individualized education programs (IEPs). They were selected for study because features of their

ASD impacted the development and manifestation of their anxiety, and thus, the course of their treatments. Furthermore, the review of their school-based treatments highlights the diversity and complexity of needs of adolescents with ASD, and provides an opportunity to examine the benefits and barriers intervening in natural settings.

Clinical Settings in Which the Cases Took Place

The treatments of Brian and Bridgette took place in diverse public schools in the northeastern United States. Each client was referred for counseling services to supplement IEP-mandated counseling as a part of their special education programming. At the time of treatment, I was a doctoral student in school psychology. Brian's treatment was provided during my first practicum placement, whereas Bridgette's took place during the following two years of my training. Both cases were supervised by license-eligible/licensed psychologists who specialized in child and adolescent psychology, developmental disabilities, cognitive-behavioral treatment, special education, and school-based service delivery more broadly.

The two clients' treatments differed drastically in dosage. Brian, partly because he was diagnosed at Severity Level 1 of his ASD and partly because of the short-term nature of my practicum training, was informed at the outset of his treatment that his supplemental counseling services would span 8 sessions. In contrast, for Bridgette, partly because she was diagnosed at Severity Level 2 of her ASD, her treatment spanned 2 school years, a total of 65 sessions. The duration of sessions varied for both students as a function of the school setting. For instance, the students attended brief, five- or fifteen-minute "check-ins," as well as 45- to 60-minute sessions. Attendance was impacted by a number of factors, including, but not limited to, the concurrent scheduling with academic classes and lunch periods.

Sources of Data Available Concerning the Clients

As a school-based practitioner, I had access to extensive educational files as well as regular consultation with educators and specialists who worked closely with the clients. I was able to review IEP data, consult with supervisors, child study team members, teachers and parents prior to treatment. Before each referral, I had casual interactions and opportunities for informal observations of both students. In the case of Brian, I had the opportunity to conduct pre- and post-treatment classroom observations. Additionally, the students completed standardized, norm-referenced quantitative measures of social-emotional functioning. (See below.)

Behavior Assessment System for Children – Second Edition (BASC-2)

Both students were assessed using the Behavior Assessment System for Children – Second Edition (BASC-2; Reynolds & Kamphaus, 2004). The BASC-2 is a standardized, norm-referenced, multi-informant assessment of a child's problem and adaptive behaviors. Raters provide information about their perceptions of a child's problem and adaptive behaviors. The BASC-2 includes rating scales for children, parents, and teachers that provide primary index scales, content subscales, and measures of validity. Raters respond to statements that might reflect the thoughts, feelings, or actions of children and adolescents, by indicating whether the statements are "True" or "False" for the child, and how frequently (i.e., *Never, Sometimes, Often, Almost Always*) the statements apply to the child.

Index and content subscales are reported as T-scores that estimate levels of social-emotional and adaptive functioning. The mean standard score for these indices and subscales is 50, and the standard deviation is 10. T-scores for clinical and adaptive scales correspond to classifications. For both clinical and adaptive scales, scores between 41-59 are "Average." For clinical scales, T-scores above 69 are "Clinically Significant," scores between 60-69 are "At-

Risk,” scores between 31-40 are “Low,” and anything below is “Very Low.” Lower scores are ideal, whereas higher scores indicate potential problems. Conversely, for the adaptive scales, T-scores above 69 are “Very High,” scores between 60-69 are “High,” scores between 30-40 are “At-Risk,” and any score lower is “Clinically Significant.” Higher scores are ideal and lower scores indicate potential deficits.

The scales generated by the BASC-2 are presented in Tables 3-6 and 8. These present the BASC-2 results for Brian and Bridgette at different time points in their therapy and as rated by different informants (for more details on when these measures were completed, see below).

The BASC-2 provides norms and profiles for youth with ASD and other disorders. The BASC total score and its subscales have demonstrated high internal consistency (.85-.95) and high inter-rater reliability (.70-.88; Grondhuis & Aman, 2012, Reynolds & Kamphaus, 2004). Similar to other measures of child social-emotional functioning, the BASC-2 provides considerable breadth, but lacks depth and specificity in its assessment of individual areas (e.g., few items measuring anxiety specifically; Grondhuis & Aman, 2012). Further, the scales developed to measure social-emotional well-being and anxiety in TD youth might not appropriately assess the experiences or manifestations of anxiety among ASD youth. Therefore, it should be used in conjunction with other assessments (Grondhuis & Aman, 2012; Lopata et al., 2010).

The clients completed the BASC-2 at different intervals and frequencies. Brian and Bridgette completed the BASC-2 pre- and post-treatment. Bridgette also completed the BASC-2 twice more as a part of her treatment through the school-based clinic in order to assess well-being and measure treatment gains at the beginning and end of each school year. Both Brian and Bridgette participated in follow-up assessments that included the BASC-2 and an interview about

the treatment process. At the time of the follow-up assessments, Brian and Bridgette's parents each completed two BASC-2 parent-rating scales. They completed one based on their child's current functioning, and one retrospectively, based on their estimates and recollections of their child's functioning two years earlier. One of Brian's teachers completed a pre-treatment scale, but was unable to complete subsequent ratings. Where possible, changes in perceptions were statistically analyzed using the Reliable Change Index (Jacobson & Truax, 1991).

The literature acknowledges that retrospective psychological assessments can be influenced by bias, but also sufficiently reliable and valid (Brewin, Andrews, & Gotlib, 1993; Coolidge, Tambone, Durham, & Segal, 2011; Hardt & Rutter, 2004; Henry, Moffitt, Caspi, Langley, & Silva, 1994; Leising, Erbs, & Fritz, 2010), and advantageous (Hill & Betz, 2005). "Validity is moderately sufficient where the assessment is not bound to narrow time periods and the behaviors to be assessed are adequately specific and operationalized" (See Coolidge et al., p. 163). Hill and Betz (2005) also acknowledge that bias is likely in both traditional (i.e., prospective) and retrospective pre-tests, and "that in some cases, retrospective pre-tests might introduce greater bias than traditional pre-tests" (p. 501). They clarify that prospective pre-test measures are more useful when seeking to evaluate the effects of a program with accuracy. However, if accuracy is not necessary (e.g., if overestimates of treatment effects are not a concern), retrospective reports can provide valuable estimates of subjective change in a practical, efficient, comfortable, and reaffirming manner for raters (Hill & Betz, 2005).

I recognized the risk of bias inherent in retrospective parent ratings, as well as some advantages of using the BASC-2 questionnaire in this particular context. I expected that scores would be meaningful because of the specificity of questionnaire items (i.e., asking about a child's complaints of headaches rather than "somatization" broadly) and the time periods about

which parents were asked to reflect. Furthermore, given the nature of my therapeutic working relationships with the families and the retrospective nature of these case studies, the administration of a retrospective “pre-test” measure seemed most comfortable, efficient, and practical for the parent raters and the purposes of this study.

Generalized Anxiety Disorder 7-Item Scale (GAD-7)

Toward the end of Bridgette’s treatment, I started administering the GAD 7-Item Scale (Spitzer, Kroenke, Williams, & Löwe, 2006), a brief self-report diagnostic screening tool to facilitate recognition of Generalized Anxiety Disorder. On a four-point scale, participants indicate the frequency with which they experienced problems associated with generalized anxiety disorder (GAD) over the previous two weeks (i.e., *Not at all, several days, more than half the days, nearly every day*). There are a total of 7 items. Sample items include, “feeling nervous, anxious or on edge,” and “worrying too much about different things.” GAD-7 scores range from 0 to 27, with scores of 5, 10 and 15 representing mild, moderate, and severe levels of symptoms, respectively (Spitzer et al., 2006).

For Bridgette’s results on the GAD-7, see Table A.7.

The GAD-7 has good test-retest reliability (intra-class correlation = 0.83), good reliability between self-reports and interviewer-administered versions of the scale (intra-class correlation = 0.83), and good criterion, construct, factorial, and procedural validity. Although developed to screen for GAD, the GAD-7 is also a good screener for panic, social anxiety, and post-traumatic stress disorders (Kroenke, Spitzer, Williams, Monahan, & Lowe, 2007). The GAD-7 was implemented as a weekly screener utilized in the last few months of Bridgette’s treatment as a means of monitoring progress more regularly and efficiently.

Methodological Strategies Employed for Enhancing the Rigor of the Study

The quality of services and methodological rigor of the study was enhanced through clinical supervision, as well as strategies to monitor treatment fidelity and symptom change. Brian's case was supervised by a license-eligible, doctoral-level school psychologist working closely with Brian, and by the licensed psychologist teaching my doctoral-level course in School-Based Psychological Interventions. Bridgette's case was supervised by the licensed clinical psychologist at the school-based clinic. Additional supervision on both cases was provided by another licensed psychologist facilitating a university-based supervision group for advanced school psychology trainees. Across the two cases, supervision was focused on tailoring empirically supported interventions with consideration of the interrelation of ASD and anxiety as it impacted the clients and manifested in their home, school, and counseling environments. Supervisors reviewed extensive clinical notes that typically included qualitative accounts of session activities, goals, and treatment techniques, as well as barriers and facilitators observed within the sessions, and plans for subsequent sessions.

Treatment fidelity was assessed with weekly checklists comprised of session goals established by the clinician (for Brian), or collaboratively with the client (for Bridgette). After each session, I completed the Therapy Procedures Checklist (TPC; Weersing, Weisz, & Donnenberg, 2002) to indicate activities performed and techniques utilized. (See Appendix for Sample Checklists B.1-B.2.) The TPC was developed to enhance youth treatment research by facilitating the assessment of therapists' reports of treatment techniques and strategies. The measure incorporates the most common components of psychodynamic, cognitive, and behavioral treatments. It has demonstrated good content validity, internal consistency (all $\alpha >$

.86), and test-retest reliability (all $r > .79$). TPC scales have been deemed sensitive to within-therapist changes in technique use (Weersing et al., 2002).

I sought input from clients, caregivers, and educators regularly throughout treatment. Ongoing clinical observations facilitated my assessment of progress, reconceptualization of the cases, and adaptation of treatment goals and plans. This feedback helped me to select and refine approaches to ensure that intervention components were feasible, acceptable, and effective. Additionally, I encouraged both clients in rating their subjective units of distress (SUDS) to help monitor stress on a regular basis. Assessment at all stages of treatment with standardized, quantitative measures was difficult, which is a common barrier in treating anxious youth with ASD (Kannabiran & McCarthy, 2009; White, Schry, & Maddox, 2012). Accordingly, I conducted ongoing, multi-method, multi-informant assessments and focused on functional, behavioral, and client-specific measures of well-being.

Confidentiality

To ensure confidentiality, identifying information has been changed. Clinical details of these cases have been preserved to maintain authenticity; however, some details of the cases have been altered in order to minimize the likelihood of identification.

Chapter II: The Clients

“Brian”

“Brian,” a 15-year-old Caucasian male in the ninth grade, was referred for supplemental school-based counseling to address symptoms of anxiety, low mood, emotional dysregulation, and social skill deficits. Based upon a record review and initial assessment (i.e., parent and teacher consultation, brief student interview and observation), I determined that Brian presented with Autism Spectrum Disorder Requiring Support (Level 1 Severity) without intellectual impairment as defined by DSM-V (APA, 2013). He struggled with effective and appropriate social communication, which hindered his development of meaningful peer relationships. Brian exhibited anxiety and low mood related to various stressors, including, but not limited to social situations and his ongoing difficulty in connecting with his classmates.

Brian reported a range of unrelated, uncontrollable, and excessive anticipatory worries (e.g., upsetting his parents, doctor appointments, and natural disasters), and he exhibited distractibility and irritability. The constellation of his symptoms reflects the high comorbidity of ASD, attentional difficulty, and internalizing conditions, as Brian met criteria for ADHD (predominantly inattentive subtype) and anxiety disorder not otherwise specified (NOS), with a rule-out of persistent depressive disorder. Brian had a history of ASD, ADHD, central auditory processing disorder, sensory integration disorder, learning disorder, and dysgraphia.

Brian was eligible for special education and related services under the classification of “Other Health Impaired” due to his earlier diagnosis of ADHD. He attended a private school for most of elementary school, before his parents moved him to the public school in order to obtain more comprehensive special education services. He was educated primarily in resource room classes, and participated in general education elective courses. He lived at home with his parents,

his older TD brother, and his younger sister who has a more severe ASD diagnosis with intellectual and language impairment.

Brian had participated in social skills and support groups for siblings of children with autism. Brian also had received speech therapy as a child. He had received IEP-mandated school-counseling since he was classified as eligible for special education and related services, but he had not participated in psychotherapy in the community. Brian's IEP-mandated counseling occurred as needed in the form of brief, solution-focused check-ins and tended to focus on making simple changes in his communication and interaction with peers. Brian was not accustomed to sessions built around longer conversations or skill-building activities, and was slow to warm up in our eight-session treatment. Brian's treatment lasted 8 sessions over the course of 1.5 months.

“Bridgette”

“Bridgette,” a 15-year-old Caucasian female in the ninth grade, was referred for supplemental school-based counseling to address symptoms of anxiety, behavioral and emotional dysregulation, and social skill deficits. Based upon a record review and initial assessment (i.e., parent and teacher consultation, brief student interview and observation), I determined that she presented with Autism Spectrum Disorder Requiring Substantial Support (Level 2 Severity) as defined by DSM-V (APA, 2013). This determination was based on Bridgette's persistent deficits in social communication and interactions across contexts and restricted, repetitive patterns of behavior, interests, and activities. Bridgette experienced persistent and pervasive anxiety about various stressors, which manifested in emotional and behavioral dysregulation.

The presentation of Bridgette's anxiety often reflected characteristics of her autism. For instance, she perseverated on particular topics, often repeating statements of concern and seeking

reassurance. She became agitated quickly if she disliked something someone else said, or if her routine changed unexpectedly. Bridgette self-reported obsessive-compulsive tendencies across environments, indicating that she often wanted objects moved to their proper places, and that she worried about possible negative outcomes of certain behaviors and events. Her preoccupation with these worries hindered her academic engagement, performance of age-appropriate life skills, and the development of satisfying family and peer relationships.

Bridgette received special education and related services under the classification of Autism, based on a previous diagnosis of autistic disorder as per DSM-IV-TR. She received instruction in a Life Skills/Community-Based Instruction classroom and participated in general education elective courses. She lived at home with her parents and her older TD sister.

Bridgette had received comprehensive services through the public schools since her initial classification during preschool. She received some supplemental supports with speech, language, and social skills, and saw a psychiatrist for medication management, but had not participated in psychotherapy. Bridgette's involvement in school-based counseling, speech therapy, and other related services was evident in counseling, as she was able to articulate her problems, needs, and preferences for treatment. She engaged readily, eagerly seeking solutions. Bridgette's treatment lasted 65 sessions over the course of two school years.

Chapter III: The Case of Brian

Assessment of Presenting Problems, Goals, History, and Strengths

Presenting problems. Brian was referred for supplemental counseling by his child study team (CST) counselor to help him develop anxiety management and social skills. He displayed social skill deficits, including literal interpretation of language, limited expressive ability, atypical prosody, and some stereotypic language usage. His counselor reported that his literal interpretation of language affected his appraisal of social situations and hindered his reciprocal communication. Brian struggled to interpret the meaning of his peers' sarcastic and playful comments, which he considered offensive and hurtful. He began pushing himself to join classmates for lunch, which he previously avoided due to his discomfort with the "chaos" and loud volume of the cafeteria; however, he continued to find conversations effortful and confusing. Brian's CST counselor indicated that these challenges exacerbated his perceived rejection, social isolation, and low self-esteem. He was acutely aware of and frustrated with his social skill deficits, as he desired peer acceptance and friendship, but was unable to achieve it. In a student interview, Brian reported disliking his peers, whom he considered immature and disruptive, but he also disclosed to his CST counselor his desire to be socially engaged like his high-achieving TD brother.

Child Study Team members and Brian's parents also reported concerns about Brian's frequent worrying. He became preoccupied with various stressors, including, but not limited to social situations. In a student interview, Brian reported anticipatory dread of multiple events (e.g., doctor appointments, unlikely catastrophes). He anticipated and ruminated about the worst possible outcomes of situations, and struggled to shift his attention to different tasks, topics, and

thoughts. Brian rarely articulated his distress as it emerged. He sought assistance when already agitated and teary-eyed, often entering the CST office yelling. Since his CST counseling focused primarily on troubleshooting conversational skills and strategies, supplemental counseling was expected to help Brian recognize his anxiety and improve his coping skills.

Pre-treatment assessments.

Classroom observation. Brian was observed in his elective, in which one instructor taught approximately 30 students. The students were expected to work on their “Do Now” assignments. After, the instructor gave a lecture and directed students to work independently. Half of the students worked diligently, while half conversed together.

At the start of class, Brian played on a handheld gaming device. After approximately five minutes and several verbal prompts, Brian put his device in his backpack and began working on the “Do Now.” During the class discussion and lecture, which lasted approximately twenty minutes, Brian leaned over his desk, resting his head on his crossed arms. He appeared to listen quietly, looking at the teacher and responding when directly questioned.

During independent seatwork, the volume in the room and Brian’s time on task fluctuated. The teacher reminded Brian that she contacted his parents about his late assignments. He agreed to complete the previous days’ worksheets, but repeatedly initiated conversation with a student seated across from him. Brian and his classmate would speak about a shared interest (e.g., videogames) for a few minutes, and stop temporarily when redirected by the teacher or distracted by other students, who tended to engage Brian’s classmate. While his classmate spoke with others, Brian looked around the room, occasionally wrote on his worksheet, and eventually tried to resume conversation. Brian attempted to seek social connection, as evidenced by his

apparent observation of other students and his multiple attempts to initiate conversation with a peer.

Quantitative assessment.

BASC-2 self-report (see Table A.3). Brian completed the BASC-2 Self-Report of Personality (SRP) to provide insight into his perceptions of his experiences in school. As shown in Table A.3, he manifested elevated scores on measures of anxiety, sense of inadequacy, and self-reliance which contributed to an Emotional Symptoms Index in the At-Risk range. Brian indicated that he often became nervous when things did not go the right way or when he went to bed. He worried often about many things, and felt unable to relax. He wanted to do better, but felt that he could never get anything right. Brian also rated himself as poorer than his peers in interpersonal relations. He endorsed several critical items, suggesting that he hated school, thought other students hated him and believed that no one understood him. These are consistent with Brian's records and reports from his counselor, which highlight his discomfort in school and his frustration in connecting with others.

BASC-2 teacher-report (see Table A.4). Ms. Smith, Brian's English teacher, completed the BASC-2 Teacher Rating Scales (TRS). Her responses yielded elevated scores on measures of adaptability, social skills, leadership, study skills, and functional communication, suggesting that Brian exhibited more school problems and fewer adaptive skills than his classmates. Ms. Smith reported that Brian sometimes showed interest in his peers, but did not initiate prosocial behavior. Rather, he often avoided and became annoyed by his peers. Ms. Smith's endorsements are consistent with previous records and parent- and counselor-reported concerns about his social skills.

Relevant personal history.

A review of educational records revealed that Brian met all formal developmental milestones within normal limits, but he had a long history of deficits in pragmatic communication and presented other features of ASD. From an early age, he exhibited impairments in his use of nonverbal behavior (e.g., minimal eye contact, limited nonverbal gestures, occasional display of overly exaggerated gestures), and reciprocal verbal communication. Brian struggled with initiating and sustaining conversations, often answering questions briefly and without showing interest in others or sharing in joint social-emotional expression. As he entered adolescence, his deficits in social understanding became clearer, as he lagged behind his typical same-age peers who used figurative language and humor.

As a result of his social communication deficits, Brian often appeared detached and disinterested in others. When younger, teachers reported that he played independently and seemed disengaged during group activities. He appeared more interested and comfortable in interacting with familiar adults than with unfamiliar adults or children his age. For example, Brian initiated conversation with his parents and asked about their well-being when they were sick. However, he did not initiate the same prosocial behavior with his classmates and few students initiated play with him.

Brian displayed other characteristics associated with ASD that limited his exposure to social environments, thereby minimizing opportunities to develop social skills through practice. First, he had difficulty coping with novel and unpredictable situations and transitions, evidenced most clearly by his anxiety in transferring to a new elementary school years earlier. Second, he became distressed by sudden loud noises and sustained periods of high volume. As a result, he was permitted to leave the classroom to decompress in the nurse's office or bathroom, and he

tended to eat lunch alone in the library. Although he sometimes pushed himself to join classmates in high school, his anxiety about the unstructured and loud cafeteria and his insecurity in social situations exacerbated social skill deficits.

Other attributes associated with ASD were off-putting to Brian's peers and later exacerbated his self-consciousness and social anxiety. For instance, Brian exhibited problems with fine and gross motor coordination and stereotyped speech, characterized by unusual prosody and delayed echolalia, as well as occasional muttering to self. Additionally, he had restricted interests that were not always shared by his classmates. Fortunately, his preoccupation with videogames served to bond him with many other teenage students.

Brian's evaluations yielded multiple diagnoses over time. He was initially diagnosed with autistic disorder, and subsequently pervasive developmental disorder – not otherwise specified (PDD-NOS), as well as sensory integration disorder, later replaced by central auditory processing disorder. Brian was also diagnosed with attention-deficit/hyperactivity disorder (ADHD) – combined type, learning disorders, dysgraphia, and expressive language delays. In school, he struggled with retention, inattention and distractibility. He participated minimally and produced work that was hardly legible to his teachers.

Brian's initial evaluation by the CST included a cognitive assessment, indicating that his overall cognitive ability was average to low average. Brian's verbal comprehension and perceptual reasoning abilities were average. His processing speed was low average and his working memory was considered "borderline." Brian's educational testing yielded scattered scores from the average to very low ranges. He was found eligible for special education services under the classification of "Other Health Impaired" due to his earlier diagnosis of ADHD. All of Brian's subsequent school-based triennial re-evaluations were waived.

After Brian's classification, he received academic, social-emotional, and speech-language interventions. He received academic instruction in pull-out resource replacement (i.e., small-group) classes, and he participated in general education PE/Health classes and electives. Over the years, Brian's IEP mandated various combinations of counseling and speech and language services. In middle and high school, IEP goals for these related services targeted fundamental social skills, such as responding to the presence of others through verbal and nonverbal behavior and reciprocating greetings. This IEP-mandated counseling occurred as needed in the form of brief, solution-focused check-ins and tended to focus on making small and incremental changes in his interactions.

Brian received some services in the community. As a child, he received private speech therapy to address early communication deficits. At the time of treatment, he saw a psychiatrist for medication management to treat symptoms of ADHD. He participated in a social skills and support group for siblings of children with autism, but had not received individual psychotherapy.

Diagnosis (see Table A.1). Brian had a history of ASD, ADHD, Central Auditory Processing Disorder, Sensory Integration Disorder, Learning Disorder, and Dysgraphia. Data available at the time of treatment highlighted patterns consistent with ASD (Level 1), as well as excessive worry, low self-esteem, irritability, and difficulty concentrating. Brian exhibited symptoms of GAD with a rule-out of persistent depressive disorder with anxious distress. Although treatment targeted anxiety, Brian's dysphoria became increasingly evident over time. Additionally, Brian had a previous diagnosis of ADHD – combined presentation, but at the time of treatment, he met criteria for the predominantly inattentive presentation.

Strengths. Brian possessed several strengths that helped him to persist in his social endeavors and motivated his participation in counseling. First, he was able to seek guidance and support from the school's Child Study Team members and from his parents when very distressed. Second, Brian persisted in improving his social skills, despite a history of unpleasant experiences. He heeded his counselors' advice in order to achieve his ultimate goal of making friends. Third, Brian demonstrated care, concern, and closeness with his immediate family and Child Study Team members. Thus, Brian had the capacity to apply his social skills when comfortable. Fourth, Brian was able to identify and engage in pleasant activities, even if maladaptive at times (e.g., excessive computer use). Finally, he was becoming increasingly self-aware in his adolescence. Although painful at times, his self-awareness motivated and facilitated positive change. Taken together, Brian possessed the capacity and interest to engage with others and cope with stress.

Guiding Conception with Research and Clinical Experience Support

Profile of social distress and anxiety in adolescents with high-functioning ASD.

Brian's history and current experience of anxiety and social difficulty appeared similar to that of other adolescents with ASD. During childhood, youth on the spectrum might be disinclined to engage in social activity for various reasons, and social avoidance may intensify anxiety or minimize opportunities for development of social skills and positive social experiences (White et al., 2010). When entering adolescence, students' social worlds become increasingly complex and self- and social-awareness increases. Higher functioning youth with greater insight might be particularly sensitive to their social disability (Bellini, 2006). Adolescents with ASD can experience increased anxiety when they become aware of their inability to forge the peer

relationships they desire (Klin & Volkmar, 2000; Orsmond et al., 2004; Sukhodolsky et al., 2008; Tantam, 2003).

Many individuals with ASD exhibit an atypical social approach or social avoidance, which can mask a genuine desire to connect with others (Leyfer et al., 2006). Some with Asperger Syndrome might be perceived as aloof or condescending due to their higher verbal ability and concurrent social difficulty (Leather & Leardi, 2012; Szatmari, 1991). A study on the social needs of adults with and without pervasive developmental disorders (PDD), like ASD, revealed no group differences in the amount of time spent alone, or in preferences to be alone (Hintzen et al., 2010). Adults with PDD reported enjoying familiar social company as much as their TD counterparts, but they experienced increased negative affect and anxiety in the company of less familiar people (Hintzen et al., 2010). Like adults, adolescents with Asperger Syndrome can be expected to have “thwarted social needs rather than diminished social needs,” more akin to social anxiety than social anhedonia (Hintzen et al., 2010 p. 78).

The role of theory of mind and emotional intelligence. The social skill deficits seen in individuals like Brian relate to limited theory of mind and emotional intelligence. Individuals with ASD exhibit impaired recognition of their own beliefs and intentions (see Williams, 2010), and they struggle to infer the internal states of others (See Uono, Sato, & Toichi, 2012). The inability to readily and accurately understand nonverbal social cues hinders the development of satisfying relationships and contributes to loneliness and depression in adolescents with Asperger Syndrome (Whitehouse, Durkin, Jacquet, & Ziatas, 2009). Impairments in self-awareness and adaptive communication (e.g., self-expression, help-seeking) further impede coping, and thus, social integration.

Accordingly, Brian's inability to interpret conversational cues, and recognize internal states in himself and others, hindered his social understanding. When unable to perceive his peers' tones and intentions, he became confused and stressed. Unsure of how to respond in conversation and unable to detect internal, incremental changes in his anxiety, he often became acutely distressed and unable to regulate himself while with peers. The relationship between emotional intelligence, theory of mind, and psychosocial adjustment highlights the potential value of interventions targeting these forms of self- and other-awareness for teens like Brian (Coonrod, 2005; Montgomery, Stoesz, & McCrimmon, 2012; Smith, 2007).

"Affective education" is a common component in youth CBT frequently emphasized in the treatment of children and adolescents with ASD to address deficits in self-reflection, theory of mind, and empathy (Attwood, 2004). Similar to the psychoeducation and skills training included in CBT programs for TD youth, affective education is intended to increase clients' understandings of the purpose and function of emotions, and how they might be experienced and expressed. Affective education might initially focus on a client's own experience of emotions and subsequently address others' perceptions. The process might involve sequential instruction on emotions, typically beginning with pleasant emotions (e.g., happiness) if they are introduced one at a time. Project-based (e.g., scrapbooks) and game-based learning can also help clients to recognize the sensations and situations associated with each emotion. This foundational instruction facilitates the development of self- and social-awareness and therefore, adaptive coping and communication skills.

Case Formulation and Treatment Plan

Case formulation. Brian's early communication deficits and sensory sensitivities limited his exposure to pleasant and reinforcing social interactions, further minimizing natural

opportunities for social skill development. As a result, he had an early history of social exclusion, low self-esteem, and negative social schemata. These experiences worsened during adolescence, when Brian grew increasingly self-aware and made downward comparisons against his typically developing same-age peers who he observed to socialize effortlessly. His early social skill deficits and negative affectivity were maintained by maladaptive beliefs (“I don’t like others. Others don’t like me.”), and assumptions (“Things won’t work out.”)/ Brian’s low self-esteem and negative beliefs about himself, others, and the world exacerbated his anxiety about various interactions and events, including, but not limited to social situations. As a result, he struggled to initiate and sustain social interactions and relationships, and experienced problems with peer isolation, low self-esteem, poor self-concept, and other symptoms of depression and anxiety. He remained motivated by cognitions, such as, “I want to fit in and be happy.”

Treatment goals. Based on Brian’s initial assessment, guiding research, and his case formulation, the following goals and objectives were developed to guide his treatment:

- (1) Help Brian to identify, understand, and articulate anxiety-related thoughts, feelings, and sensations: In each session after the first, Brian will rate his current anxiety level (1-10) and describe other emotions he felt in the past week.
- (2) Facilitate Brian’s development of coping strategies: By the end of treatment, Brian will be able to identify preferred coping strategies and describe instances in which he used them effectively and proactively (i.e., upon noticing initial increases in stress).
- (3) Help Brian to recognize environmental and interpersonal cues to determine appropriate times to initiate conversation: Brian will practice engaging peers in school-related conversation in group work or personal conversation when permitted by teachers and welcomed by peers. Brian will reduce off-task conversation during seatwork. Overall,

treatment was oriented to promote increased self-awareness and expressive ability to facilitate adaptive coping and social engagement.

Treatment plan. Brian's treatment plan integrated the common elements of two manualized cognitive-behavioral therapies (CBT). The Multimodal Anxiety and Social Skills Intervention (MASSI; White et al., 2010) offered a helpful framework from which treatment was conceptualized, particularly since Brian experienced social anxiety related to social skill deficits. However, the MASSI was ultimately inappropriate for Brian, who experienced anxiety unrelated to social stressors and did not identify with ASD or with his sister who has ASD. Given the time-limited nature of this school-based treatment, and Brian's habit of seeking social support with his CST counselor, the MASSI facilitated conceptualization, but was not implemented. The C.A.T. Project (Kendall, Choudhury, Hudson, & Webb, 2002), the adolescent version of the Coping Cat (Kendall, 2000; Kendall, Choudhury, Hudson, & Webb, 2002; Kendall & Hedtke, 2006a, 2006b; McNally Keehn, Lincoln, Brown, & Chavira, 2013) was expected to provide more appropriate and actionable activities to address a range of Brian's stressors in a more ego-syntonic and acceptable manner. I intended to follow the C.A.T. Project manual closely and add in concepts from the MASSI as it applied to our discussions. I also planned to draw upon the Coping Cat manual for simpler language and visual aides (e.g., worksheets) as needed.

Recognizing that time was limited, I expected that we would focus largely on early modules emphasizing the recognition of anxiety and development of coping skills, and thus, omitting exposure exercises. Counseling would begin with rapport building, goal setting, and psychoeducation, and continue with exercises aimed to increase awareness of Brian's unique experiences of anxiety (i.e., idiosyncratic cognitive and physiological experiences) and promote his acquisition of relaxation and cognitive restructuring skills through practice and feedback.

Some modifications suggested in the literature were expected to enhance Brian's treatment. These include flexibility in varying the length, number, and focus of sessions, as well as simplifying content, varying session activities, and integrating his interests in videogames.

Course of Therapy

Bridgette and I met for 65 sessions over two academic school years approximately once per week. At times of increased distress Bridgette and I met more frequently for brief check-ins. The majority of our sessions were 45 minutes. Our check-ins were briefly, lasting 10-20 minutes each. The presence of the school-based clinic within which we met allowed for flexibility in the time and duration of our sessions.

Phase 1 (sessions 1-4): Orientation to therapy.

Session 1: Initial assessment and analysis. Our first two sessions had a “stop and go, push and pull” feel. Our conversations were characterized by an unusual rhythm. I noticed inconsistencies in Brian's nonverbal behavior and the content of our conversations. I struggled to assess his interest in counseling and his comprehension of the concepts we discussed. As a novice therapist unable to interpret Brian's communication, I found myself insecure in developing rapport with and reluctant to impose on Brian the treatment plan that I had developed.

Session 1. Brian arrived promptly to our first lunchtime session; he looked disinterested and uncomfortable. He reclined in his seat, facing diagonally away from me with his legs crossed and his hands in his pockets. Brian averted his eyes consistently, raised his eyebrows and grimaced slightly and sporadically. He remained generally expressionless for the duration of this first session and for much of the treatment. Brian spoke infrequently and slowly, and with

atypical prosody that created a “robotic” sound. He exhibited limited reciprocity, responding minimally if at all to my speech, and emitting a sense of apathy.

During this session, I sought to orient Brian to therapy. I planned to spend time getting to know one another, discussing confidentiality, reviewing the treatment plan, and discussing the nature of his anxiety. Brian expressed his understanding of confidentiality, saying, “Yeah, I get it. I’m not like that.” He seemed to listen, and he said he might be interested in the reward system I proposed, but I struggled to interpret his nonverbal behavior.

Session 2. The content of Brian’s speech sometimes communicated the same as his body language. Upon his arrival to the second session, he inquired immediately about the frequency and duration of sessions and added, “I got nothing.” Brian complained that he was tired and wanted the day to be over. I empathized and asked more about his day. He reported nothing unusual happened. “I usually just wait for the day to end.” I reflected on the challenge in “sticking out the whole school day even when [he] feels so unhappy and tired.” The conversation was punctuated with pauses. We talked for a bit longer—a total of fifteen minutes.

Despite this tone of hesitance, Brian ultimately shared quite a bit. Although he started with “I got nothing,” he eventually described the way he coped with the seemingly never-ending school day. He reported taking breaks throughout the day by napping—usually, but not exclusively during his study hall, and putting his head down to shut out “annoying” classmates. When asked how it felt to go home, Brian said it was a total relief, “no stress.” I reiterated that the purpose of our meetings is to make school better, perhaps by finding “ways to get relaxed and refreshed.” After a long and awkward pause, I realized this resonated with Brian. He reminisced briefly about his early elementary years, before his parents withdrew him from private school “so [he] could get more education.” Brian then began a melancholy monologue,

spending several minutes recounting irksome interactions with classmates in his elementary, middle, and high schools. He detested “the utter garbage you hear....bragging about drugs, fights.” Brian’s open disclosure encouraged me that we might be able to connect productively.

I experimented in trying to extend the conversation, but he pulled back quickly. Although Brian and I seemed to join when I validated his “annoying” experiences, he ignored my nonverbal and verbal responses, including follow-up questions and efforts to explore affect. My segues to related topics, like coping and videogames fell flat. Silence. I offered: “You don’t seem very into this right now, and I know you’re tired.” He responded with quick eye contact, before darting his eyes to the corner of the room. “How about I let you go for the day? I’m glad you stopped in. Let’s touch base next week.” In an instant, he whipped out his handheld gaming device and left.

Brian vacillated between prolonged silence and brief, but dominating rants. My presence seemed largely irrelevant until I demonstrated attunement with his internal experiences, which I struggled to interpret. I felt like I was walking on eggshells and did not want to pry with unwanted questions or comments. However, after sessions, when I took stock of his disclosures, I realized we developed something of a rapport, even if fragile, and that Brian might be more interested in counseling than he appeared. Still unsure myself, I questioned the appropriateness of my treatment plan.

To proceed or not to proceed as planned. In our first two sessions, I followed Brian’s lead and deviated significantly from my initial treatment plan. I sought to create a positive experience of counseling for Brian. The C.A.T. Project advises that clinicians devote extra time in the first 45-60 minute sessions to building rapport. However, Brian met only for his 25-30 minute lunch periods. After the first two sessions, we still had not met the objectives outlined in

the C.A.T. Project manual for the initial session of the program. Although I was comfortable departing from my first two session plans, I began questioning how much to insert the common elements of the manualized treatments into our nondirective sessions.

Session 3. Early in our third session, I introduced the more active and structured components of the C.A.T. Project. I hoped to pique Brian's interest in the content of the C.A.T. Project and engage him collaboratively in treatment activities. I provided Brian with psychoeducation about anxiety, to which he was somewhat receptive. I defined it generally as "feeling uneasy because you think something bad might happen." I compared it to "fear," using an example of a tiger being inside the room, whereas, "anxiety is how it feels if you *think* a tiger is outside the door, but you don't know." Here, Brian appeared uncharacteristically "tuned in." He was quiet, but looked in my direction more than usual.

I introduced what I considered to be a wonderful resource that would appeal to Brian's interest in technology. I introduced him to a psychoeducational website for anxious teens. Brian sat at my desk while beginning to browse the website, which I tried to use as a conversation starter. Like many clients, Brian recoiled when conversation became didactic. With no response and no more clicking, I asked if he wanted to "switch gears." "What do you want to do?"

After sitting quietly for a minute, Brian turned around in his seat and began to complain about school. He reiterated some previous frustrations and explained how annoying his classmates had been that day. Brian spoke without looking at me or responding to any of my reactions or replies, verbal or nonverbal. I listened actively and quietly. That seemed to be enough for him. He mentioned that he "got annoyed and it's stressful to be with [his classmates,]" and eventually, he fell silent once again.

In trying to return our focus to the general experience of anxiety, I broke a couple of quiet minutes with an explanation: “Stress is natural. Everyone has anxiety at different times and in different ways. Some people have a lot of worries on their minds or feel uncomfortable in their bodies... and anxiety can make people want to avoid situations.” He said, “Yeah.” I continued: “Anxiety can be a problem, like when we worry too much about things that might not happen.” Brian replied, “Yeah. That might be a good thing to work on.” I agreed, suggesting that some of what he described in our “meetings” sounded like anxiety, and offered that we could talk about it more. The bell rang and he took out his phone immediately before leaving for class.

Session 4. At the start of the fourth session, I still felt pressure to adhere more closely to the treatment manual and planned to reconsider treatment goals more collaboratively with Brian. However, Brian entered the room with great intensity. Standing near the door, he stated loudly, in a firm and flat tone, “It is so annoying we have to meet at lunch.” He grimaced and looked away. Calmly, I asked, “Do you want to meet another time?” Brian softened suddenly, looking uncomfortable in the doorway, as if realizing how he sounded. We met an hour later.

Upon Brian’s return, I explained my previous understanding that he preferred to meet during lunch so he could avoid the cafeteria. Brian clarified that he did not like to be in lunch when fights broke out, because “then it gets too loud and you don’t know what will happen,” but he *did* like to play on his handheld gaming device with his friends. We agreed that Brian should spend his lunch period in the cafeteria. We would meet during class periods, except for study hall, because “it’s the only break [he gets] all day.” I was pleased that he expressed his preferences so clearly and more calmly, and that he started referring to “friends.”

I then proceeded with my plan to informally review our counseling goals and suggest ways of approaching stress management. I asked if anxiety was still something Brian would like

to work on since he seemed more frustrated and confused by his peers than overtly anxious about them. We could discuss things like “being annoyed,” and have regular conversations or play games.

Brian replied more quickly than usual, almost interrupting me: “That (anxiety) might actually be a good topic. I had an example last week.” Brian recounted an incident in which he overslept in his last period study hall and missed the bus home. He was unsure of what to do and stood in the central hallway for over an hour ruminating about all the potential consequences. He recalled some worries, such as aggravating his parents, waiting alone, and deciding what to do during that time. After all, everyone who stayed after school had a reason, or a group of friends to be with. What would he look like standing alone for hours?

Brian became visibly distressed while spilling out a list of worries. I validated Brian’s worries, reflected Brian’s anxious thoughts aloud, and praised his attention to and recollection of them, noting to myself that he did not recall the early stages or physiological changes accompanying his distress. I suggested we make a plan to learn to recognize “the early warning signs” of anxiety and use skills to manage them. We agreed on a point system, that I had developed collaboratively with his mother a few weeks earlier:

- 1 point for attendance

- 1 point for active participation (without cell phone use)

- 2 points for homework completion

- 1 point for late homework completion (start of the next session)

Brian could redeem points for candy (1 point = 1 small candy in my office) at the end of each session.

Brian appeared both somewhat relieved and also tired or preoccupied. I commended Brian again for his awareness of his anxiety and explained that “noticing and catching emotions helps us to feel better... when we know what we feel, we can decide what to do about it.” “Mhm.” He drifted off, until I encouraged him to play an emotion card game. We took turns picking up cards, reading and defining the emotion, giving an example of when we *or someone else* might feel that emotion.

From there, I tested the waters a bit more, adding the option to “show” or describe what that emotion looks like. Brian chose to explain rather than act, although I modeled both. He sometimes struggled with the activity, saying, “I don’t know.” However, Brian was able to provide examples for familiar emotion words related to happiness, worry, and anger. His examples were largely limited to the previously discussed examples of peer issues, but he offered a new example related to his “autism sister.” I praised him for thinking carefully and sharing great examples. We tallied points, which Brian redeemed for candy. Finally, I provided a choice between two homework assignments. I offered choices in order to increase Brian’s sense of agency and to involve him in shaping the course of his treatment. For his first week’s assignments, I selected tasks intended to increase his attention to pleasant emotions. Brian selected a “happiness worksheet” to complete before the next session.

This fourth session was productive. Our transparent conversation about counseling clarified goals and offered comfort to both of us. After discussing Brian’s preferences for scheduling and possible courses of action, he described in some detail an anxiety-provoking situation, which served as a natural segue to confirming at least a tentative and broad plan of action.

Brian and I seemed to hit our stride. In consulting with Brian's school psychologist, I realized that his confusing, nonverbal behavior merely reflected his historical difficulties with social skills and anxiety. I remembered that many individuals with Asperger Syndrome appear aloof and uninterested despite a genuine desire to connect with others. Thus, through consultation and consideration of the literature, I more fully understood Brian's behavior in the context of his history. In turn, this helped me to understand the nature of our relationship and my countertransference, namely, my perceptions of and discomfort with his seemingly disinterested presentation.

Throughout our first four, I had learned to discern and interpret subtle changes in Brian's body language to gauge his engagement and comprehension. With greater ease, I had learned when to shift gears; for instance, deviating from session plans to indulge in free and fluid dialogue. I sought to cultivate a validating and reinforcing counseling experience, with an ultimate hope that even if we had not achieved my initial objectives, Brian would leave treatment more likely to seek help in the future. For the remaining time we had, I planned to continue experimenting in pushing forward with my plans, or adapting them, perhaps by sharing pieces of psychoeducation to normalize Brian's experiences and to instill hope that he could manage and minimize his stress. During this time, Brian began to experience a new and more focused counseling session. He was more receptive to my suggestions for activities and conversations, but he knew that I would respect his wishes, follow his lead, and listen to anything he wished to discuss.

Interlude: Reformulation of case and goals. The fourth session provided a great deal of useful information. I maintained the initial focus and approach to treatment, but with great flexibility, adaptation, and awareness that I could not reasonably expect to meet all of the

ambitious treatment goals in the remaining few weeks of school. To establish more realistic and achievable goals, I considered Brian's current skills, our practical contextual constraints, and the optimal "flow" of our sessions.

From the first few weeks of conversation and the most recent engagement in the emotion word game, it was clear that Brian struggled to identify and express some emotions, and that he coped ineffectively. Although he seemed to recognize emotion words, he gave limited descriptions of their meanings, "what they look like," and examples of when people feel them. Brian was not yet able to connect the experience of emotions to internal bodily sensations and cognitions, but he began to make connections when prompted in conversation. Given the common difficulty of youth with high functioning ASD to detect emotions in themselves and others (See Uono, Sato, & Toichi, 2012; Williams, 2010), it was expected that "affective education" would help Brian personally and socially.

For future sessions I planned to continue drawing from the C.A.T. Project, but to expand upon the session activities outlined in the manual and add exercises from other resources. I thought about how Brian could get the gist of intervention components in the least amount of time and "imposition" on him. Overtly, in the first four sessions, Brian expressed disinterest in any suggested topic of conversation and proposed activity. But he participated, either when something resonated with him or when he chose the focus. Thus, it would be important to continue offering Brian choices (White et al., 2010), and to remain flexible in providing a space for relaxed conversation.

Moving forward, I planned to provide choices that seemed simple, and to focus broadly on helping Brian to develop emotional vocabulary and coping skills. I initially hoped to deliver the C.A.T. Project with much greater fidelity, but I recognized that Brian might not have the

prerequisite skills to benefit from it. As is common in the treatment of youth with ASD, we required additional time to review concepts and skills. We might only be able to complete the activities intended for the earliest C.A.T. Project sessions, which emphasized identification and articulation of cognitive, affective, and somatic experiences of anxiety and their interrelation.

It is worth expanding upon perception that Brian had experienced much of counseling as an imposition. Brian was present and participating, a sign that we could progress and continue without causing harm, or creating an association of counseling as aversive. However, Brian continued to present as aloof, disinterested, and probably depressed. Brian tended to recline in his chair, legs crossed, and eyes fixed on something else across the room. He paused and hesitated before responding to anything, and spoke with flat affect. Brian's short sentences communicated his depressogenic thinking that nothing was good or enjoyable, and nothing would relieve him of the insufferable dread he experienced daily during school. He appeared reluctant to start anything, but again, he eventually did start or at least join the conversations and activities I initiated. Brian displayed depressive symptoms, but with the nonverbal cues of an adolescent with Asperger syndrome, who appeared disconnected. He did not articulately express his internalized distress, but nevertheless possessed it, albeit without the expressive language needed to process it and seek help effectively. I wanted to keep him in counseling and to help to improve his capacity for emotion regulation. Increasingly, I realized that I could do just that, and with less of a push than I thought I needed.

Phase 2 (sessions 5-8): No longer new, but improved.

Session 5. Brian agreed to a new session routine, in which he would rate his stress levels over the previous week, review homework, and pick another activity for the remainder of a given session. In session 5, I introduced Brian to a Subjective Units of Distress (SUDS) rating scale

using a worksheet with a visual depiction of the 0-10 rating system, and prompts to provide an overall rating and to reflect on the “highs and lows” of the week. (See Appendix C.1.) In a matter-of-fact and in a low-monotone voice, Brian answered questions like, “What happened? What did you feel? What thoughts did you have? What did you notice in your body?” Brian was able to reflect on the entirety of the week and connect his stress levels to specific triggers and situations. He provided a global weekly SUDS rating of “4,” explaining that he did not feel overly anxious, but he did feel somewhat nervous because his younger sister ran out of their house. Brian reported worrying often about his sister’s safety. We considered anxiety and fear, whether there is a threat present and a plan for managing the threat and the emotion. This structured conversation, while allowing for flexibility, shifted attention to both negative and positive experiences, as well as interaction between events, emotions, and coping strategies.

Our discussion stimulated by the SUDs rating scale provided a smooth transition into our homework review. I had given Brian choices between two homework assignments in order to increase his sense of agency and involve him in shaping the course of his treatment. For his first assignment, he completed his “happiness worksheet,” which revealed his difficulty with metacognition as well as some encouraging beliefs about himself and his world.

After Brian found his wrinkled worksheet in his disorganized backpack, we reviewed it together. Brian had left a few prompts blank because they confused him. He read an item aloud, and asked, “What does it mean, ‘I like to be happy because...?’” To Brian, happy was happy. Happiness felt good. In response to other prompts, Brian identified positive aspects of his home and school environments. He reiterated that he was happiest at home because he could relax. He indicated that in general, he was “happy to be [himself], because [he’s] a good big brother.” Brian felt like he did “family stuff” well. At school, he felt happy when he saw friends. It was

great to hear Brian describe his pride in himself and to identify something positive about school, especially something social. I encouraged him to remember these things when he felt down and worried, especially when worried about “school and friend stuff, and upsetting [his] parents.” He seemed to listen, staring at the happiness sheet and making fleeting eye contact.

Brian and I spent the duration of the session playing emotion identification games of his choosing, after which he selected a simple “feeling definitions” homework sheet.

A note on subsequent SUDS ratings. In the following weeks, Brian reported global ratings of 3, 2, and 4. Anxiety triggers included upcoming social events and appointments (e.g., with the dentist). When he reported a “2,” he stated, “Nothing bad happened.”

A note on subsequent homework. When assigning homework, I presented Brian with options that functioned to reinforce concepts and skills. He completed less formal assignments more regularly, reportedly practicing diaphragmatic breathing before bed. In general, homework assignments stimulated discussions in sessions and served to reinforce concepts and skills.

Session 6. Brian and I maintained our new session routine of reviewing his SUDS rating (SUDS = 3) and related topics. Brian generally reported feeling better in the early evenings or weekends, when he could relax without thinking about the next school day and when he had no upcoming deadlines or tests. He felt worse before and after attending a dentist appointment. I praised his ability to reflect on the ups and downs of the week, and guided the conversation to focus on what he did in response to different events and emotions. He struggled with the latter. Brian shrugged and sat quietly. I casually suggested, “It’s just something to think about.”

Brian and I reviewed his “feeling definitions” worksheet. Prior to the session, Brian started some items, and left most of them blank. I praised him for starting the worksheet, and proposed we review what he had and finish a bit more together. I read his definitions aloud, and

praised him for his clear and accurate responses. We worked together on the rest of the items, discussing the answers aloud. This collaborative and casual approach encouraged Brian to participate to the extent that he was comfortable, while I assessed the scope of his emotional vocabulary and defined more challenging “feeling words,” comparing them to simpler and more familiar synonyms.

After, Brian was provided with a choice to “continue emotion stuff or start relaxation stuff.” Since he preferred the latter, we discussed how stress feels in the body and how to help the body relax. First, we referenced several pages in the C.A.T. Project and Coping Cat to review bodily sensations that sometimes accompany anxiety. Brian indicated which sensations he experienced when stressed (e.g., stomachaches). Next, I summarized the content of a psychoeducational reading from the Coping Cat that we looked over together. I sometimes selected materials from the Coping Cat instead of the C.A.T. Project because the former used language that was more appropriate for Brian’s verbal ability. Finally, I guided Brian through “step 1” of “focusing and breathing through your belly.” He closed his eyes as I gently coached him in imagining a balloon in his belly, filling up with air as he breathed in and emptying the air as he breathed out. Brian remained quiet and neutral in his disposition, but given his participation, he seemed sufficiently satisfied and comfortable with the exercise.

Before the end of the period, Brian and I briefly listed other ways of relaxing, and considered the problems with using his preferred coping activities – video gaming, browsing the Internet, and napping – during the school day. He recognized that deep breathing was better suited for the classroom. I offered Brian a choice of two assignments: (1) modifying a sheet from the Coping Cat (again, because of its simpler language), which required him to identify two

situations, and the emotional and physical experiences related to each; and (2) practicing the breathing exercise. He took the worksheet, but said, “I could probably do the breathing.”

Session 7. Brian and I began our second to last session with a SUDS rating. He explained that he gave a rating of “2” because “nothing bad happened,” but he was starting to worry about an event scheduled for the upcoming week. I praised him for continuing to notice connections about different aspects of his experiences in various situations. Throughout the second half of counseling, and particularly during this session, I sought Brian’s input often in order to provide choices and encourage self-expression, but also to determine what would be most beneficial and engaging in our remaining time together. I asked Brian to consider what he found most helpful about sessions, explaining that his feedback would be used to shape these last two sessions and next year’s counseling. This provided a natural opportunity to remind Brian of the time-limited nature of the treatment and our upcoming termination. I reminded Brian that I would not be returning next year. We discussed plans for him to continue anxiety management work with the school psychologist in the fall.

Brian reported that he had “perked up a bit” since we started meeting. He said he liked the breathing exercises because it was the “easiest homework to do.” When asked if he found it helpful, he replied, “In a way... the airflow.” When asked about the sessions more broadly, he highlighted (1) being in the Child Study Team office, where he is comfortable, and (2) his “problems...trying to sort them out.” This underscored the value of having a place of comfort or a safe haven within the school building, strong relationships with supportive staff, simple coping strategies, and opportunities to process and problem-solve current stressors.

When Brian reported that thinking about his problems had been helpful, I introduced very briefly the cognitive component of the treatment. I noted aloud that we had practiced identifying

emotions, physical sensations, and ways that people show feelings. I added that it could be helpful to look at the thoughts “you have about situations.” I tried to explain, “The thoughts you have affect the way you feel.” I asked him to think about a time when he worried more than he had to because things ended up okay. After a silent pause, I suggested we think of movie characters who were mad or worried. Brian could not generate examples. I remembered that cognitive components of CBT could be enhanced by offering concrete examples in simple language, and if needed, offering multiple choice answers to my own questions. I described a hypothetical situation. “What if you said ‘Hey’ to Bobby and he didn’t respond? If you thought that he ignored you, you would probably feel bad. But if you thought he didn’t see you, you might feel okay.”

I saw Brian struggling to comprehend my fast-paced explanation of a complex concept. I presented ideas of thinking traps. He found greater meaning in the term “reality check,” and in our use of recent and familiar examples (e.g., missing the bus). I suggested he practice “reality-checking,” when he noticed his anxiety “goes up,” since he had been doing that well. Brian looked intrigued, but frustrated and skeptical, his eyebrows furrowed and his body sliding backward in his seat.

Ultimately, our two remaining sessions left too little time to adequately adapt cognitive restructuring. I was eager to impart as much knowledge and help Brian build as many skills as possible before the summer, but I realized that I did not have his “buy-in” for this treatment component. Brian preferred more concrete problem-solving. We practiced “making a plan to get through it (i.e., any dreaded situation).” Most successful was our discussion of an upcoming banquet, which Brian feared because he “would have to talk to people, and [he’s] not a talkative person.” He did not know what to do at such an event, so we developed a plan and a couple key

coping thoughts. Brian intended to talk to a specific friend, and to remember that it would be okay if he only said “Hi” to others or took a break to sit at his table. Ultimately, he wanted to avoid the banquet, but he got through it, something we reflected upon the next week. Brian agreed to continue his breathing homework over the course of the next week.

Session 8. In our last session, Brian and I processed termination briefly. He said very little, and nodded to acknowledge my positive feedback about his participation and progress. We reviewed our plan for the remainder of the session, to conduct our usual check-in and discuss recent issues. Brian provided a SUDs rating of 4 and we discussed some critical items that he endorsed on the BASC-2, particularly his indication that he sometimes feels like life is getting worse and worse. He described recent evidence, citing another dentist appointment during which he learned he needed braces. Brian added that he was concerned about newly anticipated changes in his class placements for next year, since he had recently learned he could move from small-group classes to larger, in-class resource placements. Although excited about the move, the reality of the changes triggered a wave of additional worries.

Brian and I reviewed his coping strategies, and the recently introduced cognitive strategies (i.e., coping thoughts, such as, “It might be better than you expect,” and “Make a plan and get through it.”). We discussed staying in the moment, rather than thinking too far ahead (e.g., the next school year), and talked about coming to the Child Study Team for help with school stress next year, too.

At the end of our brief session, I reiterated my observation of Brian’s growing ability and comfort in describing his stressors and exploring helpful ways of managing them. I provided copies of the worksheets and other materials that we used throughout the 8-week treatment, and I informed him that his school psychologist would have copies for next year, too. When asked,

Brian indicated that he saw himself using some of the coping strategies and most likely continuing to try diaphragmatic breathing over other activities.

Brian and I also revisited our previous conversation about when to use different strategies. We agreed that some of his coping activities (e.g., enjoyable activities, like gaming and sleeping) are helpful as long as they are used in moderation and during appropriate times. We returned to the discussion of school, and considered how he ultimately did manage to get through the year, despite significant worries about earlier on. His counselors would continue working with him to make his time in school more tolerable and perhaps even pleasant. Brian enjoyed some extra candy. I wished him well and he said “thank you” before returning to class.

Therapy Monitoring and Use of Feedback Information

Consultation. Over the course of the 8-week treatment, I consulted with Brian’s parent three times on the phone, and with his Child Study Team counselor three times in person. The consultation served to clarify treatment objectives and evaluate different approaches. For instance, Brian’s parents hoped that counseling might address several additional areas, including executive functioning skills and self-regulated learning strategies including goal-setting, decision-making, organization, and time management. Given time constraints, we agreed I would address related skills to the extent possible, but within the framework of the anxiety-focused treatment. For instance, I modeled goal-setting by clarifying and specifying counseling goals a few times over the course of counseling and explaining how I expected Brian to achieve them. However, it was understood that we would not devote much time to the other areas of concern.

At the end of treatment, I shared with Brian’s parents and the Child Study Team counselor my observations of improvement, but also the persistence of Brian’s low mood and

negativity about school. I offered them the same encouragement that I offered Brian. I shared information about our work and resources for counseling over the summer.

Brian's Child Study Team counselor agreed that Brian would benefit from support in developing organization skills and in self-regulated learning strategies. However, she encouraged us to focus on stress reduction, while she continued to "troubleshoot" social issues as needed. During the course of the 8-week treatment, Brian sought his Child Study Team counselor's assistance a couple of times weekly, usually staying for a few minutes at a time. Not unlike the "boosters" that many school psychologists give, hers focused on immediate issues and helping the student to return to class. He appeared agitated and emotional on a couple of occasions, including the day after his dentist appointment and an afternoon when he was confused by a friend's sarcastic comment. Otherwise, he generally stopped by to check in and provide updates on his relatively new friends. She reported that he continued to present with the same sense of hopelessness and misery, "but with less of a keyed-up edge."

The school psychologist provided helpful perspective on Brian's long-term needs and his presentation. She reminded me that Brian's apparent disinterest and aloofness was not necessarily specific to our sessions, but rather consistent with his general demeanor. However, she emphasized that Brian would recoil the moment anything felt didactic. I updated her on Brian's progress in treatment, the topics of our conversation, and nature of our activities. We debated whether to focus the last couple of sessions on practicing relaxation strategies more or providing an overview of cognitive restructuring concepts so that Brian could work on the toolkit for coping during the remaining time before the rapidly approaching summer break. The school psychologist advised that sessions remain relaxed, and that we utilize the SUDS scale as a jumping off point—whether to process and reflect on recent events, to review coping strategies,

to learn new ones, or to discuss the other topics that his parents hoped we would be able to address.

Fidelity measures. Fidelity was assessed with weekly checklists and periodic check-ins with Brian. After each session, I completed portions of the Therapy Procedures Checklist (Weersing et al., 2002), as well as session-specific checklists I developed each week. These checklists reflected my frequent use of cognitive and behavioral procedures (e.g., teaching through modeling cognition-behavior-emotion connections, teaching problem-solving skills, and using a token system within the therapy), and highlighted when I was not delivering interventions as intended. Additionally, Brian was taught to use a SUDS rating scale and was asked to provide weekly SUDS ratings for the remaining weeks of treatment. I developed a SUDS worksheet specifically for Brian's treatment to facilitate his reflection on his stress as it related to specific events. (See Appendix C.1 for a copy.) I asked Brian periodically about the activities he deemed beneficial and wanted to use in future sessions. These informal assessments helped me to reflect with supervisors on the barriers to delivering treatment as I intended, and facilitated my reconceptualization and revision of subsequent session plans.

Concluding Evaluation of the Outcome

As indicated by the quantitative and qualitative results below, Brian had a mixed response to treatment. He displayed slight improvements in some areas, but continued to endorse difficulties with internalizing and interpersonal problems.

Quantitative Results (see Table A.3). Prior to treatment, Brian had elevated scores on the Emotional Symptoms Index, and measures of anxiety and sense of inadequacy. His post-treatment ratings revealed slight, but non-significant changes in these areas. Brian indicated that he *sometimes* became worried in circumstances that previously worried him *often* (e.g., when

things do not go the right way). He endorsed other critical items related to internalizing symptoms, and reported continued difficulties with interpersonal skills and self-sufficiency (i.e., self-reliance). These patterns warranted continued monitoring and intervention.

Note: The BASC-TRS was administered to a teacher, but not completed and submitted prior to the end of the school year. Hence, no data was available to evaluate possible changes in the teacher's perception of Brian's behavior and social-emotional well-being.

Qualitative results.

Classroom observation. Brian was observed before and after treatment in his elective, in which one instructor taught approximately 30 students. Students were expected to work on a "Warm Up" activity and listen to a student's presentation. The teacher asked students to take notes on a PowerPoint presentation that she gave for the remainder of the period.

In the before-therapy observation, throughout the class, about half of the students were engaged in the class activities, while others spoke informally to each other. The volume in the room fluctuated, and was maintained at a lower level after the teacher reprimanded a group of students for "rude" behavior. Brian and some other students had arrived before the teacher. They walked around the room while talking about videogames. They resumed conversation at a few times during the period. For most of the class, Brian rested his head on his desk. At times, his attention to the class activity was apparent, as he looked forward and asked the teacher a couple of questions. When the teacher directed students to copy something down, he said that he did not know he was to take notes. He sat up and the teacher provided a blank sheet of paper. At other times, it was difficult to tell whether his eyes were open. The teacher asked him to pick his head up a few times. Later in the class, Brian sat up on his own and continued taking notes.

In the post-treatment classroom observation, Brian appeared to be somewhat more engaged. He did not play on his handheld devices and appeared to attend to class activities for most of the period. However, his attention to the lecture and discussion was often difficult to determine. It is possible that Brian noticed my presence. At this point in time, we had established a better rapport, and his behavior might have been influenced by his awareness on some level of our previous conversations about adaptive coping behavior in the classroom.

Qualitative observations of overall progress.

- Brian displayed improvements in identifying emotions and articulating anxiety-related thoughts, feelings, and physical sensations. He was able to rate his distress using a 1-10 SUDS scale and use a broader emotional vocabulary. Whereas much of what he described at the start of counseling “annoyed him,” he eventually began noting that interactions and events also made him feel worried, nervous, or sad. Furthermore, he was able to recall the thoughts he had during these instances.
- Brian learned about various anxiety management strategies. He reported practicing coping skills with varying levels of frequency, and preferred relaxation strategies and distraction (e.g., sleeping, videogames). This is consistent with Brian’s slight self-reported improvements in his SUDs rating toward the end of treatment (ratings of 4, 3, 2, 4, in sessions 5-8, respectively), a non-significant decline in anxiety from the at-risk to average range on the BASC self-report measures that Brian completed, and his case manager’s observations of his decreased agitation during his periodic check-ins at the Child Study Team office.
- Brian exhibited improved self-advocacy and expressive ability during sessions, as evidenced by his ability to communicate his preferences calmly.
- Observations and anecdotal data suggest increases in Brian’s performance of socially accepted behavior in academic and social settings. He appeared better able to initiate conversation at appropriate times and develop satisfying friendships. During the post-treatment classroom observation, Brian appeared more attentive to class activities. He sustained concentration despite classmates’ conversations, and he initiated his conversations less often than in the pre-treatment observation. Additionally, midway through treatment, he requested to meet during academic periods rather than lunch in order to spend more time with a newly formed peer group with shared interests.
- Brian displayed increased comfort in participating in counseling over the course of treatment. He appeared more engaged and responsive during counseling activities and conversation. Brian described stressors in greater depth and with

slightly more varied facial expression. He presented as less stoic, raising his eyebrows and grimacing, suggesting affect more appropriate to the content of his speech.

- Over the course of his brief school-based counseling, Brian and I developed a therapeutic relationship, in which he experimented with expressing himself in a safe environment, and learned to recognize, describe, and respond to a range of emotional experiences in more adaptive ways, all of which reflected progress toward treatment goals.

Brian's progress in the context of the original and revised treatment plans.

Quantitative and qualitative assessments suggest slight progress toward all of Brian's initial treatment goals, as well as a subsequently added goal to improve overall emotional intelligence. The treatment plan was modified to provide extended time to address barriers to treatment related to features of ASD and the school setting. Despite modifications, Brian appeared more self-aware and reflective, and better able to regulate his emotions and socially appropriate behavior at the end of treatment. Over time, he engaged more fully, participating in session activities and practicing some skills at home. Brian benefitted from adaptations suggested in the literature for CBT for youth with high functioning ASD, including a disorder-specific hierarchy (e.g., affective education), extended time, simplification of abstract concepts, minimized verbal demands, and opportunities for choices. These helped to facilitate Brian's mastery of fundamental skills necessary to benefit from components of CBT for anxiety.

These strides were not reflected in Brian's self-reports on the BASC-2, which underscored his sustained negative affect and continued need for social-emotional supports. Quantitative results obtained from the BASC-SRP did not reflect statistically meaningful changes in anxiety or overall emotional and social functioning, but rather highlighted his repeated endorsement of critical items related to internalizing problems. Although Brian

achieved some treatment goals and made progress toward all others, he continued to experience significant distress.

Follow-up Assessment.

Quantitative results.

Client self-report (See Table A.3). Brian completed the BASC-SRP at the two-year follow-up. His ratings revealed some changes in his internalizing problems and adaptive skills. Prior to treatment, Brian had elevated scores on the Emotional Symptoms Index (ESI), and on the anxiety, sense of inadequacy, interpersonal relations, and self-reliance subscales. After treatment, his BASC-2 scores revealed non-significant improvements in anxiety and social stress. At follow-up, Brian maintained these improvements, and exhibited further, significant improvements in internalizing and self-esteem. Brian's Internalizing Problems composite score decreased significantly from the pre-treatment assessment, and his self-esteem score improved significantly from the pre- and post-treatment assessments, as measured by the Reliable Change Index (Jacobson & Truax, 1991). His scores suggest slight, but statistically non-significant decreases on the Emotions Symptoms Index and on measures of Anxiety and Sense of Inadequacy.

Despite some apparent improvements, Brian endorsed nearly all of the same critical items as he did at the end of treatment. He reported sometimes feeling sad and hating school; and he reported believing that no one understands him, other kids hate to be with him, and life is getting worse and worse. Additionally, Brian's scores on measures of interpersonal relations and self-reliance remained elevated. Thus, Brian exhibited improvements in some areas as well as sustained problems warranting continued monitoring and intervention.

Retrospective parent report (see Table 5). At the time of the follow-up assessments, Brian's parents completed two BASC-2 Parent Rating Scales (PRS) to estimate their perceptions and observations of Brian's social-emotional functioning two years earlier, around the time of treatment, and at the present time of the follow-up. When recalling the time of treatment, Brian's parents' ratings yielded many elevated scores including those on the Behavioral Symptoms Index (BSI) and the Adaptive Skills Index. Their endorsements reflected memories of problems with inattention, atypical behavior, withdrawal, social and functional communication, adaptability, and independent and self-directed behavior. Scores did not reveal significant concerns related to internalizing problems, with the exception of somatization.

When evaluating Brian's present behavior at the two-year follow-up, his parents' ratings yielded no elevated scores. Comparisons of their retrospective and current ratings suggest significant improvements in their perceptions of Brian's attention, atypicality, withdrawal, and leadership, as measured by the Reliable Change Index (Jacobson & Truax, 1991). These changes are also reflected in significant improvements in scores on composite measures, including the Behavior Symptoms Index and Adaptive Skills Index, as well as the Internalizing Problems composite, which was in the average range on both assessments. This is consistent with his parents' anecdotal reports that Brian had exhibited improved mood and anxiety management over the course of high school. Although they noticed a sharp decline in his mood when a close friend moved away, they found him to be happier and more self-confident overall.

Qualitative results. I conducted a follow-up interview with Brian two years after treatment to determine which components he remembered, preferred, and continued to utilize. I reviewed with him the purpose of the pragmatic case study, "to learn to help students like [Brian] with stress and friends. I am going to ask for your honest opinion about counseling and what you

do and don't like so I can make it better for other kids." We reviewed the timing and length of treatment and the topics covered. The interview began with questions about counseling generally, and continued with questions about specific content areas or intervention strategies. For each area or strategy, I asked Brian if he remembered it, and if so, I asked a series of questions about helpfulness, favorability, and ease. The interview was facilitated by a visual aid, a packet with each set of questions on its own page in order to maintain visual simplicity. Questions were asked in a 4-point Likert format, with emoticons presented next to written response choices. Throughout the interview, Brian was provided with additional visual aids to facilitate recall and recognition of treatment components. These included copies of worksheets and printed screenshots of web-based materials used in treatment. Brian was told that he was not expected to remember all the parts of the therapy, but we could discuss what he did remember. After, I asked about current counseling and coping strategies.

At the time of Brian's follow-up interview, he presented as quiet, but more engaged in conversation than I recalled. He maintained regular eye contact and sat in a seated position that was more upright and more facing toward me than I had remembered him in therapy. Brian's facial expression was neutral and his tone of voice was flat. He answered questions briefly after some hesitation.

Brian remembered participating in counseling, and recalled that he liked attending in order to have a break from class or lunch, and that he disliked talking about problems and feelings (at least initially). He reported that he liked counseling "a little," and he found it "a little" helpful and comfortable, but "very easy." He was unable to spontaneously recall aspects of counseling, but remembered some components with prompts and visual aids. When he recognized a component, he tended to respond to follow-up questions in a similar way, indicating

that he liked each “a little,” and he found each “a little” helpful and “kind of easy” (e.g., talking about school) or “very easy” (e.g., learning about anxiety by talking and reviewing worksheets, and by breathing exercises). Brian did report that one aspect was “kind of hard,” namely talking about feelings. There were also components that Brian did not remember at all, including using websites; relaxation worksheets; catching stress thoughts; matching situations with feelings; and matching feelings with thoughts and body language.

Brian recalled worrying about different things, and reported that recently, he has worried about “weird events that just happen” and “[his] younger sister escaping the house.” He recalled using sleep, videogaming, and some other relaxing activities to cope. Brian uses the same coping strategies and also listens to music, “breathes, and takes walks,” which “help [me] a lot.” He identified sleeping as the most helpful activity, because it feels like a “reboot” and he believes that when he gets very upset, “it’s because [he] was probably too tired in the first place.” A close second was walking, which he said gives him a “chance to get things off his head.”

Brian could not identify aspects of counseling he would change, remove, or want more of, but he reported that he liked counseling because it gets him out of class and helps him “get advice about what to do.” In general, he liked school because of the opportunities to “meet with friends,” but disliked it because “every other kid” bothered him. He reported having a group of friends in different grades, and indicated that he went through a “low patch” for about a month recently when learning that his best friend would be moving out of the area for college.

Prior to Brian’s follow-up interview, I was able to speak with his mother briefly about her observations over the years. Brian and his mother reflected separately about how Brian became nervous about losing his best friend and making new friends. He continues to see a psychiatrist “for [his] mental health.” In this interview, Brian appeared to reflect on his stress more matter-

of-factly. He seemed to have a well-established routine for managing it. He continued to worry about similar social and generalized stressors, and often appreciated counseling in any form (i.e., our previous sessions, sessions with his current counselor) as a reprieve to problem-solve.

Overall, Brian's treatment was successful in improving his anxiety management and social behavior, with some gains sustained two years later. Brian benefited from a program that was adapted by creating a disorder-specific conceptualization (i.e., promoting broader social-emotional learning), allowing extended time to review concepts, repetition of information, simplification of content, and flexibility in the course, sequence, and activity used to deliver intervention components. Brian's treatment was enhanced by my decision to engage him more actively in transparent and collaborative discussions about treatment planning, and by offering him choices in sessions. From his case, I learned the importance of remaining collaborative and consistent, and creating a predictable session routine that allowed for flexibility.

Chapter IV: The Case of Bridgette

Assessment of the Client's Presenting Problems, Goals, Strengths, and History

Presenting problems. Bridgette was referred for supplemental counseling by her CST case manager and counselor to further facilitate her development of anxiety management and social skills, and to help her cope with her transition to high school. Although she presented as warm and eager, she struggled to manage her anxiety and regulate socially appropriate behavior. At the start of treatment, she experienced significant distress related to separation from her previous instructional aide, with whom she worked closely throughout middle school. Her anxiety reflected features of ASD that mirrored obsessive compulsive disorder, such as difficulty with change and frequent reassurance-seeking. Bridgette perseverated in asking questions repeatedly (e.g., about her former aide's well-being, and about opportunities to visit with her former aide) without seeming to derive any comfort from my responses. She attempted to prompt others to say things she wanted to hear, sometimes because she enjoyed the familiar conversational sequences and sometimes because she wanted gratification and reassurance. Bridgette and her parent also described her insistence that things were done or arranged in a particular way "because that's how she likes it" or "to prevent her and her family members from getting sick." She tended to worry about various events in the near and distant future, and repeated the same questions frequently, to the annoyance of others.

Bridgette's perseveration irritated others, and when she was unable to derive comfort from others' responses, she became agitated, sometimes crying and shouting. Her anxiety reflected and exacerbated other social and cognitive features of ASD. She exhibited poor social perception and understanding, and limited metacognitive and perspective-taking ability. Bridgette struggled to sustain mental effort on some tasks, but fixated on other, particular topics.

She presented with high levels of energy and impulsivity that further hindered her development of rewarding relationships and limited her engagement in classroom activities.

Pre-treatment assessment.

BASC-2 self-report (see Table A.6). Bridgette completed the BASC-2 SRP to provide insight into her perceptions of her experience in school. She had elevated scores on measures of anxiety, locus of control, and self-reliance. She indicated that she worried a lot of the time and she often did not know why. Bridgette also reported that she sometimes feared many things, and often became nervous when things did not go the right way for her and when she did not know what would happen. She indicated that she often felt blamed for things she could not help and that people sometimes got mad at her when she did not do anything wrong. Bridgette endorsed related critical items suggesting that she often felt sad, believing that her life was getting worse and worse.

Bridgette's elevated score on a measure of atypicality reflected observations of her ASD features, as her responses suggested that she has unusual, idiosyncratic thoughts and perceptions as well as strange behaviors that reflect a disconnect from or unawareness of her surroundings. She appeared to have had little insight into the inconsistencies between social expectations and her behaviors. Bridgette's endorsements were consistent with the concerns of the Child Study Team and her parents, and highlighted the need for intervention targeting anxiety and various social and behavioral skills.

Relevant personal history. A review of educational records revealed Bridgette's significant history of developmental, social, and emotional problems related to diagnoses of ASD. At age 3, Bridgette underwent a comprehensive evaluation by the public school child study team and was classified as "Preschool Disabled" due to an initial DSM-IV-TR diagnosis of

pervasive developmental disorder-not otherwise specified (PDD-NOS), which was subsequently replaced with autistic disorder. Bridgette's parents reported that she exhibited a difficult temperament. She met all motor milestones, but experienced speech delays, marked by problems with articulation, expressive language, and age-appropriate pragmatic social communication. Since Bridgette's initial classification, she has received intensive speech and academic services.

Bridgette improved slowly in social domains. Although her articulation improved, she remained reluctant to initiate conversations with others, until later in elementary school, when she began approaching adults and younger children. In middle school, she began initiating conversation with her same-age peers. However, she struggled to maintain reciprocal conversation on topics of shared interest. Additionally, Bridgette exhibited idiosyncratic and inappropriate behavior, sometimes associated with her inability to seek help adaptively. For instance, she spoke in a high-pitched monotone voice, rarely made eye contact, and giggled frequently without provocation. Bridgette's evaluators over the years noted her generally cooperative and cheerful disposition, as well as her gradual, but continuous improvement across domains.

Bridgette also demonstrated slow, but steady academic progress. Although she recalled seemingly extraneous details with impeccable precision, she struggled to grasp abstract concepts and retain information in her academic classes. She received instrumental support from teachers and one-on-one aides in her small-group classes. Bridgette benefited from regular cues and prompts, and performed best in structured activities. In her highly supportive and structured learning environments, Bridgette continued to refine adaptive work behavior and master fundamental academic skills.

Although Bridgette's academic skills improved, she exhibited increasingly disruptive difficulties with attention problems and behavioral and emotional dysregulation. Her Child Study Team re-evaluations highlighted problems with distractibility and impulsivity. She struggled to generalize communication skills, such as help-seeking, and melted down when frustrated. In middle school, these meltdowns escalated in intensity, impeding academic growth and social inclusion. During middle school, a functional behavioral assessment was conducted to systematically address the most impairing target behaviors, including verbal outbursts (e.g., shouting, yelling, crying, repeating statements) and nonverbal behaviors (e.g., putting fingers in ears, leaving the classroom). These behaviors were triggered by overstimulation and anxiety, and they functioned to meet sensory needs and to escape work demands and other distressing conditions. Intervention recommendations included strategies to reduce sensory overload (e.g., wearing earplugs, and leaving class two minutes early to avoid crowded and noisy hallways), and strategies to clarify and simplify academic task demands and behavioral expectations (e.g., chunking of information, and using visual cue cards). Counseling was recommended to target the development of self-awareness and coping skills to manage anger and anxiety in discreet ways, and to encourage systematic desensitization to triggers.

Bridgette was evaluated privately and through triennial Child Study Team reevaluations. Early assessments suggested low intellectual functioning. Bridgette's most recent evaluation yielded higher estimates of cognitive ability. Her overall intelligence quotient and verbal perceptual reasoning abilities were in the Borderline range, and her working memory and processing speed were in the Low Average range. Educational testing revealed appropriate acquisition of basic skills, but limited ability to apply knowledge and perform tasks quickly. Evaluators noted that their standardized assessments did not adequately reflect her comparatively

higher level of pragmatic communication and adaptive functioning, although her development in these domains lagged behind the development of her peers. She performed more highly on functional assessments of basic academic skills and activities of daily living.

Bridgette made satisfactory progress with her educational program and related services. Upon her classification in preschool, she was enrolled in comprehensive day programs with self-contained and integrated inclusion classes. In elementary, middle, and high schools, she remained in self-contained classes, and continued participating in general education settings for physical education classes and electives. In recent years, Bridgette began learning job skills through structured course activities.

Bridgette saw a psychiatrist for medication management and her family had received time-limited, home-based behavioral consultation years earlier. As per her Individualized Educational Program developed by her Child Study Team, Bridgette participated in weekly counseling and a social skills group, and had access to supplemental check-ins with her case manager as needed. School counseling focused on the management of various stressors related to school and home. Although Bridgette received support from her parents, she experienced heightened conflict with her parents and her older, TD sister, which exacerbated stress for all family members. Her case manager recommended supplemental counseling to facilitate more active, skills-oriented counseling to promote the development of communication and coping skills.

Diagnosis (see Table A.2). Bridgette had a history of ASD. Under DSM-IV-TR, she received an initial diagnosis of PDD-NOS, which was subsequently replaced by one of autistic disorder. As shown in Table 2, at the time of treatment, she presented with clear signs of ASD, as well as symptoms of anxiety, obsessive-compulsive disorder, and ADHD. Bridgette was not

previously diagnosed with ADHD. Differential diagnosis was complicated because her symptoms appeared more reflective of her ASD and anxiety.

Bridgette's anxiety symptoms were prominent, and they motivated many of her maladaptive behaviors. She experienced intrusive thoughts akin to obsessions, although these tended to pass with time and sometimes seemed to reflect perseverative fixation common in ASD. Bridgette feared certain types of weather and family illness. She insisted on sameness and particular arrangements of various objects, which appeared more reflective of perseveration and repetitive behavior that are common among individuals with ASD. For example, she was particularly upset by experiencing bad weather and by getting sick. Bridgette attempted to reduce anxiety and prevent negative outcomes by reassurance-seeking, checking, and ordering items. Her frequent and uncontrollable worry caused physical tension and sleep problems. At times, her difficulty coping with ASD and anxiety contributed to sadness and irritability.

Strengths. Bridgette displayed strengths related to her demeanor and commitment to counseling, as well as in her emotional vocabulary and expressive ability. She articulated her emotional experience and possessed some basic social skills (e.g., eye contact). Bridgette was warm and proactive in seeking opportunities for social engagement with peers in her self-contained classes and her general education classes. She was motivated to develop into an independent adolescent.

Guiding Conception with Research and Clinical Experience Support

Behaviorally-based modifications. A review of available research offers specific modifications to CBT for younger clients and those with lower cognitive ability (see Schleissmann & Gillis, 2011, for a review). These include de-emphasizing cognitive components, and devoting greater time and attention to behavioral strategies, social skills

training, parent training, and exposures. Behavioral approaches might include reinforcing desired behaviors, modeling, and using extinction or blocking as well as distracting stimuli (Jennett & Hagopian, 2008). Behavioral consultation can promote the generalization of behavior change for students like Bridgette, who have previously struggled to use learned skills across contexts.

Additional modifications are suggested to address language and social skill deficits, and difficulty with transitions. For instance, clinicians are advised to speak in simple and concrete terms and to use visual aids to facilitate comprehension during psychoeducation, exposures, and self-report assessments (Schleissmann & Gillis, 2011). Visual aids are also suggested to present concrete reminders for session agendas and to facilitate transitions during and after sessions (Schleissmann & Gillis, 2011). Additionally, social stories provide helpful scripts for preparing for and managing social stressors (Ozdemir, 2010). These stories describe specific situations, anticipated challenges, and possible coping strategies. Social stories can help youth with ASD who seek familiarity, reassurance, and guidance in managing unsettling or seemingly unpredictable circumstances (Ozdemir, 2010)

Bridgette was expected to benefit from these treatment modifications, as she tended to think in concrete terms and struggle to regulate socially appropriate behavior. Her treatment would necessitate planful use of behavior modification strategies, extensive rehearsal of coping strategies and social skills, and regular consultation with caregivers and educators to reinforce the development and use of these skills.

Family stress and parent involvement. ASD can be experienced as stressful for the entire family system. Compared to parents of typically developing children, parents of children with ASD experience higher levels of stress. They are at greater risk of anxiety and depression, which are associated with parents' self-efficacy and the severity of their children's behavior

problems (Hastings & Brown, 2002; Hayes & Watson, 2013; Rao & Beidel, 2009; Rezendez & Scarpa, 2011). Heightened parental anxiety can exacerbate emotional and behavioral problems in children with ASD. Higher stress levels may affect the quality of parenting, inadvertently maintain child anxiety via modeling and reinforcing maladaptive behaviors (Schleismann & Gillis, 2011), and limit acquisition of adaptive coping strategies (Reaven & Hepburn, 2006). However, psychological services for the child, parent, and family unit can alleviate family tensions.

Current CBT programs for anxiety in youth with ASD strive to support and collaborate with parents to help children and their family systems. Parents are recognized as invaluable “consultants, collaborators, and co-clients,” whose participation in treatment is essential (Kendall, 2012, p. 7). Parents’ participation in their children’s therapy enables them to develop environments more conducive to behavior change, while offering parents support themselves. Programs like Reaven et al.’s (2011) “Facing Your Fears” aim to help parents understand the social and developmental factors affecting anxiety as their children enter adolescence (see also Reaven, 2011; Reaven & Hepburn, 2006). These endeavors are promising, as parents involved in treatment have lower stress, higher confidence, and more positive interactions with their children (Brookman-Frazee, 2004). I knew that Bridgette’s family had long advocated for comprehensive services, but that they struggled to manage her behavior and as a result, their own psychological well-being. I expected to work closely with Bridgette’s family throughout treatment, given the acuity of her distress and theirs.

Case Formulation and Treatment Plan

Case formulation. Bridgette displayed ASD-related problems with perseveration and rigidity in routine, as well as deficits in self-awareness, social perception, perspective taking,

communication skills, and cognitive flexibility. Her frequent reassurance seeking and misperception of social situations adversely impacted her school and family relationships. Bridgette employed maladaptive coping mechanisms, including inappropriate behaviors. Her behavior sometimes elicited firm or hostile reactions from others, and precluded Bridgette from experiencing satisfaction or comfort. This contributed to increased negativity, frustration, and anxiety that impacted her identity development as an adolescent with ASD. Her behavior was maintained by erroneous beliefs about causal relationships and catastrophic and dichotomous thinking, such as “[This] must happen for things to be okay,” “I need to [wear this] to fit in,” and “If things aren’t good, they’re bad.”

Treatment goals. I collaborated with Bridgette, her parents, and her case manager regularly to develop short- and long-term goals. Initial goals for Bridgette’s treatment included:

- (1) Increase Bridgette’s self- and social awareness by drawing attention to her internal states and reflecting on the impact of her behavior in her environment (e.g., relationships), and
- (2) Develop social and relaxation skills through coaching (e.g., instruction, modeling, prompting, feedback, praise).

Related goals in Bridgette’s treatment included rapport building, identifying appropriate treatment modifications, managing and modifying of environmental stressors, and providing support and guidance to Bridgette’s parents and educational staff to help them cope with stress related to Bridgette’s care and to further promote her treatment gains.

Treatment plan. Bridgette’s treatment was heavily informed by the previously discussed research, and my experiences from working with Brian. Each session would begin with the collaborative establishment of a session agenda that would be handwritten and always in plain view. The agenda would specify approximate amounts of time to be devoted to each session

activity. Session activities would likely include a review of pressing topics (e.g., recent distress related to aide or fight with sister) as well as explicit instruction and practice of a coping strategy.

Bridgette's treatment plan was planned in more general terms than Brian's because I anticipated integrating common elements of CBT flexibly to concurrently address ASD-related and anxiety-related issues. I intended to use behavior management strategies to shape socially appropriate behavior in vivo, while delivering psychoeducation and conducting behavioral skills training to target the most pressing and salient needs that Bridgette presented in treatment at any given time, whether that warranted relaxation, cognitive strategies, communication and conflict resolution skills, or more basic social skills development.

Course of Therapy

Phase 1 (sessions 1-3): Getting to know you. I had seen Bridgette in passing and in casual classroom observations, but we had never met formally. When Bridgette's paraprofessional escorted her to the school-based clinic, Bridgette was beaming with a smile stretching from ear to ear, her mouth slightly agape, and her eyes fixed on mine. She greeted me with an enthusiastic, "Hi, I'm Bridgette!" She was well oriented to me and to the counseling process, but she presented with unnatural eagerness and rigidity in conversation. She sat facing me in an upright position and engaged readily in a reciprocal conversation, waiting appropriately for cues to speak, responding promptly, and pausing for my response.

Bridgette's emotions were unfiltered and readily discernible from her facial expression, and she was able to identify and articulate her feelings about various stressors. Despite these skills, her speech lacked the casual fluidity seen among TD adolescents. Bridgette's speech was pressured, abrupt, and robotic, in a high-pitched unwavering tone. Bridgette presented as

younger than her chronological age, endearing and desperate, as if imploring me to see and solve her problems quickly.

Based on my experiences with Brian and subsequent reading on manual-based interventions and treatment modifications for youth with ASD, I determined that I would establish a session routine from the outset of treatment. I explained a bit about myself, what counseling might be like, and the limits of confidentiality. I informed her that over the next few weeks, we would split the time between “forms” (e.g., the BASC) and “stress talk,” to find the most helpful goals and ways to meet them. Bridgette offered a flat, “Oh-kay,” still smiling.

Bridgette seemed to possess impressive insight into her distress, although she rattled off responses so quickly and matter-of-factly that I wondered how much of her speech parroted adults and how much she generated. “I need therapy because I have autism and OCD.” When prompted, “Tell me about your autism and OCD,” she responded, “I have special needs and I worry a lot about a lot of things... My mom and dad say that I’m obsessed with Mrs. Valenti. She was my aide and I miss her. I talk about her too much.” Later, she reported, “My mom gets mad because I want things to go where they belong...I don’t let things go.” Bridgette listed a number of stressors and problems, all without seemingly viable and satisfying solutions.

Our early sessions provided ample opportunity for an informal assessment of Bridgette’s social skills. She was unaware of social norms, including those governing personal space and touch. At the end of the second session, she stopped me outside my office and said, “You are short.” Bridgette placed her hand on the top of my head and looked up slightly, making prolonged eye contact and smiling ear to ear. Caught of guard, I said, “Yes, I’m pretty short,” with a slight smile. “I’m going to take your hand off my head. We want to ask before we touch

people in school.” “Oh-kay.” She removed her hand and casually returned to class. So began our in-vivo behavior modification and social skills training.

While I worked to shape Bridgette’s social behavior gently and subtly, we explicitly agreed on a plan for our subsequent sessions. Each week, Bridgette would select from one of two rewards to work toward (later, just one choice, and eventually, no rewards). Sample rewards included: having a snack, listening to a favorite song, and watching a video on the Internet. We would then collaboratively identify a few session activities to complete. The first objectives typically included the discussion “hot topics” of the week, Bridgette’s most salient stressors. Bridgette explained situations, recounting interactions with great detail and automatically labeling her related emotions or stating: “I didn’t like it.” We processed her worries and frustrations and sought to problem-solve. I selected the final activity. For the first phase of treatment, the activity was typically a relaxation exercise, beginning with a progressive muscle relaxation script and video. At the end of the session, Bridgette and I reviewed the check marks next to our outlined activities and she enjoyed her reward.

These early sessions with Bridgette were unique because I vacillated between speaking to Bridgette as an adolescent and consciously shaping her behavior as I would for a young child. There were some behaviors I addressed early on, such as entering offices and conversations without knocking or waiting for a welcome. Initially, I reminded her, “Hi Bridgette! Great to see you! Remember, to knock on my door next time before you come in.” Soon, I prompted, “Wait! Let’s try again,” and had her leave the office to practice knocking. When she sought out my supervisor for questions, I prepared her, “When we go to Dr. So-and-So’s office, knock first and wait for him to respond.” With patience, occasional planned ignoring, and praise, this behavioral

practice helped Bridgette to develop more adaptive and natural social skills. It was something more common when treating a child, but nevertheless beneficial here.

Phase 2 (sessions 4-9): Loss in transition. Bridgette and I maintained a reliable rhythm in our sessions, but shifting our focus to relationship issues. For the next five sessions, Bridgette and I consistently focused on the separation from her previous aide, and occasionally addressed family conflict and social behavior. Bridgette's parents, teachers, case manager, and previous and current aides became concerned with her "obsession with Mrs. Valenti." Mrs. Valenti was a firm but fair classroom aide who worked closely with Bridgette throughout middle school. Since Bridgette began high school, she looked forward to seeing Mrs. Valenti, who visited the high school daily as part of a middle school Job Skills class. Initially, Bridgette merely expressed excitement in anticipation of these visits. This seemingly benign opportunity to see a familiar face became a distraction to Bridgette that interfered with school engagement and increased discomfort of the adults involved.

After a few months, Bridgette became more fixated on visiting Mrs. Valenti. She asked her parents, teachers, current aides, case manager, and me to arrange more frequent visits. We adults explained that this separation was part of the transition to high school, and that more frequent visits would interfere with Bridgette's responsibilities as a student and Mrs. Valenti's as a middle school staff member. Bridgette grew increasingly resistant to working with her new aide, Mrs. Smith, in the high school, who patiently persisted in redirecting her attention to school tasks. Mrs. Valenti became increasingly uncomfortable with this preoccupation.

Eventually, Bridgette's case manager, teachers, and parents decided to cease all visits with Mrs. Valenti. We then saw something of a "behavioral burst," as Bridgette persisted in talking Mrs. Valenti and wrote letters, which we told Bridgette we could hold but not deliver.

She presented with more pervasive negative affect and grew more resistant to and critical of her current aide.

In counseling, I asked Bridgette to consider what she missed most about Mrs. Valenti, and if any of these qualities or interactions could be reproduced or identified in other adults. To Bridgette, Mrs. Valenti was a warm and well-dressed role model, whom she admired and wanted to emulate. She wanted her other adult caregivers, parents and teachers alike, to present themselves in the same “fashionable” way and to relate in a similarly sweet and gentle manner. Bridgette did not believe she could enjoy the same conversations equally with her current aide, teacher, or mother. She fixated on the superficial characteristics that she liked, and she made downward comparisons to her parent and teacher. Bridgette referenced, misinterpreted, and overgeneralized pieces of advice that Mrs. Valenti gave years earlier and grew agitated when she was redirected. Both in and out of the therapy room, Bridgette shared her belief that no one could be as good as Mrs. Valenti and her speech reflected that.

During this phase, I consulted regularly with Bridgette’s case manager, parents, teacher, and current aide. I collaborated closely with the case manager to ensure that we helped Bridgette to reframe her thinking and redirect her attention in a uniform manner. We helped Bridgette to tackle her “all or nothing, black-and-white thinking,” to redefine “good” and “bad,” and to consider the impact of her perseveration on her personal goals and others’ feelings.

At the start of Bridgette’s sixth session, her new aide, Mrs. Smith, informed me that within the last hour, Bridgette criticized her appearance, comparing her to Mrs. Valenti. Mrs. Smith was patient and understanding, but felt hurt. I asked her to sit with Bridgette and me for a few minutes to process and problem-solve together. Mrs. Smith started, “Bridgette, I know you really liked Mrs. Valenti and you miss her. It hurts my feelings when you say that I don’t look as

nice.” Bridgette frowned with her head tilted downward and eye looking up guiltily at Mrs. Smith. “I’m sor-ry.” We agreed to encourage Bridgette to use “I statements” to say if she was feeling “upset, angry, or stressed,” just as Mrs. Smith modeled. We also encouraged her to think carefully about what she says to others. After recognizing the impact of her words, Bridgette ceased to make downward comparisons with the same frequency. She practiced apologizing as needed while working to think and speak more kindly.

Bridgette and I discussed why she made these comments, and considered her goals for high school. She mourned the loss of middle school, reflecting on the positive experience and affirming that her memories and relationships will remain special. We considered how relationships change, and new people come into our lives. We projected further ahead to consider how grown-ups learn to work with people with different styles, skills, and qualities. Bridgette’s preoccupation with Mrs. Valenti precluded her from recognizing and appreciating positive attributes of her current teachers, and distracted her from experiencing ninth grade fully.

Bridgette was intrinsically motivated to become an independent teenager. Reflecting on this helped to create some dissonance with her continued attachment to Mrs. Valenti and to reframe the transition from something of a loss to an opportunity. Bridgette’s case manager and I explained the transition and emphasized coping statements to reframe Bridgette’s thinking, with the overarching emphasis on working with and appreciating others and what makes them unique (e.g., “It’s more important for someone to be nice than to be fashionable. Plus, people can have different styles. It would be boring if everyone was the same.”) We told Bridgette that a perspective like this could help her to achieve her goals of independent functioning in school and in a job.

These conversations afforded Bridgette the opportunities to talk about Mrs. Valenti and Mrs. Smith in a safe space where she could draw comparisons without offending anyone, while cultivating greater appreciation for Mrs. Smith and other aspects of her new high school experience. She grew closer to Mrs. Smith, who also engaged in warm, but firm conversation and continued to model clear and responsive communication. Although these issues arose repeatedly for in early sessions and periodically throughout the following year, Bridgette could sit more comfortably in her classes, and cope with what she initially perceived to be a loss.

This challenge was resolved through coordinated and sequential efforts to clarify the problems, contributing factors, and its impact, to subsequently develop intervention strategies to implement as a team. Particularly in the first year of Bridgette's treatment, I consulted regularly with her mother, case manager, teachers and my supervisor to get a sense of the function of Bridgette's behavior and patterns that maintained it. Subsequently, we collaborated to identify a consistent rationale or message to deliver to Bridgette to shape her behavior. We all tried to respond to Bridgette's perseverative questions and comments with the same words, intended to offer comfort and to encourage coping skill usage. Further, this consultation with parents and teaching staff enabled me to provide support and encouragement, for instance, when they felt hurt by Bridgette's words.

The nature and manifestation of Bridgette's separation anxiety was atypical for her age and more extreme due to features of her ASD. She ruminated regularly, and like many individuals with ASD struggled to initiate cognitive and behavior shifts. With low frustration tolerance, she presented with urgency and grew agitated quickly when her requests were denied or she was redirected in class. It was important for all of the adults in her environment to be on the same page, using the same simple cues to redirect and settle her. After we briefly validated

and provided a coping statement, staff used planned ignoring and monitored her behavior discreetly to ensure her safety and relative appropriateness. In counseling, I limited my verbal responses to her discussion of Ms. Valenti. When possible, I validated her emotion and praised her coping skill usage. Other times, I sat quietly for a few moments before trying to shift the topic gently, perhaps by commenting on a tangential aspect of her last sentences. Our conversations proceeded like this for weeks until Bridgette directed her attention elsewhere.

This situation with Mrs. Valenti reflected a typical process for problem-solving during Bridgette's treatment. We cycled through phases of problem identification, supervisory consultation to clarify contributing factors, professional consultation with colleagues and parents, and identification and dissemination of strategies identified to meet Bridgette's needs or otherwise facilitate developmentally and socially appropriate coping. After developing a plan, I worked with Bridgette to practice skills repeatedly over time. Some issues abated entirely, while others persisted or resurfaced over the two-year treatment. While this cyclical process is seen in neurotypical students, features of Bridgette's ASD affected the nature of some of her anxieties and social challenges, and also impacted the course of treatment.

Necessary adaptations included (a) the simplification of strategies by shortening them; (b) using basic language and visual aids to teach them; (c) repetition in coping skill instruction and practice over extended periods of time and across settings; (d) modification of skills to complement individual factors, such as Bridgette's cognitive profile (e.g., presenting cognitive components simply); (e) behavioral modification strategies (e.g., planned ignoring, prompting, praise); (f) ongoing social skill training to improve social functioning and preempt additional social stress that confounds inherently higher baseline arousal and negative affectivity; and (g) ongoing consultation to inform my treatment decisions and support others.

Phase 3 (sessions 10-20): Many problems, many solutions. Throughout the initial phases of treatment, other issues arose periodically, although with much less intensity and impact. As Bridgette's stress related to Mrs. Valenti subsided, we began to address these other matters related to family conflict and social skills. Many of Bridgette's presenting stressors related to her preoccupation with her sister's behavior and a desire for contact and activity in her home. She expressed a number of grievances, many of which were beyond her control. For instance, Bridgette felt upset and frustrated when her sister ate breakfast later than her in the morning. Bridgette believed that her sister should eat at the same. Similarly, Bridgette grew angry with her sister when she lounged in her pajamas without "brushed hair" on Saturdays, and Bridgette wanted to be around other fashionable people. When focused on Mrs. Valenti, these issues arose more tangentially and fleetingly. However, over time, Bridgette perseverated on them with increasing intensity.

When upset, Bridgette repeatedly requested that others' comply with her demands. She might ask her sister to get dressed, invite a family member to join her for breakfast, or request permission to plan a day trip or host a dinner party. The answer was often "no," and eventually, "We're not talking about this anymore." In school, when asked for permission to escape a task demand by making perseverative requests, she also heard, "We're not doing that right now." While Bridgette appeared highly activated in school, she reported "losing it at home." In speaking with her mother, I got a fuller picture of the escalating arguments that prompted yelling and crying, and resulted in family members retreating to their rooms.

Bridgette struggled to get her needs met. While some of these needs appeared superficial and superfluous, such as the desire to be surrounded by "brushed-hair people," her requests seemed to stem from her desire for companionship and celebration, and from issues related to

identity. Bridgette was uncomfortable when alone, and very much wanted to be like and liked by others. Over time, she articulated that she was “lone-ly,” which she said with sadness and urgency. She did not want to be “the only one” doing something. Bridgette seemed to seek company and focus on aesthetics that were inherently pleasing, but also helped her to create a positive self-image, that of the average, stylish All-American teenager. However, in her attempts to cultivate a fun and pleasant atmosphere, she engaged in cyclical arguments with her family that isolated her further.

Anxiety management and emotion regulation. Bridgette practiced an array of coping skills intended to facilitate anxiety management and to shape more adaptive communication patterns. We began with relaxation strategies, starting with the children’s script for progressive muscle relaxation (Ollendick, 1978). To facilitate learning and generalization, I presented this to Bridgette in several ways, both aurally and visually. Initially, I read the script aloud and modeled the steps to guide Bridgette’s learning.

Later, I introduced an animated video with the same script, and shared it with her mother to facilitate practice at home. As I observed Bridgette growing restless with this practice, we shortened the instructions and focused more on the parts she liked, such as “squeezing lemons” and “stretching like a cat.” I hoped that Bridgette might practice this regularly, and develop a practice log with pictures (see Appendix C for Sample Worksheet C.2), which she could complete to earn extra rewards.

Bridgette reported practicing her coping skills religiously, and she practiced them in session; however, she did not complete practice-monitoring logs at home. Without this data, it was difficult to determine how effective each exercise was, how much she needed to practice, and if the strategy need tweaking. Bridgette welcomed new coping skills, asked for more, and

eventually complained they were not working. I explained, “It’s hard to know if they work, if we don’t know how much you need to try them. The skills take a lot of time and practice...”

Eventually, however, I introduced other strategies because importantly, they provided Bridgette hope and a somewhat concrete solution. I introduced other breathing exercises and other activities that could help her manage worry and avoid expressing them excessively to her family. Later, I presented the same fundamental skills in different ways, perhaps with different language or revised worksheets, which provided a sense of novelty.

Bridgette’s case manager and I helped her to craft coping statements to facilitate self-soothing and social understanding. Bridgette and I created “coping cards,” simply decorated index cards with coping statements or visual cues for relaxation practices (e.g., a four-square breathing box) and “thinking strategies” we used in counseling (e.g., two separate circles labeled “in my control” and “out of my control”). We wrote down brief lists of steps for responding to distressing situations (e.g., fights with her sister). In collaboration with Bridgette’s mother, Bridgette created a “coping corner” in her room with a folder of her coping cards and reminders of relaxing and distracting hobbies, like yoga and music. Despite the blank practice logs, Bridgette appeared to draw upon a range of coping strategies every day. On various occasions, she did show me how she wrote her own social stories and drew thermometers to rate her distress in her journal. Her parent reported encouraging her to practice her skills. In sessions, Bridgette was able to use them with increased automaticity and with fewer prompts.

Social skills. While Bridgette worked to improve her emotion and behavioral regulation, we worked actively to shape her social skills. Bridgette perseverated and prompted others in conversation without recognizing her impact on others and her relationships. In sessions, I sought to help Bridgette develop greater perspective-taking ability. Since our previous session

with Mrs. Smith, I regularly encouraged Bridgette to consider others' feelings and reactions in various situations. She had limited insight into others' experiences, but could sometimes generalize her own reactions. "How would you feel if so-and-so said that to you? ...So if that would make you sad, it might make her sad." This perspective-taking took a great deal of time for Bridgette to develop and always required Socratic questioning followed by simple explanations.

We used a more hands-on approach, with an explicit goal of making conversations more effective for Bridgette (and my implicit goal of making them more tolerable and pleasant for others). We practiced starting conversations during good times, showing interest in others, monitoring tone, and using "I-statements." I introduced each of these social skills, as a teacher would introduce a lesson. On handouts and worksheets, I summarized the rationale and steps for using each skill with brief bullet points and visual aids. I then guided Bridgette in completing brief written activities, hands-on practice, and role plays. For instance, I used a traffic light as a metaphor to help Bridgette decide when to start conversations. I developed two nearly identical worksheets with a large picture of a traffic light. On one, we listed nonverbal and situational cues associated with "red, yellow, and green lights." On the other, we listed examples of good and bad times to start conversations. Presenting this concept on two similar sheets helped to connect ideas while minimizing the visual complexity of the charts.

Bridgette and I visited other counselors' offices and decided whether to initiate conversation. When appropriate, I prepared Bridgette to knock and initiate small talk. Once she did so independently, I prompted her to reciprocate questions and goodbyes. Bridgette became friendly with many staff members in the building and enjoyed more frequent, positive social interactions and as a result of her well-timed and reciprocal conversations.

Bridgette and I also role-played conversations from the past, in the present, and planned for the future, particularly between her and her family members. We tried approaching conversations with different emotional tones and statements, until we identified the approach that would be most useful in facilitating dialogue and granting her validation, if not gratification. After a role play, I often called her mother to inform her of Bridgette's plan to approach a conversation differently. The following week, Bridgette and I reviewed how the conversation went. Unfortunately, many of these conversations went poorly and unraveled into fights.

I introduced Bridgette to social stories to consolidate her learning. After we processed and role-played conflicts and resolutions, we collaboratively drafted simple stories. Each story outlined a commonly occurring problem, related emotions, goals and strategies for solving the problem, and anticipated outcomes. Initially, I demonstrated how to write one. Over time, we wrote them together. Bridgette also began journaling about her efforts to resolve issues using a similar format. Her journal entries described situations and solutions, including a list of coping statements. Importantly, they concluded with a statement of praise and pride: "If I use my skills, my parents and counselors will be proud. I will be proud, too!" Or, "I can do it!"

Bridgette's journals reflected her commitment to managing her anxiety and suggested generalization of her coping skills. The mere establishment of a journaling practice was noteworthy. Moreover, she soon began drawing small feeling thermometers to depict her stress level before and after using her strategies or writing, just as we had done in our sessions. With frequent repetition of coping skills and statements and a lot of specific praise, Bridgette displayed slow, but steady progress.

Phase 4 (sessions 21-27): Reflection and reconceptualization.

Consideration of context-specific change. Bridgette's growth was most noticeable in her management of mild and moderate anxiety in school. When frustrated, she repeated her coping statements aloud. When first detecting worry, she took deep breaths. I occasionally noticed her stiffen and inhale slowly and deeply in the middle of a session, usually when she relayed her own part in a fight with her family or acknowledged her misbehavior in school. In counseling, we processed family conflicts and helped Bridgette to look forward and appreciate the positive aspects of various scenarios, including the present moment. Teachers noticed that Bridgette perseverated less and responded more calmly to redirection. Her progress was readily observable in school, where she was prompted to revisit her strategies. Staff frequently reinforced her coping strategy usage through specific, labeled praise or a smile and head nod.

Bridgette's coping and communication skills offered her much hope, but they were not sufficient for effecting meaningful and sustained change across contexts. At home, Bridgette and her family continued to engage in escalating cycles of coercion and conflict. While Bridgette's parents greatly appreciated her efforts and progress, they reported that she struggled to implement them proactively, for instance, only moving to her "coping corner" after recovering from a meltdown. Like other children with ASD (Myles & Hubbard, 2004), Bridgette behaved differently at home. She was less inhibited and her behavior had fewer immediate social consequences. Her family struggled to manage her stress and theirs. Compared to teachers and counselors who worked with Bridgette for periods in the school day, her family had fewer resources for facilitating adaptive communication and coping.

The stress at home soon permeated Bridgette's school life. Upon arriving to school one morning, she headed straight to her case manager's office in tears relaying the details of a fight

with her family. As the frequency and intensity of family conflicts escalated, school staff saw increased reactivity and resistance to previously successful prompts.

Within the week of her tearful arrival to school, during our 23rd session, she asked angrily to have her snack early, before we completed our checklist. I asked her to wait, and she repeated herself. She begged, “I’m hungry! I want it now!” I replied slowly and calmly, “Let’s pause.” I reminded her of our routine. In an instant, she stood up, clasped her hands, and drew her elbows inward, punching her stomach. Immediately, her eyes widened and she burst into tears. “I’m sorry, I’m sorry...” I saw that Bridgette’s parents could encourage her and listen to her read her journal entries aloud, but it was these outbursts that they could not manage. They struggled to cope with their daughter’s emotional dysregulation, recurrent requests, the ensuing sibling rivalry, and the pervasive tension in the home. In consulting with Bridgette’s case manager, my supervisor, and Bridgette’s mother, we agreed to encourage Bridgette to “save” her worries and stories in her journal to discuss in counseling. We increased her sessions with me to twice weekly in the clinic and as needed with the child study team.

In many ways, Bridgette was a model client. She was eager to participate fully in therapy and to practice coping skills across contexts. Bridgette wanted to be liked, and was sensitive to rejection and disapproval. She strongly desired social and emotional connection, and was highly motivated to please those around her. Bridgette readily performed most tasks in session, and was proud to show me evidence of her efforts throughout the week. She exhibited similar eagerness in pleasing her family, teachers, and peers. Bridgette’s motivation to please others and develop as an independent teenager motivated her engagement in therapy and practice of coping skills across contexts, thus facilitating her overall progress.

Despite Bridgette's desires to manage her anxiety, regulate her behavior, and please others, she continued to present as highly reactive. I hoped that through regular rehearsal of relaxation strategies, her baseline activation level might decrease and she would be better able to use other skills to mitigate intensifying distress. However, what worked in school was not easily translated to the home. She regressed across contexts and exhibited explosive behavior that had not been seen in school. It was necessary to think and intervene more systemically.

Recognize the rumble, reduce the rage. Bridgette's worsening outbursts were similar to those of other children and adolescents with Asperger Syndrome, high functioning autism, and related disabilities. Meltdowns might appear aggressive and/or oppositional, and/or instantaneous and unprovoked. Alternatively, these outbursts typically manifest the same anxieties that prompt withdrawal, rigidity in routine, and rumination (Myles, Trautman, & Schelban, 2004). The underlying anxiety can stem from ASD-related challenges in meeting needs and managing social and environmental stressors. Thus, explosive behavior can be understood as the most visible component of a three-stage cycle of meltdowns.

Myles and Hubbard (2005) present a cycle comprised of "the rumbling stage, the rage stage, and the recovery stage" (adapted from Albert, 1989; Beck, 1985). During the "rumbling stage," youth with ASD exhibit minor behavioral changes that adults might not automatically associate with meltdowns (e.g., biting lips, fidgeting, grimacing, changing the volume of their voice, making threats). Although in rare instances, Bridgette occasionally threatened to misbehave or embarrass her sister, they were not always followed by disruptive behavior. In reflecting on her outbursts, adults might have perceived her "rumbling" by noticing her pursed lips, fixed wide eyes, furrowed brow, and louder and more abrupt speech. Later in treatment, her "rumbling" might have been signaled by her bodily tension, which reflected her fear of "losing

it” and her apparent attempt to cope by using progressive muscle relaxation. In session, I noticed that her facial and bodily tension was sometimes fleeting. She might release her muscles and continue conversation. Other times, when “rumbling,” she remained frozen.

As soon as these shifts are observed, parents and teachers can implement several strategies (Myles & Hubbard, 2005; Myles & Southwick, 2005). Adults can help students notice their “rumbling” and shift their behavior through “signal interference” (i.e., using a secret, agreed-upon cue) or reviewing routines (e.g., a chart or visual schedule). Both of these strategies can prompt a child to refocus their attention to the task at hand or initiate a sequence of coping behaviors, ideally beginning with an in-seat option to refocus attention to the task at hand or initiate a sequence of coping behaviors. Alternatively, adults might shift student behavior more discreetly by altering the environment. They might use “proximity control” (i.e., moving toward a student) or “antiseptic bouncing” (i.e., assigning an unrelated and distracting task in a nonpunitive fashion; Myles & Southwick, 2005).

When students are more upset, they might need to change environments altogether. “Just walk and don’t talk” allows a student to express anything s/he wishes while walking alongside a quiet adult. The adult is to display little or no reaction and avoid speaking, as the student might misinterpret and/or react more emotively to any spoken statement. Additionally, students can go to their “home base,” a calming space at school or home where they can decompress, but without escape from task demands (i.e., they are still expected to bring classwork and complete chores; Myles & Southwick, 2005). While Bridgette could sometimes be redirected easily, she tended to need “Just walk and don’t talk” and the “home base” more often. These worked effectively in school, but infrequently at home, where her family members tended to either engage in a back-and-forth conversation or retreat altogether, both exacerbating her dysregulation.

If a student enters the “rage stage,” adults must continue intervening discreetly and calmly. If necessary and possible, the student might be ushered to his/her “home base” or away from peers. If needed, staff can remove classmates from the room until the student de-escalates. The primary goal for this stage is to ensure safety (Myles & Hubbard, 2005).

The “recovery” stage that follows looks differently for different students. Some students might withdraw, self-criticize, deny or fail to remember what transpired, or sink into physical and emotional exhaustion (Myles & Southwick, 2005). At home, Bridgette collapsed and ultimately fell asleep. At school, Bridgette’s recovery reflected her shame and dissonance with her ASD-identity. She appeared sad and lamented about her “special needs.” At this point, however, she would not be readily available for a discussion of her self-identity or complex classroom learning. Most helpful was her return to her regular routine and attendance of her classes as scheduled.

“Teaching moments” can only take place after a rage stage and before the next rumbling stage. During the three-stage cycle of meltdowns, children are only able to use skills they have already mastered and used fluently (Myles & Southwick, 2005). This underscores the importance of regular coping skill rehearsal between “meltdowns.” It also encourages adults to avoid engaging in conversation or active skill instruction during the rage phase. Rather, at this time, staff are most supportive when gently prompting use of familiar skills, if possible, and monitoring safety. During the meltdown cycle, a more measured behavioral and crisis management approach is preferred.

Although I did not use this model intentionally or teach it explicitly in consultation, it clarified ongoing efforts to prevent and manage problematic behavior by Bridgette’s support team. I worked closely with school staff to look for these changes in Bridgette and to decide

when a redirection would help or hurt, and when a jump to “just walk, don’t talk” was warranted. I provided some psychoeducation to Bridgette’s parents about her outbursts. However, given the persistent high stress in the home, the family did not have the energy or confidence to pursue more intensive intervention. In line with this, I had been decreasing my efforts to modify family communication via Bridgette’s social experiments and coaching and via more directive parent consultation, while I continued to provide structure and support from school in conjunction with Bridgette’s teachers.

After several weeks, I grew concerned about “coping skills as a compulsion,” and later, “coping skills as an escape.” Although a benign behavior, Bridgette started avoiding classwork in order to use her coping skills. In my absence, she met with other counselors to read her stories, and in the classroom, she requested breaks to write new ones. We developed a “voucher system,” in which Bridgette was given two 5-minute check-in cards. She could redeem them with any counselor between our sessions, and all counselors were informed to set a 5-minute limit and give a 1-minute warning to facilitate her transition back to class. Bridgette’s aides were asked to monitor her visits and check for a voucher before bringing her to the clinic. Similarly, in class, she was permitted to use her coping skills in the back of the classroom for 5 minutes.

The organization and consistency of this system helped all involved. Expectations were clear for Bridgette and all staff members. As the year came to an end, Bridgette’s behavior improved drastically. She had significantly fewer outbursts at home, and only a couple after her first meltdown in my office. She used coping skills proudly, and practiced her conversation skills among her peers.

On the other hand, Bridgette seemed more despondent at times, and reported sadness about her family circumstances. She began to perseverate about the summer, relaying familiar

worries about spending time with her sister. We reviewed established coping strategies and reframes, and then agreed to “make a plan, be present, and pay attention to the positive.” For instance, we wrote a list of summer activities to look forward to, and listed ways to minimize conflict with her sister. Once we had the list, if Bridgette brought up her summer stressors, we would review her plan and then return to the present. She participated readily, viewing the exercise and all coping activities as accomplishments.

Phase 5 (sessions 28-51): Reinventing the wheel. When we returned to school the next year, Bridgette’s anxiety was similar in nature and presentation as in the past. For instance, Bridgette fixated on the weather and on interactions with her sister. She restated her concerns to various staff members, seeking reassurance and trying to solicit desired responses from others, often prompting them directly or indirectly to check the weather or otherwise answer a question or resolve a predicament. She spoke in a raspy whisper and prompted staff to ask, “Are you sick?” As in the previous year, although these behaviors were benign, they detracted from her engagement in adaptive work behavior and in more natural and age-appropriate social interactions.

Accordingly, the intervention strategies used in the second year of treatment were largely similar to those used in the first year, but with important adaptations. Bridgette mastered and used skills in school and at home. However, the limitations of these strategies became evident. Bridgette needed to use them more appropriately and flexibly. For instance, her journaling promoted self-soothing and decreased reassurance-seeking, but it was also negatively reinforcing as it functioned as an escape from undesirable tasks (i.e., classwork). As another example, Bridgette communicated her wants and needs more calmly through “I statements,” but without listening responsively to others. She repeated an “I statement” several times after her parent

validated her feelings and explained why a request could not be fulfilled. Her rigid adherence to her strategies regardless of their results interfered with her occupational and social functioning.

Fortunately, Bridgette was motivated to refine her strategy usage to achieve her ultimate goal of becoming an “independent teenager.” She and I discussed the benefits and limitations of her coping skills. While helping her managing anxiety and improve interpersonal communication, she needed to be wise about when, where, and how to use them. We considered whether her behavior was consistent with her ideal-self as an “independent teenager.” For instance, Bridgette and I reflected that as a store employee, she would have to fulfill her job duties and take breaks at the discretion of a supervisor. She could not request breaks repeatedly and expect supervisors to grant them. Thus, in the classroom, she practiced completing a certain amount of work, asking only once for a break, and respecting her superiors’ (i.e., teachers’) decisions about when she could take them. To facilitate this adjustment, Bridgette, her case manager, and I reinvented familiar strategies emphasizing “distress tolerance” and “focusing on the here and now, and the task at hand.”

Given Bridgette’s continued perseveration on several stressors, we revisited another common theme, and corresponding visual aid for deciding when events were in Bridgette’s control. Bridgette and I collaboratively developed a decision tree (see Appendix C for Sample Worksheet C.3) that prompted her to ask: “Is this in my control or out of my control?”, and we followed a series of steps based on her response. For instance, if beyond her control, and most were, she could pick from her growing list of distress-tolerance and distraction strategies. If the circumstance was in her control, Bridgette might choose to use effective communication to resolve an issue (e.g., “I statements,” apologize, give space, and/or speak nicely). Below this

decision tree was a chart in which Bridgette would document the trigger/situation, answer “IN/OUT of my Control,” and her next steps.

We subsequently developed another worksheet, a “Let It Go List” to shape Bridgette’s use of her “I statements” (see Appendix C for Sample Worksheet C.4). The worksheet included brief instructions to (1) use an I-statement to express your feelings and needs calmly, and (2) “take a breath, let it go, and relax.” Bridgette and I role-played using her “I statements,” anticipating undesirable responses, and shifting her thinking and behavior. Bridgette preferred this worksheet to the previous one, finding it as a simple solution that both gave her satisfaction in trying to solve a problem and guidance in accepting the situation. We continued using the “Let It Go List” for the remainder of the year.

Phase 6 (sessions 35-51): Exposure for idiosyncratic triggers. While trying to use her coping skills more flexibly, Bridgette continued seeking supplementary check-ins with other school clinic staff as needed, particularly during periods of more acute family conflict. Almost a year and a half into high school, most school clinic staff knew her well and knew how to encourage desired behavior and minimize problematic behavior. However, in a brief check-in, a new female counselor tried to redirect Bridgette from an inappropriate preoccupation. The counselor unknowingly used the notorious “words not to say,” namely, “We’re not talking about that right now.” Bridgette stood up instantly and grabbed the counselor’s hair with both hands. After realizing what she had done, she ran out of the office to confess to her instructional aide, who brought her back to the counselor to apologize.

This incident catalyzed a shift in our treatment plan. Bridgette’s treatment involved significant coordination with her caregivers and teaching staff. We realized that we could not prepare the world to interact with Bridgette, but we could prepare her to interact with the world.

Rather than relying on others to detect subtle changes in Bridgette's mood and activation level, Bridgette and I began focusing more closely on desensitization to triggers via exposure, self-monitoring, and self-regulation. Additionally, although Bridgette had demonstrated significant progress in using coping skills to manage her anxiety with intensive school supports, she would ultimately need to generalize her skills to less structured and predictable settings.

Bridgette and I discussed this shift openly, acknowledging that she will not know everyone she speaks with and cannot control what others say. At this point, we returned to the feelings thermometer and experimented with different rating scales. The SUDS worksheet (see Appendix C for Sample Worksheet C.1) that worked well for Brian was too broad and abstract for Bridgette. She was unable to differentiate between a 4 and a 6, or to recall and rate events with accuracy. Rather, any stressor might be labeled a 7 of 7, or 10 of 10, and anything pleasant might be labeled a 1.

Instead, then, we used a 3-point system with smiley faces and rated her current mood (i.e., without trying to recall and reflect on her highest and lowest points of the previous week as Brian had done). We did this informally. I listed vertically, the numbers "1, 2, 3," and next to them, drew smiley faces to indicate levels of well-being (i.e., ☹ ☺ ☺). I pointed to my notepad, and asked, "How do you feel?" She would respond accordingly, stating "1," "2," or "3." She tended to answer at the extremes, but this served as a useful conversation starter.

I tried to help Bridgette attend to slight changes in her bodily sensations and mood. When she "stayed stiff," she practiced "catching herself" and taking a deep breath. (In trying to teach diaphragmatic breathing, I had Bridgette put one hand on her chest and the other on her belly. She ended up returning to this position, which she endearingly described as "giving herself a

hug.”) This strategy followed well with “Let It Go and Relax” Appendix C.4). Bridgette eventually blended the relaxation and self-talk strategies together.

While working on self-monitoring, we developed an exposure hierarchy. We predicted unsettling situations in order from least to most stressful: thinking about “the words,” imagining Ms. G (this author) saying them, and hearing “the words” from Ms. G (on purpose), from a preferred aide (calmly), another female counselor, the female counselor who said them initially, a male counselor, and any aide (angrily or firmly). We worked up the hierarchy, repeating each step several times. After hearing “the words,” Bridgette “caught herself” and breathed slowly once or a few times. She practiced responding appropriately to the conversation, saying either “Please don’t say that. I don’t like hearing that,” or “Okay.” She admitted that the simulations did not evoke the same level of agitation, as she was generally more relaxed in the weeks that followed her initial aggression and anticipated practice. She did not recognize a noteworthy change, but we observed her to tolerate “the words” with observable discomfort in response to hearing them in the simulation (at least from familiar staff) without significant upset.

Phase 7 (sessions 42-54): Emphasizing cognitive flexibility and acceptance.

Bridgette’s disproportionately intense reactions to triggers like “the words not to say” stemmed from her deeply ingrained cognitive rigidity and distortions. She tended to catastrophize, polarize (i.e., discount the positives), and identify with her shortcomings (i.e., label, e.g., as “special needs”). These tendencies were observable from the beginning of treatment, but clearly discernible in our discussion of “the words.” From discussions with Bridgette, I surmised that “the words” triggered anxiety because “We’re not talking about this now” meant that (a) she would not get what she wanted, but worse, that (b) people would no longer like her and want to talk to her. She tried to detect gradual changes in others’ emotions, but instead only recognized

more extreme and hostile states. Bridgette could only hold two extremes in her mind, such as good and bad, or happy and mad. She struggled to hold “both,” and to recognize that she could make forgivable mistakes and appeal to those whom she frustrated.

Our efforts to challenge Bridgette’s maladaptive beliefs began early and took several evolving forms. The content and process of her cognitive restructuring differed from that of some typically developing children. The language and approaches used to teach cognitive restructuring for TD children were not appropriate for Bridgette. She maintained idiosyncratic and irrational beliefs that were difficult to challenge given her cognitive rigidity, weak central coherence, and her limited metacognitive and perspective-taking abilities. Bridgette was unable to understand that the intensity of her worries was disproportional to the level of actual threat. Additionally, it is possible that her manifested anxieties were underlaid by more complex concerns she could not articulate. For example, she worried about the weather and the possibility that she might not be able to wear fashionable and seasonable clothing. This fear, which seemed unusual to many, may have stemmed from self-identity issues and her desire to fit in with “non-special needs” peers.

Unable to eradicate Bridgette’s deeply ingrained maladaptive beliefs, the staff repeated our canned coping statements: “It’s out of our control,” “We can’t predict the future,” and “We’ll hope for the best.” We tackled rumination and overreaction as needed, but also needed to continue striving to challenge Bridgette’s all-or-nothing thinking that characterized so much of her worry.

Bridgette developed a fear of making mistakes that became disruptive in school. Her discomfort reflected her fears of being “all bad,” which she sometimes associated with “the words.” In the classroom and job training sites, she panicked whenever she made a mistake.

Bridgette's teacher asked me to address this after Bridgette solved a math problem incorrectly and burst into tears. Bridgette and I drew several pictures to illustrate continua, challenge her "all or nothing" distortions, and introduce "both/and" thinking. We created a "mistake thermometer" with the top labeled "big mistake on purpose" and the bottom labeled "little mistake by accident." On the flip side of the thermometer, we identified corresponding consequences. If Bridgette made a big mistake on purpose, she might get in trouble and lose a privilege. Otherwise, "It's okay!" and either way, she could apologize and try again. Bridgette kept this in her folder, and her teachers and aides would use it as a reference if she overreacted to a mistake.

I used similar diagrams to further increase Bridgette's cognitive flexibility. In a similar manner, we drew a horizontal line with two arrows to show the "good" and "bad" behaviors and qualities of both her and her sister. On the top, we identified things she did and did not like about her sister and placed them along the continuum. Her sister might not always look polished, but she had good style. She might sometimes prefer time alone, but she could also have a nice conversation. We did the same with examples of her role in sibling interactions, reflecting that her meltdowns would not make her a bad person or end her relationships. In plotting these behaviors, Bridgette and I discussed that few, if any, of our examples were "all good" or "all bad." This was a useful tool in prompting Bridgette to evaluate herself and others with more compassion, thereby softening her response to mistakes and other triggers.

Phase 8 (sessions 55-66): Positive psychology and preparation for termination. The intervention activities included in the final phase of treatment promoted self-compassion and positive affectivity. Throughout treatment, Bridgette tended to "discount the positives," focusing exclusively on her fears, frustrations, and faults. With encouragement, Bridgette entertained exercises, such as positive thinking logs. She responded well to praise, and took pride in her

efforts and growth. In the last months of treatment, as we continued to “think positive and focus on the task at hand,” Bridgette spent a session with her case manager reflecting more deeply on her growth. She created a list of all the things she “didn’t need to talk about any more.” In our next session, she proudly read this list aloud, which spanned the complete length of her loose-leaf sheet of paper. We flipped through her chart, in which she listed nearly twenty items of stressors at the start of each year, many of which we had since forgotten. Bridgette held on to her new list of proudly solved problems to remember how she used her skills to be more of an “independent teenager.”

As Bridgette and I reflected on her growth, we also prepared to transfer her to an incoming counselor. Bridgette had historically come to the clinic in distress, saying, “I need therapy.” The staff wondered how she would respond to a transfer, and worried that she might regress somewhat, as she did when she switched aides a year and a half earlier. We sought to deliver several important messages. First, I emphasized the specialness of our relationship and memories. Second, I acknowledged the inevitability of change. When we supported Bridgette in separating from Mrs. Valenti two years earlier, we discussed how their time together would remain special and that Bridgette would get to meet and work with all new people throughout her life. Third, I highlighted the diversity in people and relationships, suggesting that other therapists would have different styles and strategies, which she might even prefer.

In one of our last sessions, Bridgette listed what she liked and disliked about our therapy. I encouraged her to share her preferences with the new counselor, but also remain open to new kinds of people and ideas. Finally, and most importantly, I emphasized Bridgette’s role in her therapy and in her change. While I supplied strategies and guidance, and greatly appreciated and enjoyed doing so, Bridgette sustained her motivation and regular practice. She sought help when

needed, and blended components of coping skills to tolerate distress and interact more effectively. Bridgette would likely continue to benefit from therapy should she remain equally committed to achieving her goals. These messages contributed to Bridgette's pride and hopefulness, and facilitated the transfer.

Our termination was further supported by two events. First, in our final month of treatment, Bridgette began in-home counseling provided by a government-contracted agency. This allowed us to "practice" new beginnings in therapy. She reported showing her new counselor, with whom I consulted briefly, the way we started our sessions. Bridgette felt "Oh-kay" about the new counselor and remained open to her feedback. She enjoyed talking with someone in her home. Second, as we prepared to say "goodbye," we also reviewed the purpose and process of this pragmatic case study, including our scheduled follow-up interview later in the summer. Bridgette and I looked forward to reconnecting, at which point Bridgette would share updates before answering interview questions. With our open discussions and transitional events, the termination went more smoothly than anticipated.

Our termination was bittersweet. Bridgette and I developed a strong therapeutic relationship, and I saw her make great strides in her first years of high school. We were both sad to say goodbye, but pleased by her progress and confident in her ability to adapt to a new counselor and continue her pursuits of wellness and happiness.

Therapy Monitoring and Use of Feedback Information

Consultation. Over the course of Bridgette's treatment, I consulted with her parent, case manager, teacher, and aides regularly. In the first year, I spoke with her parents and case manager at least weekly. We spoke openly about ongoing stressors and their impact, and ways to manage them in a unified and systematic manner. We strove to ensure that we were all well-

informed, and equipped to promote skill generalization and respond to behaviors consistently. At times, members of Bridgette's "team" disagreed on the proper course of action, but overall, everyone collaborated well. All parties were open to feedback and committed to working together to support Bridgette.

Fidelity measures. Fidelity was assessed with weekly checklists and periodic check-ins as I described above in the case of Brian. After each session, I completed the Therapy Procedures Checklist (Weersing et al., 2002), and reviewed the session checklists that Bridgette and I developed together each week (see Appendix B.2 for Sample Checklist). These checklists reflected my plan to utilize more behavioral practices (e.g., modeling, prompting, reward and praise, teaching behavior in steps) than cognitive or cognitive practices (e.g., cognitive reframing), because of Bridgette's limited cognitive abilities. These checklists guided my reflection on the approaches that facilitated and hindered progress, and informed the development of subsequent session goals.

I aimed to teach Bridgette to use the same SUDs scale as Brian (see Appendix C for Sample Worksheet C.1), but found that she struggled to differentiate between ratings in an accurate and meaningful manner. We proceeded with simpler versions, like a three-point scale with smiley faces, drawn casually on notepads. These ratings helped to guide discussion, and in the end, helped Bridgette to self-monitor and self-regulate independently. Ultimately, my use of checklists, supervision, and consultation provided more useful feedback of Bridgette's progress in therapy than the SUDs ratings and other quantitative client self-report measures.

Concluding Evaluation of the Outcome (Tables 6-8)

As indicated by quantitative and qualitative results below, Bridgette had a mixed response to treatment. She demonstrated both inconsistent improvements in some areas and

dramatic and lasting improvements in others. Her growth was more readily observable in informal, functional observations than in the standardized, quantitative outcome measures (e.g., BASC-2, GAD-7). Specifically, Bridgette demonstrated significant improvement in her adaptive skills and management of stress and social situations, but continued to exhibit elevated levels of baseline anxiety and arousal, as measured by both the BASC-2 self-report and informal observations.

Quantitative results (see Tables A.6-A.7). As shown in Table 6, prior to treatment, Bridgette had elevated scores on measures of atypicality, locus of control, anxiety, and self-reliance. Bridgette's post-treatment BASC-2 scores suggest changes in her behavior and personal adjustment, as measured by the Reliable Change Index (Jacobson & Truax, 1991). She exhibited significant improvement in atypicality since the beginning of treatment, and in personal adjustment since the beginning of the school year (i.e., 10 months earlier). Bridgette's scores reveal non-significant improvements in locus of control, and self-reliance since the beginning of treatment. In contrast to these encouraging outcomes, Bridgette's post-treatment BASC-2 self-report scores indicate non-significant regression in social stress and anxiety. However, at follow-up, four months later, Bridgette's scores indicated non-significant improvement in these domains. (See Follow-up Assessment on page 99.)

Over the course of treatment, Bridgette endorsed the same few critical items with responses indicating that she "often" or "sometimes" heard voices that no one else could hear and felt sad, and like life was getting worse and worse. Discussions with Bridgette clarified that the "voices" were often merely her internal monologue. At the end of treatment, Bridgette endorsed all three critical items.

As shown in Table A.7, Bridgette's scores on the GAD-7 fluctuated consistently between "mild" and "moderate" levels of generalized anxiety.

Qualitative results. Relative to Brian's short-term counseling, Bridgette's long-term treatment allowed for clearer observations of progress. She demonstrated gains in several areas:

- Bridgette displayed noteworthy improvement in her social skills, as reflected in her verbal and nonverbal behavior and self-regulation.
 - Bridgette maintained more appropriate physical proximity to others.
 - Bridgette used better discretion in initiating conversations more appropriately (e.g., assessing situational and social cues, knocking before entering offices).
 - Bridgette participated in more reciprocal and responsive conversation, initiating polite small talk with staff and students, waiting patiently for responses, and responding appropriately to questions and answers.
 - Bridgette used more effective communication skills (e.g., "I-statements").
 - Bridgette self-monitored her nonverbal behavior and volume.
- Bridgette demonstrated improvements in anxiety management.
 - Bridgette learned and practiced several coping skills (e.g., journaling, deep breathing), which she eventually generalized and used independently.
 - Bridgette learned to express and manage her anxiety more effectively. She began "saving her stories" for designated school staff, thereby decreasing the frequency with which she articulated her anxiety to others. This mitigated the social and family impact of her distress.
 - Bridgette demonstrated more flexible and appropriate use of skills. When Bridgette used communication and coping strategies incessantly and as a potential escape from work, she learned to engage with others and adapt to environmental expectations more productively (e.g., using "Let it Go and Relax" instead of repeating "I-statements").
 - Bridgette learned to think more flexibly (e.g., different definitions of "good," differentiating little and big mistakes), and used self-talk to self-regulate and reduce rumination somewhat.

- Bridgette demonstrated increased confidence in her ability to manage anxiety and solve problems, as evidenced by her pride in her growth.
- Bridgette demonstrated fewer episodes of crying and aggression over the course of counseling.
- Bridgette's improved social and anxiety management skills suggest improved self- and social awareness. Although her development of perspective-taking and theory of mind was limited, she sometimes seemed to recognize the impact of her behavior on others. She learned to respond appropriately to others' verbal and nonverbal cues (e.g., saying sorry when others looked upset).

Bridgette's progress in the context of the original treatment plan. Over the course of Bridgette's treatment, it was difficult to discern objective improvements in her overall anxiety, as indicated by observations and self-reports of her arousal and rumination. Throughout the two-year treatment, she continued to mention past worries albeit with decreased frequency and sometimes perseverate on new subjects and stressors. Although she exhibited few meltdowns at school and fewer at home over time, she became observably distressed and reported significant anxiety well into the last phases of treatment. At the end of treatment, she often presented as more relaxed, but occasionally appeared similarly desperate as she had at a year and a half earlier. These observations are consistent with Bridgette's self-reports on the BASC-2 and GAD-7, which changed little over time.

Although Bridgette's susceptibility to emotional dysregulation and rumination appeared unchanged, she demonstrated remarkable growth in her ability to manage anxiety and regulate socially appropriate behavior outside of counseling. Bridgette presented to school staff and family less often and with less acute distress, and responded more swiftly and amenably to redirection. She demonstrated progress toward all treatment goals, as she developed greater self- and social awareness and acquired several coping and social skills that she learned to apply more flexibly. Importantly, Bridgette's pride in her growth over her first two years in high school were

encouraging for her and everyone involved in her education and care. Her team was optimistic that she could continue making progress with ongoing social-emotional supports.

Follow-up Assessment.

Quantitative results.

Client self-report (see Table A.6). Prior to treatment, Bridgette had elevated scores on measures of atypicality, locus of control, anxiety, and self-reliance. Although Bridgette's post-treatment scores suggest non-significant regression on measures of social stress and anxiety, her follow-up scores suggest Bridgette's non-significant improvements in these domains. Ultimately, her scores on social stress and anxiety were relatively stable from pre-treatment to follow-up, with the exception of elevations at post-treatment.

Four months after treatment, Bridgette maintained post-treatment gains in locus of control and personal adjustment, but not in atypicality. She also exhibited significant improvements in attention relative to pre- and post-treatment assessments, as measured by the Reliable Change Index (Jacobson & Truax, 1991).

At follow-up, Bridgette endorsed two critical items indicating that she *sometimes* heard voices and felt sad. In contrast from all previous measures, she did not report feeling that her life was getting worse and worse. Her scores at follow-up also suggest non-significant regression on attention and self-reliance.

Retrospective parent report (see Table A.8). At the time of the follow-up assessments, Bridgette's parents completed two BASC-2 parent rating scales (PRS) to estimate their perceptions and observations of Bridgette's social-emotional functioning around the start of treatment, and at the time of the follow-up. When recalling the beginning of treatment, Bridgette's parents' ratings yielded elevated scores on measures of hyperactivity and depression,

and on the overall behavioral symptoms index (BSI). When evaluating Bridgette's behavior after treatment, her parents' ratings yielded no elevated scores. Comparisons of their retrospective and current ratings suggest significant improvements in their perceptions of Bridgette's hyperactivity, anxiety, and overall internalizing problems, as indicated by the Reliable Change Index (Jacobson & Truax, 1991). Scores also suggest non-significant declines on the BSI from the at-risk to average range. These trends are consistent with observations of Bridgette's growth over the two years of treatment.

Qualitative results. A month after termination, Bridgette and I met for a follow-up interview much like Brian's. She arrived beaming, with a wide smile and ready to discuss counseling. I provided the same rationale for the interview that I delivered to Brian, and specified, "We met for counseling for the past two years. Do you remember talking about anxiety, social skills, and school?" Bridgette responded in ways consistent with her previously demonstrated verbal ability and enthusiasm about therapy. She shared her preferences and dislikes, but tended to answer questions with brief and positive responses.

When describing counseling generally, Bridgette indicated that she liked counseling "very much" because she "learned ways to handle things better and did not have to hear 'the words' (usually)." She was generally unable to generate recollections or articulate impressions of counseling without prompting and questioning. When asked about specific treatment components, Bridgette provided similarly positive responses, indicating that she liked most aspects of counseling "very much" and found most to be "very" helpful and easy (e.g., talking about and handling problems through breathing, catching anger, letting things go, journaling). She also benefited from role playing and having me talk with teachers and parents, taking breaks in class, and reviewing topics she no longer needed to discuss. Bridgette identified other helpful

hobbies: yoga, dancing, swimming, playing music, talking with others, and doing job-related tasks and life skills activities.

Bridgette reported disliking some aspects of counseling, finding them harder and less enjoyable. She reported that she did not like “answering questions, having short sessions, and hearing some things that were said.” Bridgette struggled with and disliked exposure (i.e., “hearing the ‘words not to say’”) and trying to use her coping skills at home.

Bridgette reported that she continued to worry about many of the same problems. These included “hearing words,” weather, loneliness, sibling conflict, dressing certain ways, and having things out of place. She reported continuing to use many of the coping strategies we discussed (e.g., catching emotions and breathing, looking at coping cards and social stories, writing new ones, talking to others, hobbies). She reported writing in her journal and engaging in pleasant activities “even when things aren’t bad.” When thinking specifically about fashion, she continued using some strategies she found “a little” helpful: thinking about other ways people are stylish, considering other good qualities of people, and reflecting on good things about being unique. In general, Bridgette wished that she could have longer therapy to focus on “all” of its components, and to work on her problems with more people (e.g., teachers, family). Although she demonstrated continued difficulty, she found treatment helpful and looked forward to continuing.

Chapter V: Comparison of the Cases

Similarities in Presenting Problems

Brian and Bridgette were referred for supplemental school-based counseling for similar ASD- and anxiety-related problems that manifested differently. They had histories of sensory and cognitive atypicalities that impacted their exposure to and experiences of social situations. From early ages, Brian and Bridgette exhibited deficits in social perception and pragmatic communication. They struggled to perceive, interpret, and respond to nonverbal and verbal cues. Both presented with atypical social approaches, although Brian was withdrawn and Bridgette was obtrusive. Accordingly, both struggled to initiate and maintain conversations in accordance with social norms (e.g., reciprocity, topics of shared interest). They were aware of and upset by their social disabilities and difficulties in making friends.

Brian and Bridgette also exhibited anxiety about social and non-social stressors. They ruminated before and after social encounters. They also exhibited similar “unusual” worries characterized by catastrophic and dichotomous thinking related to natural events (e.g., disasters, weather), wellness and safety, and family relationships. These anxieties were maintained and exacerbated by Brian and Bridgette’s negative self-concepts and low self-efficacy for meeting their needs and/or managing unpleasant emotions. Although they presented differently, Brian and Bridgette exhibited difficulties in expressing and meeting their needs, and coping adaptively.

Similarities in Treatment Approach

Given the similarities in Brian and Bridgette’s needs, some modifications to CBT for youth with ASD were expected to benefit both of them. *Disorder-specific conceptualization* guided the concurrent pursuit of multiple goals. Their interventions targeted anxiety, and other

ASD-related problems, some of which presented barriers to CBT. Brian and Bridgette's cognitive-behavioral treatments included supplemental modules for affective education and social skill instruction. The concurrent treatment of several problems necessitated *flexibility* in the sequence and duration in which components were delivered. *Additional time* was needed to teach and practice strategies. Both students learned skills incrementally.

Further, Brian and Bridgette learned better when information was *simplified*. I sought to *minimize verbal demands* (e.g., in conversation, and by using visual aids) and to distill abstract concepts into more *concrete terms*. To varying degrees, I emphasized *behavioral practices over cognitive components* of treatment (e.g., planned ignoring, praising, modeling, employing a reward system). In sessions, Brian and Bridgette benefited from some level of *structure balanced with creativity and choices*. All of these efforts were enhanced by frequent *consultation* with their parents and educational support staff.

Differences in Presenting Problems and Treatment Approaches

Brian and Bridgette differed drastically in their overall presentation and ability levels. In general, Brian was withdrawn and difficult to read. He appeared quiet and disinterested in others. His behavior was unobtrusive, unless he was melting down. Thus, Brian's behavior was generally socially acceptable. His cognitive and linguistic ability was similar to his peers in his special education classes. He could blend in and assimilate. However, Brian felt disconnected because he lacked fundamental social and functional communication skills, and struggled to identify and express his internal experiences and needs, and connect meaningfully with peers.

In Brian's treatment, more time was required to develop a solid rapport. I learned to approach treatment and deviate from a protocol more flexibly and comfortably. With improved rapport and flexibility, Brian was consistently more engaged in client-driven and fluid

conversation. With more time and transparency about treatment, and a reward system, he grew more receptive to directive and interactive interventions.

In contrast, Bridgette was very social and engaged, but she had lower cognitive ability. She had a more juvenile quality and a more impulsive and intrusive approach in conversations. However, she was often warm and endearing, and remained visibly motivated and eager to learn. Although Bridgette had limited insight, she had benefited from previous speech and academic interventions. She possessed a broad emotional vocabulary, and fundamental nonverbal and verbal social skills. She could express her emotions readily and easily to seek help.

Compared to Brian, Bridgette benefited from more directive approaches to treatment. With Bridgette, I was more intentional about my use of behavior management strategies in terms of shaping her behavior and teaching her skills. Bridgette also benefited from other elements more common in the treatment of chronologically or developmentally younger clients. For instance, she was enthusiastic about creative activities that integrated her interests, and she was eager to write social stories. While Bridgette improved with behavioral skills training, she also appeared to benefit from modified cognitive strategies. Although cognitively lower than Brian, she was able to grasp and utilize these skills more meaningfully, perhaps due to the extended duration of her treatment as it allowed for repetition and rehearsal. Overall, Bridgette's treatment involved more regular consultation with parents and teachers to ensure that I had all the information needed for treatment planning, to strengthen others' capacities for helping Bridgette, to coordinate our responses to her behavioral difficulties, and to provide support for the caregivers and educators who were vulnerable to burnout.

The more internalized nature of Brian's distress contributed to a counseling process in which we progressed slowly and worked one-on-one, with little coordination and consultation

outside of sessions. In contrast, Bridgette's outgoing personality and externalized distress shaped a more active approach to counseling and consultation. Although both clients benefited from similar modifications to CBT intervention strategies, the process of their treatments differed greatly.

Contextual Factors in Treatment

The two treatments differed as a function of personal and environmental factors. When working with Brian, I was newer to counseling and to working with students with ASD. I was eager to implement manualized interventions and cautious in deciding when and how to deviate from them. Starting a year later, when beginning work with Bridgette, I was still new, but more comfortable in working with CBT flexibly, in implementing behavior management strategies, and in consulting with parents and teachers.

The scope and course of treatment was meaningfully impacted by contextual factors. Manualized interventions are rarely delivered in Child Study Team offices. Individualized Educational Program-mandated counseling typically targets problems interfering with academic achievement. Although this can include anxiety, if it impacts a student's ability to access curricula and progress academically, school counseling sessions are often briefer and less consistent than in private settings. In Brian's school, staff members were more overburdened by high caseloads and thus, less able to devote resources to mental health service delivery. Since they had fewer resources (e.g., time), child study team and guidance staff tended to contact parents and teachers only as needed, and they delivered empirically supported social-emotional interventions very rarely. The timing of our sessions was irregular and the format was unfamiliar to Brian. He was unaccustomed to sitting beside a counselor to discuss social-emotional issues. Since his treatment was brief, it was particularly difficult to involve adults as collaborators.

In contrast, Bridgette was treated in a smaller school district with a culture more conducive to evidence-based practice. Her school had greater resources and a history of providing comprehensive mental health services and parent outreach. Bridgette was typically able to meet for counseling on a regular, weekly basis, and she felt familiar and comfortable with a one-on-one approach to treatment. Moreover, consultation was more common and feasible in her school than in Brian's. Parents could often be reached easily by phone, and school staff members were available for formal and informal meetings as needed. Further, given the longer-term nature of her treatment, I was able to develop closer working relationships with all the parties involved in her care, and all of us were able to recognize change in multiple areas.

The norms and demands of the two school settings influenced Brian and Bridgette's treatments greatly. The availability of parents and school staff for regular collaboration, and the centrality and accessibility of counseling for students contributed immensely to the clients' growth, particularly Bridgette's.

Reflections

Case study results in the context of previous research. Brian and Bridgette's treatments successfully contributed to improved social, emotional, and behavioral functioning. At the end of Brian's short-term treatment, he exhibited progress toward all treatment goals. He exhibited increased self-awareness and developed a broader emotional vocabulary with which he improved his self-expression. Furthermore, he was able to learn and identify preferred coping strategies, and display more socially acceptable behavior in academic and social settings.

Brian's gains were evidenced in several forms of assessment, although improvements were not statistically significant across domains. Brian's BASC-2 self-report scores suggested slight, statistically non-significant improvements on measures of anxiety and sense of

inadequacy, as well as the composite measure of Emotional Symptom Index. Additionally, his SUDs ratings declined slightly and temporarily over the course of treatment (e.g., 4, 3, 2, 4). His self-report ratings at follow-up suggest similarly encouraging results, as his endorsements revealed significant improvement in self-esteem and the Internalizing Problems Composite. Brian's parent's retrospective reports on the BASC-2 Parent Rating suggest their perceived improvements in Brian's attention, atypicality, withdrawal, and leadership. Their reports highlighted significant improvements in related composite measures, such as the Behavior Symptoms Index, Adaptive Skills Index, and the Internalizing Problems Composite. Thus, all results of the BASC-2 rating scales suggested progress rather than regression, although some changes were not statistically significant.

Brian's Child Study Team counselor and I were able to observe his functional improvements in behavioral and social functioning. His counselor noted that he presented to the Child Study Team office in a calmer state. Brian's counselor perceived his agitation to be less severe and frequent relative to the beginning of treatment. Additionally, during my post-treatment classroom observation, I noticed Brian behaving more appropriately and participating somewhat more actively than in the pre-treatment observation. In general, Brian exhibited improved self-awareness, self-regulation, anxiety management and social skills after treatment.

Bridgette also made noteworthy strides in social, emotional, and behavioral functioning throughout her long-term treatment. She progressed toward broad, initial goals of increasing her self-and social awareness by noticing her internal states and reflecting on the impact of her behavior in her environment. Bridgette also developed social and relaxation skills through coaching. She achieved related, incremental goals established throughout treatment. However,

Bridgette's scores on the BASC-2 and the GAD-7, used toward the end of her treatment, also revealed inconsistent improvements over time. In some domains, her scores remained stable.

Bridgette's progress was reflected in some quantitative and standardized measures, like those included on the BASC-2. Bridgette's post-treatment BASC-2 scores suggest changes in her behavior and personal adjustment, as measured by the Reliable Change Index (Jacobson & Truax, 1991). She exhibited significant improvement in atypicality since the beginning of treatment, and in personal adjustment since the beginning of the school year (i.e., 10 months earlier), and non-significant improvements in other aspects of behavior and personal adjustment.

Bridgette's treatment gains were readily observable in informal functional observations than in the standardized, norm-referenced quantitative measures. Her parents, teachers, Child Study Team case manager, and I noticed growth in her self-awareness and ability to implement social skills and coping strategies more automatically and flexibly over time. Although her BASC-2 and GAD-7 scores remained stable, and staff observed stable levels of baseline arousal, Bridgette was better able to manage anxiety and recover from acute distress. Similar to Brian, Bridgette's functional observations and BASC-2 scores yielded no regression and some noteworthy improvements; however, the scores were not always consistent with observations of growth over time. For instance, although Bridgette exhibited non-significant regression in social stress and anxiety at post-treatment, she exhibited non-significant improvement in these areas at follow-up, with scores that were consistent with all other measures throughout treatment.

Despite the successful outcomes of Brian and Bridgette's cases, assessment presented a barrier to their treatment and a limitation of this study. During sessions, I struggled to perceive and evaluate their internal experiences based on their atypical nonverbal behavior. In evaluating progress, their scores on standardized, norm-referenced measures yielded results that contrasted

somewhat with clinical observation data. Their progress was more readily discernible from behavioral observations than from BASC-2 scores.

Assessment of youth with ASD is complicated for several reasons. Some challenges relate to inherent problems with language and self-awareness. For instance, youth with ASD might struggle to evaluate and describe internal experiences, like emotions and other anxiety symptoms (Kannabiran & McCarthy, 2009). Additionally, the tendency of youth with ASD to interpret and report literally might impact the nature and ease of their reporting (Kannabiran & McCarthy, 2009). Furthermore, the measures commonly used to evaluate anxiety in typically developing children might not be sufficiently meaningful or sensitive for this population. There are qualitative differences in the nature of anxiety experienced by children with and without ASD (Evans et al., 2005). In order for measures to be meaningful, they must adequately target the precise form and manifestation of anxiety experienced by the clients. This is problematic because there are no commercially available measures for anxiety in people with ASD and limited psychometric data for anxiety measures used in this population (White, Schry, & Maddox, 2012). These scales might not be sufficiently valid or reliable for youth with ASD (Grondhuis & Aman, 2012). This underscores the importance of multi-method and multi-rater measures of progress and outcome.

Brian and Bridgette's therapy outcomes – and related difficulties in measurement – are consistent with prior research. Previous group and case studies of modified CBT programs yielded encouraging, but inconsistent results. Most studies reported improvements in anxiety and ASD-related social skills impairments. More specifically, group studies often revealed decreased symptom severity and diagnostic remission for anxiety, and improved social responsiveness associated with participation in modified CBT programs (viaca adolescent 11-5; group coping

cat ret;). When follow-up assessments were conducted, these gains were often maintained up to six months (Storch et al., 2013; Sung et al., 2011; Wood et al., 2015). However, many studies yielded mixed results, wherein improvements were observed in some, but not all outcome measures. Some studies reported non-significant results and highlighted discrepancies between child and parent reports (e.g., group/pre/post coping cat). Although modified CBT interventions were superior to wait list controls, they were not always superior to treatment as usual or active controls on all measures of anxiety (Sung et al., 2011) and social responsiveness (Storch et al., 2013). Thus, multi-modal assessment is important for evaluating treatment outcomes, particularly for clients with ASD.

The available literature presents case studies and reports summarizing the modified CBT for almost 20 children and adolescents with ASD and anxiety. These cases are described in varied levels of details (e.g., paragraphs, comprehensive theses), and vary greatly in their methodology (e.g., intervention modality, measurement). These case studies present different combinations of behavioral data, rating scale scores, and narrative descriptions. In some studies, significant client progress was demonstrated across measures (McCambridge, 2009). In others, outcome assessments yielded mixed results. For instance, improvements in diagnostic status and symptom severity appeared clearer and more consistent when measured by the CYBOCS and Anxiety Disorder Interview Schedule for DSM-IV — Parent and Child versions (ADIS-C/P) Silverman & Albano, 1996; e.g., Elliott & Fitzsimmons, 2014; Sze & Wood, 2008). In contrasts measures like the Multimodal Anxiety Scale for Children ([MASC] March 1997) and Spence Children's Anxiety Scale: Parent Version ([SCAS-P] Spence, 1997, 1998) sometimes yielded results that were inconsistent with other measures – quantitative, functional, or qualitative. In some cases, client and/or parent ratings on the MASC and SCAC-P suggested

improvement (Ozsivadjian & Knott, 2011; Sze & Wood, 2008; McNally Keehn et al., 2013). In others, MASC and Spence Children's Anxiety Scale: Child Version ([SCAS-C] Spence, 1997, 1998) scores yielded non-significant change or suggested regression (Ozsivadjian & Knott, 2011; McNally Keehn et al., 2013). These less encouraging MASC scores often contradicted other rating scales and clinical observations of functional improvements (Ozsivadjian & Knott, 2011).

Importantly, all studies highlighted qualitative and functional improvements in anxiety levels and coping skill usage in child and adolescent clients. For instance, in Reaven & Hepburn (2003) and Elliott & Fitzsimon's (2014) respective case studies, 7-year-old children with ASD and OCD were able to use visual means of representing problem behaviors (e.g., mapping, charting frequency or duration of compulsive behaviors, like hand-washing). Clients in both studies demonstrated improved ability to self-monitor and coach themselves. In cases studies of older children (e.g., Greig & MacKay, 2005; Ozsivadjian & Knott, 2011), families reported that over the course of CBT, their children were better able to manage anxiety and they exhibited less frequent and severe outbursts. Further, their families reported decreased interference of separation anxiety and compulsive behaviors in overall family functioning. These gains were not necessarily reflected by scores on standardized measures, such as the MASC and CYBOCS (Ozsivadjian & Knott, 2011). These trends are consistent with behavioral observations of Brian and Bridgette's mastery of coping skills, improved self-monitoring and coaching skills, and decreased frequency of anxiety-related outbursts. Across case studies, CBT for comorbid ASD and anxiety has been associated with behavioral observations of improved functioning, despite inconsistent improvements on qualitative measures of symptom severity.

In summary, Brian and Bridgette's treatment outcomes were consistent with previous research suggesting that modified CBT programs can improve anxiety and ASD-related social

impairments. Similar to most studies of this population, assessment was challenged by a number of factors (e.g., characteristic of the population or the status of psychometric research on it) and thus yielded profiles of mixed results. Importantly, Brian and Bridgette demonstrated significant and sustained gains, and there was [no regression] in anxiety or social impairment over time as measured by quantitative--- rating scales. As in other case studies, their functional gains as observed by clients and their adult caregivers (and educators) far exceeded those evidenced by standardized, norm-referenced measures developed for typically developing populations.

It is important to note that the paucity of research on this population precludes a precise comparison between Brian and Bridgette's treatment outcomes and other cases. The cases of Brian and Bridgette differ in many ways from those presented in the literature. Most of the available case studies examined the treatment of young school-aged children. Many cases reported on treatments targeting OCD, and others reported on different combinations of social phobia, separation anxiety, and/or GAD. The interventions described in previous case studies often involved parents and lasted for fewer than fifteen weeks. Importantly, all of the previous cases took place in clinical settings.

Case studies as a mechanism for refining practice. Given the paucity of research on this population on the treatment of comorbid ASD and anxiety in natural settings, case studies serve as a valuable mechanism for refining practice. My previous research and experience with ASD youth informed my conceptualization and treatment of Brian, and subsequently my treatment of Bridgette. As additional research becomes available and more case studies are conducted, clinicians are better equipped to provide effective care for this complex population.

In my work with Brian, I learned lessons that shaped my approach as a clinician and guided my thinking about engaging clients. Specifically, I learned how and when to be more

flexible. Although I expected to devote additional time to reviewing CAT Project content, I eventually learned to deviate more drastically from my initial treatment plan and modify goals in order to promote rapport building and preserve client engagement in treatment. This required a “trial and error” approach as I experimented with forgoing a manual-based approach to Brian’s treatment, allowed fluid dialogue, and subsequently encouraged more active and structured interventions. My difficulty in navigating these treatment decisions stemmed in part from my countertransference and confidence. I uncomfortable with my inability to read Brian’s nonverbal and verbal cues, and concerned about creating an aversive counseling experience for him. Over time, I became more confident and comfortable with risk-taking and decision-making.

Through my work with Brian, I also recognized more fully the importance of collaboration, motivation, and consistency in treatment. Although these are essential in all therapies, I had initially developed very specific plans and goals without Brian’s consultation. He noticed that he was much more engaged after sessions 3 and 4, when I sought his opinion on the most effective use of our time together, and described transparently and clearly my ideas about how to structure the remaining weeks. Brian was more engaged after we developed rapport, and he was able to articulate his preferences, including his preferences in reinforcers. As we developed a plan, Brian and I established an incentive plan, using candy to motivate his participation in various components of treatment. Additionally, as we developed rapport and revised our treatment plan, I recognized the importance of consistency and predictability. I maintained a neutral disposition when Brian entered our fourth session angrily, after which he appeared to speak more freely. Additionally, adherence to a predictable routine often alleviates anxiety in youth with ASD. As Brian and I discussed openly and collaboratively our intentions, he became increasingly motivated in treatment.

When entering treatment with Bridgette, I learned to remain more flexible as a clinician, waiting to identify specific treatment objectives until getting to know her and her preferences. I recognized the importance of a session routine, particularly for a student with more significant ASD features. Through the case of Bridgette, however, I recognized that collaboration and consistency was vital, not only for the client, but for her entire systems of support. Central to Bridgette's progress was the ongoing consultation among her family, teachers, and support staff. Bridgette exhibited improvements in school that were not mirrored at home. When tensions at home increased, she began struggling more in school. At school, staff was able to respond to Bridgette's behavior and modify the environment in a consistent manner. I hoped to promote similarly consistent responses at home, but had to recognize and respect the limitations of Bridgette's family. Although they advocated for her and strove to support her, they also experienced a great deal of stress, like many other families of children with ASD. Thus, they did not always have the emotional resources to participate in consultation and implement behavioral contingencies as the school staff had done.

I experienced the case of Bridgette as unique because she possessed child-like qualities as well as typical adolescent concerns. For instance, she was behaviorally disinhibited relative to her same-age peers. For her rewards, she sometimes chose to watch animated videos and listen to juvenile songs, which would not have appealed to others her age. Thus, I was struck by Bridgette's periodic discussion of common teenage issues. She wanted to dress fashionably and fit in with her peers in the general education curriculum. We had discussed issues related to identity and the implications of a disability on her life past, present, and future. Thus, while behavioral skills training and consultation were imperative, so too was the creation of a disorder-specific conceptualization that allowed for development of social skills and issues salient to

adolescent identity development. In contrast to Brian's short and somewhat structured treatment, Bridgette benefited from long-term therapy that developed in a non-linear manner. Moreover, this progress was supported by consistent patience and compassion for Bridgette's disinhibition and perseverance, and the related stress experienced within her systems.

Taken together, these cases highlight several important lessons that guide future practice. The course and outcomes of these cases suggest that most modifications highlighted in the literature work well for most clients, although effective implementation can require "trial and error," as well as the clinician's confidence in risk-taking and decision-making. Additionally, adolescent clients with ASD benefit from flexibility within a mutually established session routine. Transparency and collaboration in therapy, and the provision of choices and incentives, helped Brian and Bridgette to exercise agency and autonomous decision-making within a safe setting. Although these elements can enhance therapy for all clients, they can be difficult to remember when treating adolescents who present differently. The cases of Brian and Bridgette illustrate two very different presentations and related differences in countertransference that clinicians might experience. However, maintaining collaboration, consistency, and compassion with the client, their caregivers, and educators, across time and contexts significantly shapes the course and outcome of treatment for this population.

Conclusion

As a clinician, the continuous engagement in disciplined inquiry strengthened the quality of Brian and Bridgette's therapy. I researched and reflected upon previous studies to shape Brian's treatment, and subsequently Bridgette's. My experiences in treating each of them, and continuing to read other group and case studies, expanded my capacities for comprehensive conceptualization and flexible adaptation. These pragmatic case studies capture this cyclical

process. The framework is intended to guide clinicians in considering the multitude of factors influencing treatment and highlights promising strategies for overcoming complexity and challenge found in the real-world clinical care.

The cases of Brian and Bridgette illustrate how CBT for anxiety can be adapted to meet complex needs of adolescents with ASD as they play out in different family and school contexts. Although students with ASD share some common features that inform conceptualization and treatment, they have unique personalities, problems, and strengths. Thorough assessment of individual differences and knowledge of the school context in which therapy is delivered are essential in developing and adapting intervention components appropriately and effectively.

Both Brian and Bridgette benefitted from flexibility and additional time in treatment, whether for the purposes of rapport building or for learning skills more fully. Additionally, they were better able to access interventions when language and concepts were simplified, and delivered repeatedly in varied and creative formats. Although these modifications were important to both clients, their individual strengths and weaknesses shaped the content and process of treatment.

While Brian and Bridgette both benefitted from exercises promoting emotional intelligence and social skill development, Brian's therapy focused more explicitly on the former, and Bridgette's, on the latter. Further, their presentations necessitated different degrees of structure and behavioral modification, and they preferred different types of activities and conversational styles. Brian was more withdrawn, and generally preferred free speech. He was more engaged when offered choices in his treatment. He did not want to integrate specific interests, like videogames, but he was more attentive and responsive when offered choices in intervention activities. In contrast, Bridgette was pleased to integrate her interests as reinforcers,

or rewards to work toward, and she participated in more varied and creative activities. She presented as more engaged, and eager to learn skills and please those around her.

The nature and scope of Brian and Bridgette's treatments were meaningfully influenced by therapist-related and contextual factors, including, but not limited to clinician experience, duration of treatment, and their school's norms for social-emotional service delivery and interdisciplinary collaboration. Careful consideration of the common and unique qualities of clients like Brian and Bridgette and the context of their treatments can facilitate best practice treatment planning for other adolescents with ASD, although the clinician's continual assessment, adaptation, and consultation are vital for providing quality care.

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Appendix A

Tables

Table A.1 Brian's Symptoms and Diagnoses at the Beginning of Treatment

<u>Diagnosis</u>	<u>Symptoms</u>
299.00 (F84.0); Autism Spectrum Disorder, Without accompanying intellectual and language impairment	<p>Persistent deficits in social communication and interaction across contexts, requiring support:</p> <ul style="list-style-type: none"> – Deficits in social-emotional reciprocity (limited back-and-forth conversation; reduced sharing of emotions; failure to initiate or respond to social interactions) – Deficits in nonverbal communicative behaviors (poorly integrated nonverbal communication and abnormalities in eye contact, body language, and gesturing) – Deficits in developing relationships <p>Restricted patterns of behavior and interests, requiring support:</p> <ul style="list-style-type: none"> – Stereotyped speech and idiosyncratic expressions – Hypersensitivity to sensory input (auditory)
314.00 (F90.0) Attention-Deficit/Hyperactivity Disorder, Predominantly inattentive presentation	<ul style="list-style-type: none"> – Failure to attend to details of schoolwork – Difficulty sustaining attention on tasks – Seems not to listen when spoken to – Difficulty organizing tasks (e.g., multistep assignments; poor time management) – Reluctance to engage in tasks that require sustained mental effort – Loss of materials necessary for assignments – Easily distracted by extraneous stimuli, including unrelated thoughts
Rule out: 300.02 (F41.1), Generalized Anxiety Disorder	<ul style="list-style-type: none"> – Excessive anxiety, most days for over 6 months, about various events and activities – Difficulty controlling worry – Frequent fatigue – Difficulty concentrating – Irritability
Rule out: 300.4 (F34.1); Persistent Depressive Disorder (Dysthymia) with mild anxious distress, early onset	<ul style="list-style-type: none"> – Depressed mood for most of the day, for more days than not, for over one year – Hypersomnia – Fatigue – Low self-esteem – Poor concentration – Feelings of hopelessness <p>With anxious distress, mild:</p> <ul style="list-style-type: none"> – Difficulty concentrating because of worry – Fear that something awful may happen

Table A.2 Bridgette's Symptoms and Diagnoses at the Beginning of Treatment

<u>Diagnosis</u>	<u>Symptoms</u>
299.00 (F84.0); Autism Spectrum Disorder, with accompanying mild intellectual impairment and without language impairment	<p>Persistent deficits in social communication and interaction across contexts, requiring support:</p> <ul style="list-style-type: none"> – Deficits in social-emotional reciprocity (atypical social approach, limited back-and-forth conversation; reduced sharing of interests) – Deficits in nonverbal communicative behaviors (poorly integrated nonverbal and verbal communication and abnormalities in eye contact, body language, and gesturing) – Deficits in developing, maintaining, and understanding relationships and difficulty adjusting behavior to suit social contexts <p>Restricted patterns of behavior and interests, requiring substantial support:</p> <ul style="list-style-type: none"> – Stereotyped speech – Insistence on sameness and ritualized patterns of verbal and nonverbal behavior (e.g., needing to engage in routine conversation, distress upon deviation from the desired responses expected from others) – Highly restricted, fixated interests that are abnormal in intensity of focus (e.g., preoccupation with circumscribed and perseverative interests)
Rule out: 314.01 (F90.2); Attention-Deficit/Hyperactivity Disorder – Combined Presentation	<p>Persistent pattern of inattention</p> <ul style="list-style-type: none"> – Failure to attend to details of schoolwork – Difficulty sustaining attention on tasks – Seems not to listen when spoken to – Difficulty organizing tasks – Easily distracted by extraneous stimuli <p>Persistent pattern of hyperactivity/impulsivity</p> <ul style="list-style-type: none"> – Fidgets or squirms in seat – Often acts as if “driven by a motor” – Difficulty waiting turn – Interrupts or intrudes on others
300.02 (F41.1); Generalized Anxiety Disorder	<ul style="list-style-type: none"> – Excessive anxiety and worry, more days than not for at least 6 months, about a number of events and activities – Difficulty controlling worry – Restlessness – Difficulty concentrating – Irritability – Muscle tension – Difficulty falling asleep

Table A.3 Brian's BASC-2 Self-Report of Personality Scores

Index/Scale	Pre-Treatment	Post-Treatment	2-Year Follow-up
Attitude to School	55	57	50
Attitude to Teachers	43	53	48
Sensation Seeking	42	30	47 ^b
School Problems	46	46	48
Atypicality	45	45	43
Locus of Control	53	46	43
Social Stress	58	58	50
Anxiety	62*	54	50
Depression	55	55	45
Sense of Inadequacy	61*	49	50
Somatization	47	40	38
Internalizing Problems	56	49	44^a
Attention Problems	54	56	63*
Hyperactivity	48	51	45
Inattention/Hyperactivity	51	54	55
Relations with Parents	60	62	70
Interpersonal Relations	36*	36*	34*
Self-Esteem	57	55	73 ^{a b}
Self-Reliance	33*	30*	19**
Emotional Symptoms Index	60	57	50
Personal Adjustment Index	45	44	50

Notes. Additional technical information about BASC-2 scores: The mean score for individual scales is 50, with a standard deviation of 10. The Personal Adjustment Composite has an inverse system of categorization since this composite measures strengths rather than problems. Thus, higher-ranking scores on this composite are considered positive. Additional information on BASC-2 tables: Scores on index and composite measures (i.e., comprised of subscales) are bolded. Subscale measures and scores are presented in regular, non-bolded text. On clinical scales (i.e., School problems, Internalizing Problems, Inattention/Hyperactivity, Emotional Symptoms Index) higher scores reflect greater problems with social-emotional functioning. Conversely, on adaptive scales (i.e., Personal Adjustment Index), higher scores are associated with improved adaptive functioning.

* Score in the At-Risk range.

** Score in the Clinically Significant range.

^a Significant change between initial and current scores as measured by Jacobson and Truax's (1991) reliable change index.

^b Significant change between most recent measurement and current score is statistically significant as measured by Jacobson and Truax's (1991) reliable change index.

Table A.4 Brian's BASC-2 Teacher Rating Scales Scores

Index/Scale	Pre-Treatment
Hyperactivity	42
Aggression	49
Conduct Problems	48
Externalizing Problems	46
Anxiety	46
Depression	54
Somatization	48
Internalizing Problems	49
Attention Problems	56
Learning Problems	63*
School Problems	60*
Atypicality	59
Withdrawal	64*
Behavioral Symptoms Index	55
Adaptability	41
Social Skills	34*
Leadership	34*
Functional Communication	43
Adaptive Skills	36*

Notes. Additional technical information about BASC-2 Scores: The mean score for individual scales is 50, with a standard deviation of 10. The Personal Adjustment Composite has an inverse system of categorization since this composite measures strengths rather than problems. Thus, higher-ranking scores on this composite are considered positive. Additional information on BASC-2 tables: Scores on index and composite measures (i.e., comprised of subscales) are bolded. Subscale measures and scores are presented in regular, non-bolded text. On clinical scales (i.e., Externalizing Problems, Internalizing Problems, School Problems, Behavioral Symptoms Index), higher scores reflect greater problems with social-emotional functioning. Conversely, on adaptive scales (i.e., Adaptive Skills), higher scores are associated with improved adaptive functioning.

* Score in the At-Risk range.

** Score in the Clinically Significant range.

Table A.5 Brian's BASC-2 Parent Rating Scales Scores

Index/Scale	Remembered Pre-Treatment	2-Year Follow-up
Hyperactivity	57	50
Aggression	53	43
Conduct Problems	55	52
Externalizing Problems	56	48
Anxiety	50	46
Depression	58	47
Somatization	63*	50
Internalizing Problems	58	47^a
Atypicality	63*	49 ^a
Withdrawal	80**	60* ^a
Attention Problems	70**	53 ^a
Behavioral Symptoms Index	68*	50^a
Adaptability	33*	46
Social Skills	35*	42
Leadership	27**	44 ^a
Activities of Daily Living	35*	44
Functional Communication	29**	47 ^a
Adaptive Skills	28**	43^a

Notes. Additional technical information about BASC-2 scores: The mean score for individual scales is 50, with a standard deviation of 10. The Personal Adjustment Composite has an inverse system of categorization since this composite measures strengths rather than problems. Thus, higher-ranking scores on this composite are considered positive. Additional information on BASC-2 tables: Scores on index and composite measures (i.e., comprised of subscales) are bolded. Subscale measures and score are presented in regular, non-bolded text. On clinical scales (i.e., Externalizing Problems, Internalizing Problems, Behavioral Symptoms Index), higher scores reflect greater problems with social-emotional functioning. Conversely, on adaptive scales (i.e., Adaptive Skills), higher scores are associated with improved adaptive functioning.

* Score in the At-Risk range.

** Score in the Clinically Significant range.

^a Significant change between initial and current scores as measured by Jacobson and Truax's (1991) reliable change index.

^b Significant change between most recent measurement and current score is statistically significant as measured by Jacobson and Truax's (1991) reliable change index.

Table A.6 Bridgette's BASC-2 Self-Report of Personality Scores

Index/Scale	Pre-Treatment Start of Year 1	End of Year 1	Start of Year 2	Post-Treatment End of Year 2	4-Month Follow-Up
Attitude to School	40	40	40	40	37
Attitude to Teachers	46	46	34	39	43
Sensation Seeking	58	49	49	47	49
School Problems	47	43	38	39	41
Atypicality	73**	62*	65*	59 ^a	70**
Locus of Control	62*	67*	60*	51	46 ^a
Social Stress	58	62*	56	62*	58
Anxiety	62*	75**	67*	73**	65*
Depression	53	59	49	53	47
Sense of Inadequacy	49	44	44	51	44
Somatization	44	44	44	44	44
Internalizing Problems	59	62*	57	58	54
Attention Problems	54	54	45	54	43 ^{a b}
Hyperactivity	54	51	57	54	51
Inattention/Hyperactivity	55	53	51	55	47
Relations with Parents	51	51	51	50	57
Interpersonal Relations	62	59	59	55	59
Self-Esteem	57	40*	55	47	55
Self-Reliance	38*	38	57 ^{a b}	55	53
Emotional Symptoms Index	56	64*	52^b	58	51
Personal Adjustment Index	53	46	71^{a b}	52^b	58

Notes. Additional technical information about BASC-2 scores: The mean score for individual scales is 50, with a standard deviation 10. The Personal Adjustment Composite has an inverse system of categorization since this composite measures strengths rather than problems. Thus, higher-ranking scores on this composite are considered positive. Additional information on BASC-2 tables: Scores index and composite measures (i.e., comprised of subscales) are bolded. Subscale measures and scores are presented in regular, non-bolded text. On clinical scales (i.e., School problems, Internalizing Problems, Inattention/Hyperactivity, Emotional Symptoms Index), higher scores reflect greater problems with social-emotional functioning. Conversely, on adaptive scales (i.e., Personal Adjustment Index), higher scores are associated with improved adaptive functioning.

* Score in the At-Risk range.

** Score in the Clinically Significant range.

^a Significant change between initial and current scores as measured by Jacobson and Truax's (1991) reliable change index.

^b Significant change between most recent measurement and current score is statistically significant as measured by Jacobson and Truax's (1991) reliable change index.

Table A.7 Bridgette's GAD-7 Scores

Session	Total Score	Qualitative Description
55	6	Mild
56	10	Moderate
57	9	Mild
58	10	Moderate
59	6	Mild
60	5	Mild
61	12	Moderate
62	10	Moderate
63	8	Mild
64	10	Moderate
65	14	Moderate

Table A.8 Bridgette's BASC-2 Parent Rating Scales Scores

Index/Scale	Remembered Pre-Treatment	Post-Treatment
Hyperactivity	63*	47 ^a
Aggression	50	43
Conduct Problems	42	42
Externalizing Problems	52	43
Anxiety	58	46 ^a
Depression	65*	54
Somatization	44	41
Internalizing Problems	57	46^a
Atypicality	59	52
Withdrawal	58	47
Attention Problems	50	53
Behavioral Symptoms Index	60*	49
Adaptability	52	52
Social Skills	54	62
Leadership	54	56
Activities of Daily Living	63	66
Functional Communication	50	54
Adaptive Skills	55	60

Notes. Additional technical information about BASC-2 Scores: The mean score for individual scales is 50, with a standard deviation of 10. The Personal Adjustment Composite has an inverse system of categorization since this composite measures strengths rather than problems. Thus, higher-ranking scores on this composite are considered positive. Additional information on BASC-2 tables: Scores on index and composite measures (i.e., comprised of subscales) are bolded. Subscale measures and scores are presented in regular, non-bolded text.

* Score in the At-Risk range. On clinical scales (i.e., Externalizing Problems, Internalizing Problems, Behavioral Symptoms Index), high scores reflect greater problems with social-emotional functioning. Conversely, on adaptive scales (i.e., Adaptive Skills), higher scores are associated with improved adaptive functioning.

** Score in the Clinically Significant range.

^a Significant change between initial and current score as measured by Jacobson and Truax's (1991) reliable change index.

^b Significant change between most recent measurement and current score is statistically significant as measured by Jacobson and Truax's (1991) reliable change index.

Appendix B

Samples of Fidelity Checklists

Sample Checklist B.1: Brian, Session 7

Session Checklist:

- A. Review homework (or complete it together as makeup; relaxation) – √
Note: He indicated that he did it because it was the easiest homework to do (before bed).
When asked if it was helpful, he replied, “In a way...the airflow.”
 - B. SUDS Scale – √ (Rating = 2)
 - C. Ask about characters who pursue goals despite challenges. – √ (Couldn’t think of any.)
 - D. Introduce alternative relaxation strategies – X
 - E. Assign practice work (choice: relaxation or thought record from C.A.T. Project (chose p. 9)
 - F. Tally points and provide rewards. – √
 - G. Discuss and plan for termination. – √
 - H. If time, introduce cognitive triangle (thoughts ↔ feelings ↔ sensations) – √
- *Note: Based on the goals and objectives for C.A.T. Project sessions 1-2)

Therapy Procedures Checklist (TPC) Techniques (Weersing, Weisz, & Donnenberg, 2002) expected to be used:

- A. Help child gain insight on feelings/motives – X
- B. Foster therapeutic relationship – √
- C. Encourage expression of feelings – √
- D. Teach model of cognition-behavior-emotion (focusing today on emotion-physical sensation) – Partial √
- E. Use point or token system – √
- F. Reward or praise positive behaviors – √
- G. Ignore inappropriate behavior – N/A

Sample Checklist B.2: Bridgette, Session 6

“Bridgette & Ms. G’s To Do List”

Aide	√
Home	√
Relaxation	√
Reward	√

Therapy Procedures Checklist (TPC) Techniques (Weersing, Weisz, & Donnenberg, 2002) expected to be used:

- A. Help child gain insight on feelings/motives – X
- B. Foster therapeutic relationship – √
- C. Encourage expression of feelings – √
- D. Enhance perspective-taking skills – √
- E. Give direct instructions to change thoughts – X
- F. Use point or token system – √
- G. Reward or praise positive behaviors – √
- H. Use prompts to elicit desired behaviors – X
- I. Arrange modeling opportunities – √
- J. Ignore inappropriate behavior – √







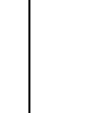


Appendix C

Sample Worksheets

Sample Worksheet C.1

Name: _____ Date: _____

SUDS Anxiety & Related Emotions
Subjective Units of Distress Scale

0	1	2	3	4	5	6	7	8	9	10
NO		MILD	MODERATE	MODERATE				SEVERE		WORST POSSIBLE
										

Overall SUDS rating for the week:

What was the highest point of the week?
Rating:
Situation:









What was the lowest point of the week?
Rating:
Situation:

Sample Worksheet C.2

Relaxation Practice

Name: _____ Dates: _____

Practice each step every day. Put a check mark in the boxes to show the steps that you did.
Remember, the more you practice the steps, the easier they are to use and the better they work!

Step	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
Hands & Arms 							
Arms & Shoulders 							
Shoulder & Neck 							
Jaw 							
Face & Nose 							
Stomach 							
Legs & Feet 							
Whole Body 							

Coping with Problems In and Out of My Control

List the problem and check of whether it is “out of your control” or “in your control.”

Problem	Out of my control	In my control

Is it in or out of my control?

Decide if the problem is in or out of your control. Look at the possible next steps. Put a star next to the coping strategies you used or the actions you took.

Out my control

Coping strategies:

In my control

Actions I can take:

<u>*Let It Go List*</u>		
Situation/Problem	Solution	Let It Go
Ex: Something is out of place and I want Mom to move it.	Ex: I can ask Mom one time. If she says no and doesn't want to talk about it or hear me ask again...	Ex: I can let it go. ✓