Treatment of Generalized Anxiety Disorder: A Case Study of a 17 Year-Old Male

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by

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Case Study Approval
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MASTER OF ARTS DEGREE

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Theoretical Foundation of Generalized Anxiety Disorder

The primary feature of GAD is excessive and uncontrollable worry about future events and potentially negative outcomes (Barlow, 2004). Current models of GAD theorize that uncontrollable worry occurs in individuals who engage in patterns of anxious, future-oriented cognitions associated with various areas of the person's life such as productivity at school or work, quality of health of self or others, and interpersonal relationships. A person engaging in future-oriented worry tends to react negatively within unfamiliar or vague situations and engage in a cycle of worried thoughts with the perception that the situation is dangerous. Therefore, the person develops a disposition of intolerance of uncertainty about the outcome of future events. Intolerance of uncertainty is defined as "a dispositional characteristic that results from a set of negative beliefs about uncertainty and its implications and involves the tendency to react negatively on an emotional, cognitive, and behavioral level to uncertain situations and events" (Buhr & Dugas, 2009, p. 216). In routinely engaging in worried thoughts about potential negative outcomes, the person also assumes a positive belief that worry is protective. However, when faced with a potential problem, the person tends to think about all possible negative outcomes associated with the problem and loses the confidence to make decisions. In addition, the person becomes hypersensitive to shifts in emotional states that are associated with worried thoughts, and attempts to avoid experiencing upsetting experiences associated with the worry (Borkovec, Alcain, & Behar, 2004).

The Intolerance of Uncertainty Model (IUM) involves four main components that interact in a non-linear manner; 1) intolerance of uncertainty, 2) positive beliefs about worry, 3) poor problem-orientation and, 4) cognitive avoidance (Behar, DiMarco, Hekler, Mohlman, & Staples,

2009; Dugas & Ladouceur, 2000; Dugas, Letarte, Rheaume, Freeston, & Ladouceur, 1995; Freeston, Rheaume, Letarte, Dugas, & Ladouceur, 1994).

A person with an intolerance of uncertainty may highly relate to beliefs such as, "uncertainty makes life intolerable," "it's not fair that there are no guarantees in life," "my mind can't be relaxed if I don't know what will happen tomorrow," "uncertainty makes me uneasy, anxious, or stressed," and "unforeseen events upset me greatly." Therefore, the person with an intolerance for uncertainty may try to accommodate for the anxiety associated with ruminating on "what if" questions by attempting to plan for all possible negative outcomes associated with the worry. This belief and pattern of thinking contributes to the difficulty to stop worrying associated with GAD. This cycle then leads the person to adopt positive beliefs about worry.

Positive beliefs about worry is the second hallmark of the IUM. Individuals believe worrying about all possible negative outcomes will prevent the feared outcomes from occurring and prepare for these outcomes. Also, individuals may believe that worrying will increase motivation to get things done and convey that one is a responsible and caring person (Freeston et al., 1994). Furthermore, individuals believe that their positive beliefs about worry will help them find a better way of doing things, avoid disappointment, and protect loved ones. These beliefs are then negatively reinforced when the feared outcomes do not occur. Therefore, the individuals maintaining positive beliefs about worry may think there is something inherently wrong if they are not engaging in worry.

Negative problem-orientation is another aspect associated with the IUM. Individuals holding a negative problem orientation tend to perceive problems as threats, become easily frustrated when faced with a problem, lack confidence in their ability to solve problems, and become pessimistic about their ability to solve their problems (Behar et al., 2009; Dugas &

Ladouceur, 2000). Negative emotional reaction to a problem situation and selective attention to ambiguous components of a problem contribute to poor emotional problem-orientation (Dugas, Freeston, & Ladouceur, 1997). Although the person with GAD may be able to identify the solution to the problem and engage in other aspects of problem-solving, worry associated with uncertainty strongly affects the person's ability to take action when making decisions. For example, a person with GAD may strongly associate with the thoughts, "when I'm uncertain, I can't go forward," "when it's time to act, uncertainty paralyzes me," and "uncertainty stops me from having a firm opinion." The person adopts a mentality that being uncertain about the future is a sign of weakness as others seem to know what to do. This mentality causes the person to doubt his or her self-confidence when faced with daily decisions at home, school, and within the community. Lack of self-confidence in the ability to solve problems can also influence a person to either avoid thinking about the problem or make a decision when faced with a problem. This pattern of thinking and avoiding leads to cognitive avoidance.

Cognitive avoidance refers to avoidance of cognitive and emotional content in which people engage in both implicit and explicit avoidance (van der Heiden, Muris, & van der Molen, 2012). Implicit avoidance involves the mental imagery associated with emotional processing as part of Borkovec's avoidance model of GAD in which the person engages in thought replacement, distraction, and thought suppression in order to avoid experiencing strong emotional reactions to images associated with the worrisome thoughts (Borkovec, Alcain, & Behar, 2004). Mental imagery associated with worried thoughts is believed to evoke stronger somatic symptoms than verbalizing the fear. Therefore, individuals with GAD will engage in worry to reduce the intensity of somatic symptoms experienced. The somatic symptoms

associated with GAD are feelings of restlessness, difficulty concentrating, irritability, and sleep disturbances.

The cycle of worry leads to a state of demoralization exhaustion that manifests as chronic fatigue, difficulty sleeping, restlessness, and difficulty concentrating. The IUM model supposes a predisposition to this cycle of worry as indicated by a lowered mood state and perceived negative life events that is similar to Barlow's genetic and specific vulnerability model of anxiety (Barlow, 2004). Genetic and specific vulnerability refers to the individual's "set-point" for levels of anxiety or mood state that are either inherited from immediate family members or learned from early childhood experiences. The "what if" cognitive component associated with the intolerance of uncertainty and positive beliefs about worry underwrite the diagnostic criteria of worrying about a number of events associated with GAD. Furthermore, poor problem-orientation and cognitive avoidance contributes to impaired decision-making as well as overall maladaptive functioning within the home, school, and community settings (Dugas & Ladouceur, 2000). Intolerance of uncertainty is highly related to worry associated with generalized anxiety disorder (GAD) and distinguishes individuals with GAD from those with obsessive-compulsive disorder (OCD), panic disorder, and social anxiety disorder (Dugas & Ladouceur, 2000; Freeston et al., 1994).

Empirical Support for Intervention

Research indicates that intolerance of uncertainty is more prevalent in GAD than other anxiety disorders such as panic disorder (Dugas, Marchand, & Ladouceur, 2005). A recent meta-analysis examining the psychological treatment of GAD within 41 studies found that when compared to wait list control groups, the IUM for cognitive behavioral therapy (CBT) has a large positive effect on worrying and major depressive disorder (MDD) (Cuijpers, Sijbrandij, Koole,

Huibers, Berking, & Andersson, 2014). That is, IUM for CBT significantly reduces worry and symptoms of major depression. Symptoms characterizing GAD are associated with MDD and exacerbate chronic physical conditions (van der Heiden et al., 2012). A randomized controlled trial utilizing a large sample (N = 165) of clinically referred patients with GAD found that 80% of patients no longer met diagnostic criteria for GAD after receiving an intolerance of uncertainty treatment intervention that included worry awareness training, problem-solving training, behavioral exposure, and modification of cognitive interventions challenging positive beliefs about worry (van der Heiden et al., 2012). A study investigating the relationships between excessive and uncontrollable worry with intolerance of uncertainty in individuals not diagnosed with GAD found that intolerance of uncertainty was highly correlated with worry (Dugas, Gosselin, & Ladouceur, 2001). The findings of the study suggested the possibility of preventing the development of GAD by increasing tolerance of uncertainty.

Intolerance of uncertainty is also strongly associated with worry among young adults and adolescents. For example, a study examining the effectiveness of IUM with a small sample of 20 to 24 year-olds found an average decrease of 57% in mean time spent worrying from pre-test to one-year follow-up (Dugas & Ladoucer, 2000). Another study examining the relation between worry and the IUM in a large sample of Canadian adolescents (N = 528) found that intolerance of uncertainty had the strongest association with worry and was vital in discriminating among levels of worry (Laugesen, Dugas, & Bukowski, 2003). A five year, ten wave longitudinal study of 338 adolescents found patterns indicating that highest levels of worry, intolerance of uncertainty, and fear of anxiety occurred during transition periods (i.e., biological, cognitive, emotional, academic, responsibilities, and social relations) associated with adolescence (Dugas, Laugesen, & Bukowski, 2012). The findings of Dugas and colleagues (2012) support the finding

that change in intolerance of uncertainty mediated change in worry by 53% and change in worry mediated change in intolerance of uncertainty by 60%. That is, the study provided evidence that intolerance of uncertainty and worry impact each other throughout the individual's life. When considering the efficacy of the intolerance of uncertainty model for adolescents versus adults, characteristics of worry change from concrete concern (i.e., specific fears) to abstract, detailed, elaborate (Henker, Whalen, & O'Neil, 1995), and temporally distant worry (Magnusson & Olah, 1981) which is similar to adult worry. Another study examined four cognitive abilities associated with the IUM in 197 adolescents and found that intolerance of uncertainty was higher among boys and older adolescents compared to girls and younger adolescents (Barahmand, 2008). Therefore, the IUM treatment for GAD in adults is also efficacious in treating GAD in older adolescents.

Leahy and colleagues (2012) developed a cognitive-behavioral treatment plan aimed at reducing physiological arousal and cognitive symptoms associated with GAD. A review of 16 meta-analyses has demonstrated CBT as highly effective for improving symptoms of GAD (Butler, Chapman, Forman, & Beck, 2006). An evaluation in a controlled clinical trial has shown that 77% of clients no longer met criteria for GAD after receiving CBT focused on increasing tolerance for uncertainty and increasing active, problem-solving coping (Ladouceur et al., 2000). The general plan of treatment for GAD includes assessment, psychoeducation, relaxation and mindfulness training, monitoring worries, assessing and confronting avoidance, cognitive evaluation of worrying, interpersonal interventions, problem-solving training, and phasing out, which occurs over 15 sessions. Although Leahy's recommended treatment of GAD is not exclusive to the IUM, the skills and strategies presented address intolerance of uncertainty, positive beliefs about worry, cognitive avoidance, and negative problem orientation (Cuijpers et

al., 2014; Dugas, Freeston, & Ladouceur, 1997; Robichaud & Dugas, 2006; Roemer & Orsillo, 2002). Furthermore, the skills presented in Leahy's treatment model are also congruent with the treatment of GAD in youth (Minde, 2013; Seligman & Ollendick, 2011).

Presenting Problem and Relevant History

Noah[1] is a White 17-year-old high school senior residing in a midsize city in Midwest America. Noah is the only biological child of both parents who divorced when Noah was 14 years old. His mother currently works in administration and father worked as a police officer; however, he lost his job due to excessive drug and alcohol use. Noah attends public school and is on the honor roll. Noah's mother reported that some of Noah's early childhood experiences consisted of witnessing verbal arguments and physical aggression between his parents. Noah's mother explained the conflict was mainly due to his dad working long hours, engaging in frequent alcohol use, and being sexually promiscuous with other women. Currently, Noah lives with his biological mother and her significant other and his three sons ages 10, 8, and 7 years. Noah reported getting along well with his mother's significant other as well as his sons. Noah and his mother reported that they have a mutually supportive relationship. Noah's mother reported that Noah's biological father currently resides in a distant town and does not have contact with them due to a previous history of verbal abuse.

Noah had been receiving pharmacological treatment from a community-based mental health agency since March of 2014 after a one-month hospitalization in an inpatient behavioral health hospital. He was initially diagnosed with major depressive disorder, single episode, moderate severity and prescribed Prozac (30 mg) for depressive symptoms and Klonopin (0.25 mg) for anxiety as needed. Noah was hospitalized due to a suicide attempt in which he attempted

[1] The names and identifying details were changed to protect the privacy of the individual.

to hang himself after experiencing chronic stress and anxiety pertaining to difficulties with his biological father. For example, Noah recalled experiencing anxiety when discovering his father had been perpetuating an affair and threatened to physically hurt Noah's mother if Noah told her about the affair. Noah continued pharmacotherapy until July 2015 when he was again hospitalized for one month due to another suicide attempt where his mother discovered him unconscious in his bedroom after overdosing on prescribed psychiatric medications. Noah explained feeling overwhelmed with anxiety when attempting to maintain a part-time job at a grocery store while fulfilling his school and home obligations. After his release in September 2015, he was referred to therapy to manage his anxiety symptoms. Noah and his mother expressed concern about Noah's ability to manage symptoms of anxiety and worry related to graduating high school, applying to college, and moving away from the house to attend college. Noah expressed fear of failing and ending up "being alone on the streets." Noah and his mother recalled him experiencing this type of general worry and anxiety symptoms for several years. The two previous hospitalizations for suicidal attempts were triggered by the chronic status of Noah's anxiety symptoms combined with interpersonal conflicts within his family.

Anxiety Symptoms. Noah reported having panic attack symptoms approximately four times each week for the past eight months in which he experienced sweating, shaking, shortness of breath, feelings of choking, upset stomach, hot flashes, dizziness, feelings of "going crazy," and fear of losing control. Noah's recount of the circumstances surrounding the panic attacks identify that performance expectations (i.e., work and school performance) served as triggers. Noah also described worrying about various areas of his life (i.e., college education, performance, health, family matters, world events, and dying alone). Additionally, Noah admitted to avoiding socializing and mostly staying home due to fear of scrutiny by others. Noah

reported cutting his arms several times within a month over several months between 15-17 years of age. Noah's mother stated conflict with his biological father exacerbated his anxiety. Noah reported that he has not engaged in cutting since April 2015. He denied any thoughts or plans related to suicide and stated that cutting himself reduced tension, rather than attempting to end his life. Noah admitted difficulty falling asleep due to an inability to stop worrying about the "little things." Noah and his mother reported that he takes Geoden at night to help him sleep.

Assessment

Diagnosis. The most used diagnostic assessment for youth with mood and anxiety symptoms is the Anxiety Disorders Interview Schedule for DSM-IV, child version (ADIS-IV C; Silverman & Albano, 1996). The ADIS-IV C is a semi-structured interview pertaining to both internalizing disorders [Generalized Anxiety Disorder (GAD), Obsessive-Compulsive Disorder (OCD), Separation Anxiety Disorder (SAD), Social Anxiety Disorder (SOP), Specific Phobia (SP), and Major Depressive Disorder (MDD)] and externalizing disorders [Attention Deficit-Hyperactive Disorder (ADHD), and Oppositional Defiant Disorder (ODD)] (McLeod, Jensen-Doss, Ollendick, 2013). The ADIS-IV C shows moderate to very strong test-retest and interrater reliability among youth reports across both internalizing and externalizing disorders. In order to determine the degree of strength between two variables, Evans (1996) suggested absolute values of *r* as follows: .00-.19 (*very weak*), .20-.39 (*weak*), .40-.59 (*moderate),* .60-.79 (*strong*), and .80-1.0 (*very strong).* The Kappa value (*k*) is used to measure the magnitude of agreement between two raters. Guidelines for the magnitude of interrater agreement has been suggested as: 0-0.20 (*slight*), 0.21-0.40 (*fair*), 0.41-0.60 (*moderate*), 0.61-0.80 (*substantial*), and 0.81-1.0 (*almost perfect agreement*) (Landis & Koch, 1977). For GAD, the test-retest reliability for youth yielded *r* values of .63 for youth, .72 for parent reports, and .80 for combined. As far as

interrater reliability, kappa values were consistent among youth, parent, and combined reports for GAD (youth $k = 0.82$, parent $k = 0.82$, combined $k = 0.80$; McLeod, Jensen-Doss, Ollendick, 2013). A study using the ADIS-IV reported poor agreement between parents and children when assessing anxiety disorders regardless of age and gender (Choudhury, Pimentel, & Kendall, 2003). Poor agreement could be the result of the parents having difficulty understanding their child's internalizing symptoms associated with anxiety. Research shows that children are best at reporting internalizing symptoms such as worry (Loeber, Green, & Lahey, 1990). Therefore, Noah completed the ADIS-IV child version.

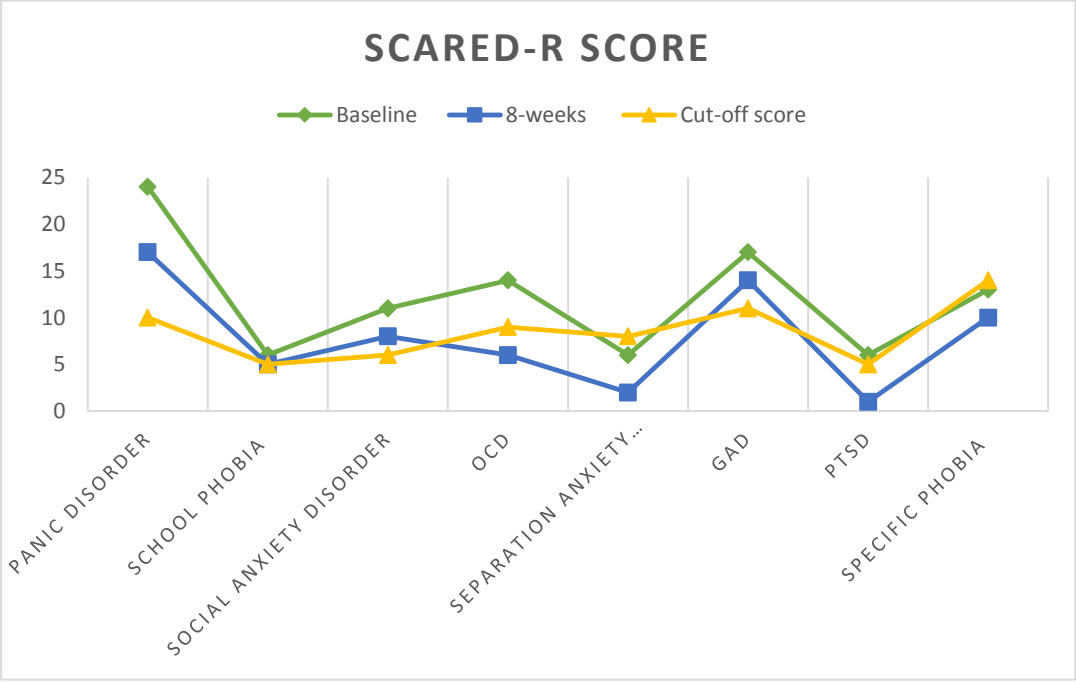
Noah described symptoms associated with GAD, Social Anxiety Disorder, and panic attacks on the ADIS-IV. During the interview, Noah reported a subjective unit of distress scale (SUDS) score of 7/10 along with a feeling of choking. According to the clinician's severity rating scale (0-8), severity ratings of symptoms ranging 5-7 are considered *severe* and ratings above eight are *very severe* (Silverman & Albano, 1996). Noah reported severe anxiety regarding his and his mother's health, social life, end-of-life loneliness, perfectionism, and general world events and very severe ratings on college education and school performance. Noah reported incessant anxiety as indicated by a number of anxious behaviors in the past six months including an inability to sleep, stop worrying, distract himself or seek reassurance from his mother. He reported experiencing restlessness, dizziness, unclear thinking, and rigid posture. In addition, he reported unsafe behavior such as running into a wall and traffic to escape the anxiety. Based on severity and interference ratings, number of symptoms endorsed, and the clinician's impressions, Noah endorsed anxiety, chronic worry, and panic. The clinician further evaluated anxiety symptoms to specify a diagnosis for Noah.

Another assessment utilized for diagnostic purposes in adolescents is the Screen for Child Anxiety Related Emotional Disorders-Revised (SCARED-R; Muris, Dreesen, Bogels, Weckx, & Melick, 2004; Muris, Merckelback, Schmidt, & Mayer, 1999). The SCARED-R contains 69 items across eight subscales assessing a variety of anxiety disorders. The SCARED-R is scored using a three-point Likert scale (i.e. 0= *almost never*; 1= *sometimes*; 2= *often*). The total score is configured by adding the value of responses. Total scores of ≥ 56 indicates clinical significance for anxiety-related symptoms (Muris et al., 1999; Muris & Steerneman, 2001). For each subscale, the clinical score and number of items for the child-report are as follows:

Subscale	**Number of Items**	**Clinical Score for Child-Report**
Panic Disorder	13	10
Specific Phobia	15	14
School Phobia	4	5
Social Anxiety	7	6
Obsessive-Compulsive Disorder	9	9
Separation Anxiety Disorder	8	8
Generalized Anxiety Disorder	9	11
Post-Traumatic Stress Disorder	4	5

The SCARED-R possesses good internal, convergent, and discriminant validity. Internal validity for the SCARED-R indicates the scale's ability to accurately measure anxiety symptoms. The SCARED-R is a reliable and valid questionnaire for assessing childhood anxiety that demonstrating high internal consistency with Cronbach's alphas ranging between .64 and .94 (Muris, et al., 2004; Muris et al., 1999). Convergent validity pertains to how well the scale relates to other childhood anxiety scales. A study demonstrated convergent validity by comparing the internal and external constructs of the SCARED-R and the Child Behavior Checklist (CBCL; Achenbach and Endelbrock, 1983) in which the SCARED-R significantly positively correlated with the internalizing ($r = .26$, $p < .05$) but not with the externalizing ($r = -.07$) factors of the CBCL (Muris et al., 2004). This correlation indicates the SCARED-R is a

valid measure for internalizing constructs such as anxiety-related disorders but not for externalizing symptoms such as behavioral or conduct disorders. Discriminant validity differentiates between children exhibiting anxiety symptoms and children not exhibiting anxious symptoms. To test discriminant validity, SCARED-R subscale scores of youth with and without anxiety disorder diagnoses were compared using analyses of variance (ANOVAs) with age and gender as covariates. The subscale scores of panic disorder ($F(1,229) = 16.4$, $p < .001$), OCD ($F(1,229) = 6.3$, $p < .05$), PTSD ($F(1,229) = 29.7$, $p < .001$) and social anxiety disorder ($F(1,229) = 9.5$, $p < .05$) demonstrated significant discriminative validity (Muris et al., 2004). These findings suggest that the SCARED-R is a reliable assessment for internalizing symptoms associated with anxiety among youth and adolescents. The following graph indicates Noah's baseline, eight-week, and cut-off scores on the SCARED-R:



(Figure 1: baseline = diamond, eight-week = square, & cut-off = triangle)

Noah's initial scores indicate symptoms of panic disorder, social anxiety disorder, obsessive-compulsive disorder, generalized anxiety disorder, and post-traumatic stress disorder.

Although panic disorder was the highest rated SCARED-R score, Noah's report on the ADIS-IV indicated that worry and rumination about future events were his primary concern and are core cognitive processes associated with GAD (Robichaud & Dugas, 2006). Therefore, further assessment associated with GAD was warranted.

When considering symptom management and treatment monitoring for individuals with GAD, the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990; Molina & Borkovec, 1994), the Intolerance of Uncertainty Scale (IUS; Freeston, Rheaume, Letarte, Dugas, & Ladouceur, 1994), and Metacognition Questionnaire-30 (MCQ-30; Wells & Cartwright-Hatton, 2004) are recommended for use with adolescents (Cuijpers, Sijbrandij, Koole, Huibers, Berking, & Andersson, 2014; Dugas, Gosselin, & Ladouceur, 2001; Leahy, Holland, & McGinn, 2012; van der Heiden et al., 2012).

The PSWQ is a 16-item self-report questionnaire assessing overall levels of worry as well as problematic coping styles (i.e., self-blame, dread, wishful thinking, and avoidance). Although the PSWQ has been adapted for children, the PSWQ can be used to assess worry in adolescents ages 12-18 (Robichaud & Dugas, 2006). The PSWQ has demonstrated high internal consistency in clinical samples (r = .88 – .95) as well as good test-retest reliability (r = .74 – .92) among college students (Startup & Erickson, 2006). Total scores range between 16 and 80 and cut-off scores indicating chronic worry associated with GAD can range between 45 and 53 (as cited in Turk & Wolanin, 2006). Noah's total score of 72 indicates clinical significance. He endorsed items related to worrying about many situations, worrying all his life, not being able to stop worrying, and worrying about everything else he has to do once he completes one task. Due to Noah's high levels of worry, the clinician further assessed the nature of Noah's worrisome thoughts.

The IUS is a 27-item measure reflecting five subscales associated with the person's ability to tolerate uncertainty in which total scores range between 27 and 135. Scores above 87 indicate intolerance of uncertainty associated with individuals with GAD. The five subscales include: 1) *Uncertainty is Unacceptable and Should be Avoided*, 2) *Uncertainty Reflects Badly on a Person*, 3) *Frustration with Uncertainty*, 4) *Uncertainty Causes Stress*, and 5) *Uncertainty Prevents Action* (Leahy, Holland, & McGinn, 2012). The IUS is a reliable and valid measure of intolerance of uncertainty associated with GAD among college students (as cited in Turk & Wolanin, 2006). An evaluation of symptoms sensitivity on the intolerance of uncertainty scale for children (IUSC) ages 7 – 17 illustrated insignificant differences from the IUS (Comer et al., 2009). Therefore, the adult version of the IUS is most appropriate to measure Noah's level of intolerance of uncertainty especially when considering Noah's age and maturity level.

Noah's high score on the IUS (109) was due to endorsing *Uncertainty Causes Stress*, *Uncertainty Reflects Badly on a Person*, and *Frustration with Uncertainty* scales (Leahy, Holland, & McGinn, 2012). Examples from these scales include "Uncertainty makes me uneasy, anxious or stressed," "The ambiguities in life stress me," "One should always look ahead as to avoid surprises," "Unlike me, others always seem to know where they are going with their lives," "I hate being taken by surprise," and "I can't stand being undecided about my future." In addition, Noah's high scores on the IUS indicated that he tends to worry about the future. Therefore, the clinician targeted Noah's intolerance of uncertainty in his treatment plan.

Finally, the MCQ-30 was designed to elucidate positive and negative beliefs about worry, the need to control thoughts, how self-aware a person is about having worrisome thoughts, and judgments of effectiveness of worrisome thoughts. The MCQ-30 demonstrates good internal consistency (r = .70 – .93), as well as correlations for construct validity between the

uncontrollability subscale and measure of pathology worry within the PSWQ (r = .73) and trait-anxiety (r = .69) (Wells, 2006). There are five domains associated with the MCQ-30: 1) *Positive Worry Beliefs*, 2) *Uncontrollability and Danger: Negative Beliefs*, 3) *Cognitive Confidence*, 4) *Need for Control*, and 5) *Cognitive Self-Consciousness*. Noah's highest rated scores on the MCQ-30 were within the following domains: *Uncontrollability and Danger: Negative Beliefs* (total = 21), *Need for Control* (total = 20), and *Cognitive Self-Consciousness* (total = 20). Although there are no established normative data to determine clinical significance, high scores within one of five domains can elucidate cognitive beliefs about worry and how the worry is perpetuated within the person from a cognitive perspective (Leahy, Holland, & McGinn, 2012). Noah's highest rated factor is consistent with the negative beliefs about future events which is consistent with individuals with GAD.

To assess depressive symptoms, the Child Depression Inventory is empirically supported for youth ages 7 to 17 (CDI 2; Kovacs, 2011) and includes the Emotional Problems and Functional Problems scales. The *Emotional Problems* scales assess *Negative Mood, Negative Self-Esteem,* and *Physical Symptoms* that indicate levels of sadness and guilt, significant changes in personal interests, sleep, and appetite. The subscales on *Functional Problems* assess *Interpersonal Problem* and *Ineffectiveness* reflected by dysfunctions in social relationships, school performance (i.e., grades), and troubles in interpersonal relationships resulting from irritability (Bae, 2012). The correlation coefficients for all scales were statistically significant (p < .01) for internal consistency. The CDI 2 indicates good internal consistency (α = .67 – .91) as well as good test-retest reliability up to four weeks. The CDI 2 also showed strong convergent validity when compared to the Beck Depression Inventory-Youth version (BDI-Y) as well as significant discriminative validity (Bae, 2012). For each scale and subscale, a t-score greater than

65 is considered clinically significant. Noah's overall score on the CDI 2 was *very elevated*. Within the subscales, Noah's score for *Negative Self-Esteem* and *Functional Problems* were *very elevated*. *Functional Problems* scale was elevated due to Noah's rating of *Ineffectiveness* and *Interpersonal Problems*. However, Noah's score on *Negative Mood/Physical Symptoms* was only *high average*. These scores were consistent with Noah's verbal self-report in that he did not endorse depressed mood or lack of pleasure in pleasurable activities. However, the elevated scores on the CDI 2 indicate current distress and misery associated with anxiety and insufficient coping mechanisms.

The SCARED-R, PSWQ, IUS, MCQ-30, and CDI 2 were administered at baseline and again at eight-weeks. Noah's score on the SCARED-R declined 34 points indicating that Noah experienced a decrease in expecting worrisome or intrusive thoughts. In particular, Noah's unwanted thoughts and fear of somatic sensations associated with anxiety decreased. Noah's score on the PSWQ dropped 24 points indicating a general decline in worry. In addition, a decrease of 45 points on the IUS total score indicates an increased ability to tolerate anxiety associated with uncertainty and ability to make decisions within vague situations. Within the MCQ-30, the total score for *Uncontrollability and danger: Negative beliefs* decreased by 11 points, the Need for Control total decreased by seven points, and the *Cognitive Self-Consciousness* total decreased by three points. The CDI 2 was within *average or lower* range (down from a *very elevated*). Below is a graph depicting baseline (diamond) and eight-week (square) assessment outcomes:

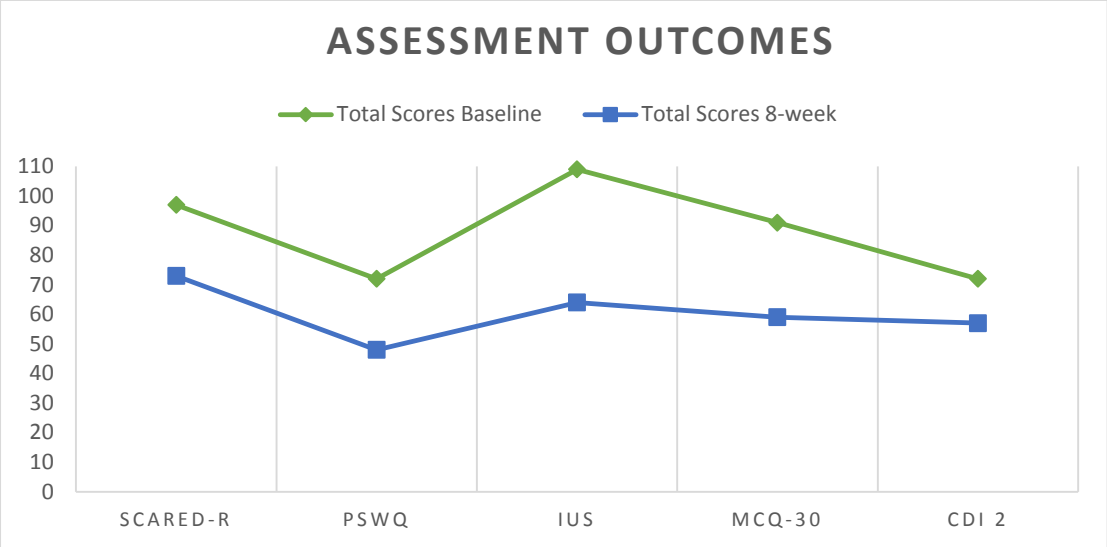


Figure 2.

DSM Diagnosis and Differential Diagnosis

The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; *DSM–5*; APA, 2013) describes Generalized Anxiety Disorder (GAD) as "excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance)" (p. 222). When diagnosing youth with GAD, one consideration is whether the frequency, intensity, or duration of the worry is greater than the worries of same-aged peers facing the same situation (APA, 2013; Craske & Barlow, 2006). For example, when faced with the completion of an upcoming homework assignment, Noah stated worrying about receiving a failing grade, which could lead to a lowered GPA and disqualification to an elite school. Noah reported continuing with the chain of thoughts that lead him to believe that the possibility of a failing grade will result in working a minimum-wage job. Excessive worry tends to overwhelm individuals with GAD, often leading to adopting a negative or pessimistic outlook on life. Similarly, the individual may also tend to worry about several topics at any particular time. In Noah's case, he reported often worrying about world events, his and his mother's health, his job performance, and his school success. Furthermore,

individuals with chronic worry report physical symptoms such as “restlessness or feeling keyed up or on edge, being easily fatigued, difficulty concentrating or mind going blank, irritability, muscle tension, and sleep disturbances (i.e., difficulty falling asleep, staying asleep, restless and unsatisfying sleep)” (APA, 2013, p. 222). Another indication of excessive worry is that when engaging in worry, it is difficult to stop worrying. If one does not worry in response to a triggering event, the person may believe that something horrible will happen. One more example of excessive worry is running away from the situation instead of confronting it (Craske & Barlow, 2006; APA, 2013).

Based on the length of time Noah reported excessive anxiety and worry about a number of areas, he endorsed symptoms associated with generalized anxiety. In addition, Noah stated experiencing symptoms associated with panic attacks lasting 15-20 minutes, at least four times per week, in which he experiences sweating, shaking, breathlessness, a feeling of choking, upset stomach, hot flashes, dizziness and feelings of “going crazy” as well as feelings of doing something he cannot control. Therefore, GAD with panic attack specifier may be most appropriate to describe Noah's current difficulties with panic attacks. If Noah had expressed worry about having panic attacks, the clinician would have further considered panic disorder. According to the diagnostic criteria listed in the DSM-5, Noah meets at least three of six physical or cognitive symptoms for GAD (i.e., restlessness, feeling as though the mind goes blank, increased muscle aches, and difficulty sleeping). He has also experienced excessive worry for at least six months, spends a great deal of time worrying about a number of areas, seeks reassurances from others, and finds it difficult to control his worry. Additionally, he reports that the worry has interfered with his overall ability to perform day-to-day activities within the home, school, and community. Furthermore, Noah’s symptoms are not better explained by another

mental disorder, physical illness, or the use of chemical substances (APA, 2013). Consistent with the development and course of GAD among adolescents, Noah's worrying pertains to the quality of his performance in school, excessive concerns about punctuality (i.e., being late for work), and doubts about his competence. Noah also exhibits a perfectionistic attitude in which he frequently expresses dissatisfaction with any performance that is below his level of perfection (APA, 2013).

Noah also reported symptoms indicative of social anxiety disorder (SAD) and panic disorder; however, these symptoms were insufficient for comorbid diagnoses (APA, 2013). For example, Noah stated he was afraid to leave his house for fear of judgment from others. However, the main fear catalyzing the social anxiety was associated with a pessimistic outlook and fear of uncertainty rather than consistent fear of scrutiny from others that is associated with SAD. Therefore, a diagnosis of SAD was not appropriate. In addition, Noah reported having four panic attacks per week and a fear of losing control or going crazy. However, Noah failed to report a consistent concern about specifically having panic attacks and did not exhibit significant changes in behavior (i.e., avoiding exercises or activities that would trigger physiological sensations associated with panic attacks). Therefore, a panic attack specifier was included with the diagnoses of GAD instead of including comorbid panic disorder.

Noah's total scores on the CDI 2 indicated the presence of some depressive symptoms and, given his history of suicide attempts, these symptoms may have resulted from failed attempts to cope with chronic anxiety symptoms associated with GAD. The depressive symptoms accompanying anxiety associated with of GAD can be explained by Watson's (2005) quantitative structural model. The model identifies the Anxious-Misery factor that explains how the general distress/negative affect (i.e., fear, anger, sadness, guilt, and disgust) dimension

underlies both GAD and depressive symptoms. The interaction of general distress and negative affectivity is exemplified when a person admits to not only sadness but also anger, guilt, and fear. The negative affect is associated with both anxious and depressive symptoms that evoke subjective distress and dissatisfaction. Thus, Noah had adopted a pessimistic outlook that exacerbated his depressive symptoms. This model accounts for Noah's elevated CDI 2 scores; however, Noah's symptoms were insufficient to warrant a diagnosis of Major Depressive Disorder (MDD). Noah did not endorse depressed mood or lack of pleasure as well as physical (i.e., changes in weight, sleep or psychomotor agitation/retardation, and fatigue) or cognitive symptoms (i.e., difficulty concentrating) associated with MDD. He also did not express feelings of worthlessness, recurrent thoughts of death, or suicidal ideation (APA, 2013).

Case Conceptualization of Intolerance of Uncertainty Cognitive Model of GAD

Noah's symptoms, life experiences, and responses to worry seem to coincide with the IUM of GAD. As previously discussed, the model involves four interacting factors including intolerance of uncertainty, positive beliefs about worry, cognitive avoidance, and negative problem orientation. The cycle begins with an internal or external triggering event that catalyzes a pessimistic progression of "what if" questions (i.e., worrisome thoughts) that trigger physiological (i.e., muscle tension) and emotional (i.e., irritability) manifestations of anxiety. This pattern leads to an intolerance of uncertainty in which the person may believe that uncertainty causes stress and frustration, reflects poorly on a person, prevents the person from taking action, and should be avoided.

In Noah's life, the IUM is manifested when he entertained "what if" questions after experiencing anxiety. For example, Noah reported that neck muscle tension and restlessness while watching television triggered his anxiety. During this time, Noah recalled asking, "Why

am I upset? There must be something I'm forgetting or something wrong." Noah misperceived his somatic anxiety as threatening because he could not determine the source of his anxiety. In addition, individuals with GAD require greater evidence when they experience higher ambiguity. For instance, Noah proceeded through a "mental checklist of "what if" questions relating to completing work and school assignments, chores, and other various responsibilities. However, after completing the "checklist" in his head, Noah also recalled having difficulty concentrating on watching television and becoming irritated.

Furthermore, the second element of the model includes positive beliefs about worry in that worrying keeps the person organized, helps with completing tasks, and helps with problem-solving by thinking about all possible scenarios associated with a potential problem. Some individuals adopting positive beliefs about the usefulness of their worry believe worrying shows that one is a responsible and caring person. As individuals with GAD are so accustomed to chronic worry, some may tend to worry something is inherently wrong with them if they are not currently engaging in worry. Noah engaged in positive beliefs about his worry by stating that his worry helps him to complete schoolwork early to avoid feeling anxious about submitting late assignments. Noah recalled how worrying helps him get things sorted or organized. Noah stated worrying about his overall daily productivity and expressed concern if he did not worry about his productivity on a daily basis.

Cognitive avoidance is the third element of the IUM that involves both implicit and explicit aspects of avoidance consistent with Roemer and Orsillo's (2002) experiential avoidance model of GAD as well as Borkovec and colleagues (2004) avoidance model of GAD in which emotional reactions associated with worry are avoided via thought replacement, distraction, and thought suppression. Mental images play a role in generating fear responses (i.e., unpleasant

emotions and physiological responses) when exposed to a triggering event (Freeston et al., 1994). Therefore, worry serves to suppress the mental images that elicit fear. Implicit avoidance occurs when a person engages in worry in order to avoid unpleasant affect associated with the mental images or as a means of distraction from thinking about more distressing issues. Explicit cognitive avoidance occurs when a person attempts to suppress worrisome thoughts, substitutes neutral thoughts for worries, uses distractions as a way to interrupt worry, and avoids situations that can lead to worry. Noah also engaged in cognitive avoidance of worry through prescription anti-anxiety medication, thought suppression, and distraction. For example, Noah reported having intrusive thoughts at night when trying to fall asleep that related to unfinished tasks despite the reassurance of already completing them. Noah admitted to taking Geoden before going to sleep in order to "turn off" his brain. However, he stated he still engaged in "what if" questions about making mistakes in his daily responsibilities and then criticizing decisions made. Noah recalled suppressing his worry by attempting to run through "checklists" in his head for reassurance. However, he reported playing video games when attempts at suppressing his worry fail. Noah also admitted to using walking as a means of distraction from his worries. Noah also engages in explicit avoidance by procrastinating on college applications and avoiding interactions with teachers he intended to ask for recommendation letters for college placement. Noah reported fear of being denied entrance into a favorable school and stated he is "not good enough" for elite colleges. Noah recalled engaging in worrisome thoughts about current school assignments and rationalized that if he fails to pass his current subjects and graduate high school, his college application process is irrelevant.

Negative problem-orientation is the final factor associated with the IUM. A negative problem-orientation involves a pessimistic perception of the problem as well as the person's

inability to solve the problem. The person may catastrophize the problem and expect that negative outcomes will occur (Behar et al., 2009; Dugas & Ladouceur, 2000). Noah engaged in negative problem orientation by perceiving problems as threats, becoming easily frustrated when faced with problems, and being pessimistic about outcomes. For example, Noah recalled experiencing frustration and pessimism when a customer asked to complain to the manager about Noah's customer service. Noah's pessimistic outlook was evidenced by assuming he would be fired because he did not serve the customer "perfectly." Noah recalled worrying he would not be able to ameliorate the customer and boss' demands and feared that his boss would yell at him and fire him due to the customer's complaint. While some individuals may cope with the problem by examining the evidence for the complaint and then work to rectify the complaint, Noah's response indicates doubt in his ability to resolve the problem. Instead, Noah readily resorted to "worst case scenarios," which is a reflection of a pessimistic outlook to the problem.

Treatment Goals and Plan

Individual cognitive-behavioral therapy associated with the IUM was recommended to manage the anxiety contributing to panic attacks and improve his ability to cope with worry. In particular, the prescribed treatment goal was, "Noah will develop healthy strategies for dealing with anxiety and stress." Consistent with the IUM, there are four main stages of treatment after psychoeducation about the cycle of worry: 1) worry awareness training, 2) coping with uncertainty, 3) re-evaluating the usefulness of worry, and 4) improving problem orientation and problem-solving ability (Dugas & Ladouceur, 2000; Leahy, Holland, & McGinn, 2012; Robichaud & Dugas, 2006). The general plan of treatment for GAD recommended by Leahy and colleagues (2012) was as follows:

- Assessment
    - Test and clinical interviewing of presenting problems

        - Worry evaluations (PSWQ, MCQ-30, IUS)
        - Standard intake interview/ADIS-IV
    - Identify specific content of worries as well as metacognitive factors
    - Consideration of medication
- Socialization to treatment (IUM treatment model)
    - Psychoeducation about GAD and cognitive-behavioral therapy
    - Indicate how GAD involves motor tension and arousal
    - Indicate how worries are central to GAD and worries are reinforced by nonoccurrence
    - Develop short-term and long-term goals
- Relaxation training (PMR and relaxation breathing)
- Mindfulness training
    - Identify triggers for anxiety and avoidance
    - Introduce Patient's Worry Log
- Assessing and confronting avoidance: Exposure
- Monitoring worries and assigning "worry time"
- Cognitive evaluation and treatment of worrying
    - Step 1: Distinguishing between productive and unproductive worry
    - Step 2: Acceptance and Commitment
        - Advantages and disadvantages of accepting limitations and uncertainty
        - Current examples of acceptance
    - Step 3: Challenging worried automatic thoughts (e.g., fortune telling, catastrophizing, discounting positives, & personalizing) and maladaptive assumptions (e.g., cost-benefit analysis)
    - Step 4: Examining core beliefs about self and others
        - Downward-arrow technique on worries
        - Ultimate outcome or fear the client anticipates
        - Distinguishing between possible and probable outcomes
        - Examples worries for probability versus plausibility
        - Identify and modify emotional schemas (beliefs about emotions as dangerous, out of control, incomprehensible, shameful, etc.)
    - Step 5: Examining fear of failure
        - Identify beliefs about failure and introduce rational responding to fear of failure
    - Step 6: Using emotions rather than worrying about them
        - Practice self-validation for emotional distress
    - Step 7: Putting time on the client's side
        - Putting time in perspective by practicing living in the moment, mindfulness, stretching time, looming-vulnerability interventions (slowing down image of impending threat and identifying intervening or contingent events)
- Interpersonal interventions
    - Assertion training, communication training, conflict resolution, and couple therapy
- Problem-solving training and apply to situational sources of stress
- Phasing out treatment

Course of Treatment Accompanying Treatment Plan

Consistent with the IUM for treating GAD in adolescents, Noah's treatment consisted of assessment, socialization to treatment via psychoeducation about worry, relaxation training, monitoring worries, and cognitive evaluation and restructuring of worry. Although the therapist did not explicitly introduce the concept of mindfulness, she incorporated worry awareness training by assigning weekly worry monitoring exercises. In addition, the therapist collaborated with Noah to identify safety behaviors and instructed Noah to not engage in safety behaviors or seek reassurance from his mother. During the course of treatment, Noah did not present with any depressive symptoms, suicidal ideation, or non-suicidal self-injurious behaviors. The first session consisted of a two-hour assessment and a semi-structured interview discussing the presenting problem, a history of symptoms, and overall functioning. The therapist asked Noah questions on the ADIS-IV pertaining to Social Anxiety Disorder, Panic Disorder, panic attack symptoms, Agoraphobia, and Generalized Anxiety Disorder. Noah was also given the PSWQ, the MCQ-30, IUS, and the CDI 2 as baseline measures and again at eight weeks of treatment.

During the course of treatment, Noah was given psychoeducation about the three components of anxiety (i.e., thoughts, physiological responses, and behavior), how anxiety becomes distressing (i.e., genetic and specific vulnerabilities), and how it is perpetuated (i.e., safety behaviors, reassurances, and avoidance). Noah agreed with the therapist's logic and provided good examples of how anxiety manifests in his life. For example, Noah recalled experiencing anxiety when thinking about being late for work. Noah identified his automatic thought as "it feels like a sin to be late" and discussed experiencing guilt (emotion) and rushing to work to ensure he is not late for work (behavior). The therapist also provided psychoeducation about Noah's anxious symptoms, the nature and cycle of worry in Noah's life, and introduced

the specific interventions proposed in the IUM of GAD (Koerner & Dugas, 2006; Leahy, Holland, & McGinn, 2012).

Another aspect treatment of GAD included relaxation training that fosters coping skills when developing tolerance of uncertainty and confronting cognitive avoidance (Roemer & Orsillo, 2002). The therapist provided handouts and a guided compact disk on deep breathing and progressive muscle relaxation (PMR) techniques, practiced the techniques in-session, and instructed Noah to practice the techniques throughout the course of treatment. Noah reported regularly practicing the PMR techniques and quickly adapted the techniques to function within his daily life. For example, Noah stated he frequently curled his toes and tensed his chest as "quick" means to alleviate stress throughout the day.

Another focus of treatment included Noah routinely monitoring his worries via weekly homework assignments. Noah recorded his worries three times per day by completing The Patient's Worry Log (Leahy, Holland, & McGinn, 2012). Noah was instructed to record content for each worry area including factors in the situation that elicit worry, prediction of what will happen and when, anxiety rating for each prediction (0–10), rating of confidence in accuracy of prediction (0–10), actual outcome (i.e. exactly what happened?), and anxiety rating at outcome (0–10). For example, Noah recorded experiencing anxiety about an upcoming four-page paper in which he made predictions that he would not be able to complete it on time due to time constraints associated with his work, school, and home responsibilities. He provided an anxiety rating of seven for the prediction and rated the confidence in the accuracy of his prediction as five. He completed the assignment three days before the due date; however, his anxiety rating at the outcome was five because he then began to worry his teacher would grade his assignment harshly. Furthermore, within his daily monitoring, the therapist instructed Noah to identify and

label worrisome thoughts as, “I am having an anxious thought” as opposed to thinking, “I am anxious” to help Noah create an emotional distance and objectively identify the core fear underlying the worry (Craske & Barlow, 2006; Robichaud & Dugas, 2006). Although Noah did not consistently bring completed logs, he was able to easily discuss specific incidents of worry with the therapist. To aid in maintaining motivation to continue with cognitive restructuring exercises, the therapist discussed the costs and benefits of tolerating uncertainty and explained how engaging in “what if” questioning provided the fuel for worry (Leahy, Holland, & McGinn, 2012).

The therapist also assigned weekly “worry time” in that Noah was required to worry for 20 minutes per day in between school and work and to refrain from worrying until the designated time. This method was introduced as a method to help Noah realize his worries seem inconsequential by the time he addresses them and will ultimately decrease his sense of urgency to immediately respond in a perfectionistic manner to his worries (Leahy, Holland, & McGinnis, 2012). Noah responded to the prescribed worry time as “silly and unprofitable” and admitted to not engaging in the prescribed worry time. The therapist reinforced the concept of completing the assignment by explaining how worry time reduces time spent worrying and provides evidence that Noah’s worry is manageable.

Lastly, building on previously learned concepts presented in treatment, Noah received education about and practiced cognitive restructuring of worry via weekly exercises via self-monitoring. The therapist introduced the Socratic questions worksheet, as part of Treatment Plans and Interventions for Depression and Anxiety Disorders (Leahy, Holland, & McGinn, 2012). The therapist introduced the concept of cognitive restructuring strategies by eliciting an example of an upcoming anxiety-provoking situation for Noah such as missing a day of school.

The therapist collaborated with Noah in Socratic questioning to explore predictions, likelihood ratings, best/worst outcome predictions, examining evidence for and against his worrisome predictions, and cost/benefits of worrying. On the worksheet, Noah provided lower probability ratings of worse case scenarios such as providing a 25% likelihood rating of his worst fear actually happening.

On the Socratic questions worksheet, Noah indicated statements such as, "I will get kicked out of school or fail government because I missed school due to being sick." Noah utilized several cognitive restructuring strategies. The therapist introduced the concept of overestimating the likelihood of the worrisome thought occurring. The therapist oriented Noah to the tendency of "catastrophizing" which is viewing the potential negative consequences of a situation as being the worst-case scenario and unmanageable. The therapist further explained the likelihood of Noah coping or managing the consequences should the feared event occur. Noah agreed and collaborated with the therapist in challenging the tendency to overestimate the risk of worried thoughts.

Another component of cognitive evaluation and treatment of worrying involved distinguishing between productive and unproductive worry (Leahy, Holland, & McGinn, 2012). The therapist introduced the strategy for identifying whether a worry is productive (helpful) or unproductive by eliciting examples of a worrisome thought from the client and systematically questioning the thoughts in order to differentiate between the two types of worry. Noah was able to engage with the therapist and agreed with her logic. Noah reported that utilizing the "checklist" of differentiating between productive and unproductive worry as helpful in managing his worrisome thoughts throughout the course of treatment.

Furthermore, the therapist coached Noah to cease safety behaviors and confront cognitive avoidance as they presented throughout the course of treatment. For example, Noah recalled seeking reassurances from his mother about having a place to live while attending college. The therapist instructed Noah's mother to only provide reassurance twice; after which, his mother was instructed not to respond to Noah's questions. Noah reported his mother was compliant with the therapist's instructions. Noah also remained accountable to his safety behaviors by discussing them with the therapist and amenable to the therapist's instructions to stop engaging in all safety behaviors.

Noah presented for eight sessions and only completed portions of the recommended treatment. Noah received psychoeducation about the cycle of worry, worry awareness-training, strategies for coping with uncertainty, and tools for re-evaluating the usefulness of worry. Noah did not present for two scheduled appointments in a two-month period, which placed him on a waiting list for therapy per the mental health agency's policy. Noah did not return for therapy.

Evaluation of Treatment Outcomes and Disposition

Noah reported that the combination of psychoeducation about the cycle of worry with monitoring worrisome thoughts as helpful for identifying how worrisome thoughts interfered with his daily functioning. Noah stated that knowing about the interactions of the three components of anxiety was helpful in understanding how he developed intolerance of uncertainty and how his thoughts, feelings, and behaviors within vague situations perpetuate his positive beliefs about worry and tendency to engage in negative problem-orientation. In particular, Noah admitted utilizing the checklist differentiating between productive and unproductive worry as helpful in managing his worrisome thoughts. As a result, Noah reported having an increased ability to disengage in the cycle of worry.

One interesting aspect of treatment was Noah's enthusiasm for and willingness to adjust therapeutic strategies to suit his personality. For example, Noah asked to incorporate humor with the Socratic questions to challenge his worrisome thoughts. During one session, Noah described experiencing anxiety while driving when he noticed a police patrol car behind him. He stated his initial thought was, "Oh no! I am going to get pulled over and receive a ticket!" Noah reported he utilized humor with Socratic questioning by asking, "Do you really think this officer is going to pull you over for driving like a grandma?" Noah reported experiencing a decrease in anxiety after laughing about the incident.

Assessment measures given during his last session corroborated Noah's report of the usefulness of treatment strategies as indicated by a decrease in anxiety symptoms relating to worry, intolerance of uncertainty, and thoughts about worry. Noah seemed to respond most positively to Socratic questioning of his worrisome thoughts as evidenced by adapting the cognitive challenging questions to match the sarcastically humorous quality of his personality. This strategy assisted Noah's development of tolerating uncertainty and re-evaluating the usefulness of his worry.

In addition, Noah received PMR training and used it daily to alleviate muscle tension. The usefulness of PMR was evidenced by obtaining weekly ratings of relaxation experienced at the end of the exercises and concentration during the exercise. Noah reported rate of relaxation and concentration on a 100-point scale in which zero was *none* and 100 was *excellent* on a weekly basis. Noah initially reported scores in the low 50s for relaxation and concentration and reported scores in the mid-90s after eight sessions. Due to Noah's self-report and increased scores of weekly ratings of relaxation and concentration, PMR was an effective tool for alleviating muscle tension associated with GAD.

Given the ease and speed of treatment progression, Noah's prognosis was good as evidenced by regularly completing homework assignments, collaborating with the therapist on a weekly basis, and taking initiatives to adopt treatment tools and incorporating them to fit his needs. Furthermore, Noah's positive subjective report and general improved presentation provided further evidence of the potential for treatment progress. Noah was considered high functioning, introspective, and motivated to complete the treatment protocol as he is embarking on pursuing a college education at Harvard.

Evaluating Strengths and Identifying Areas for Growth

The main themes of the session include relaxation training, exploring beliefs and assumptions about worrisome thoughts including the role and function of worry, and introducing the concept of determining an unproductive worrisome thought. The main interventions utilized by the therapist were amplified reflections to elucidate the extreme dichotomous thinking and Socratic-style questions to cognitively challenge the perfectionistic and dichotomous thinking exhibited by Noah during the session. The overall goal of the session was to elucidate Noah's perfectionistic attitude towards being on time and being identified as a "cool" teacher, as well as dichotomous thinking about his grades. The therapist's goal was to discuss and understand the origins of the perfectionistic attitude and then to see how that rigid mentality served Noah in his life. At times, there were many opportunities to cognitively challenge the rigid, perfectionistic attitude and Noah did acknowledge the rigidity of this thinking; however, acknowledgement was insufficient to "control for the worry." It was apparent that Noah greatly desired to control his worrisome thoughts.

Noah was high functioning and strongly motivated to make treatment gains. Therefore, the therapist found great success in establishing therapeutic alliance reinforcing expectations, and

facilitating adherence to treatment. The therapist fostered a stronger therapeutic alliance and supported Noah's involvement in treatment by allowing him to tailor the cognitive restructuring homework exercise to his personality. Therapeutic expectation was established by routinely monitoring treatment progress through the evaluation of homework assignments. Noah indicated that routine review of assessment results kept him motivated to continue with treatment. For instance, as Noah's anxiety ratings decreased, his motivation to comply with treatment increased. Noah exhibited treatment adherence by routinely completing PMR exercises and engaging in cognitive restructuring exercises. Despite the strength of therapeutic practices and treatment gains, there are several areas for improvement involving missed questions and therapeutic style.

Reflecting on portions of the transcript, there were a few missed opportunities for comments and questions. Areas for improvement include exploring the effects of Noah's depressive symptoms on his pessimistic outlook and confronting resistance to exposure therapy. Noah mentioned not celebrating getting "As" or celebrating much in general. The therapist could have applied some of the same hypothetical reasoning used for challenging anxious thoughts such as, "What is the advantage of celebrating less than perfect performance? What if you replaced 'perfection-mindset' with progress, growth, and learning? What would performing lower than your expectations look like? How does having a perfectionistic attitude influence your overall outlook of how you measure your success?" The goal with this line of questioning would be to challenge his perfectionistic attitude while elucidating how this attitude may contribute to his pessimistic outlook.

Another area for improvement would be confronting Noah's resistance when the therapist introduced the concept of imaginal and in vivo exposure exercises. When discussing "thought flooding" associated with imaginal exposure, Noah presented some mild "resistance" in

entertaining the thought of "making a mistake." He anxiously responded to the therapist, "That is a terrible idea! Why would I intentionally do that?" During the session, the therapist did not press the issue further and simply instructed Noah to entertain the thought of pursuing something of that nature in the future. Although the therapist re-addressed the resistance by facilitating exposures in future sessions, it would have been better for the therapist to explore Noah's resistance in that particular session. For example, the therapist could have asked, "What is the worst and best that could happen in making a mistake?" The therapist could help Noah develop a balanced conclusion by continually looking for evidence supporting and challenging possible outcomes. The therapist could have incorporated an in-session exercise that would require Noah to intentionally make a mistake on a homework assignment and presenting the homework to various clinicians who would be instructed to provide a low or failing grade. For homework, Noah would then submit the homework assignment, without having a real impact on his grade. This practice might have fostered greater adherence to the treatment model and improved the effectiveness of therapy.

Another missed opportunity to challenge Noah's beliefs occurred when discussing Noah's perfectionistic attitude towards being the "cool" teacher and his judgment of other "cool" teachers. Perhaps the therapist could have asked, "So, if I understand correctly, you said that the best teachers demonstrate they are human, but you being human is somehow not enough? If there are different standards of being a good teacher, then why are standards for you different from expectations for others? If the tables were turned, what definition do you think the 'imperfect' teachers would provide for being a 'cool' teacher?" These questions may have made a greater impact on challenging Noah's perfectionistic attitude while attempting to reconcile the disparity between his expectations and the expectations he holds of others.

Another opportunity to challenge Noah's perfectionistic attitude occurred when he expressed concern that the therapist would think poorly of him for forgetting his homework sheets. Although the therapist provided corrective feedback by asserting she did not think he was inadequate for forgetting his homework, it would have been a good moment to cognitively challenge the maladaptive intermediate belief that if he makes a mistake, others will think he is inadequate. The therapist could have used the downward arrow technique to ask what he thought would happen and what he perceives about his character when forgetting homework sheets. The therapist could further facilitate a discussion of what it meant to Noah that his fear of being judged by the therapist did not happen as he feared. This method would challenge Noah's propensity to worry about the feared outcome and his overall pessimistic outlook.

In addition, the therapist tended to endorse habits that could have influenced treatment efficacy. Minor mistakes made during the session involved mechanics associated with the communication process such as the therapist's tendency to use the word "feel" instead of "think," asking too many questions at once, not asking for specific examples of experienced emotions, and asking for details about Noah's life occurring over 10 years ago. Using the word "think" would have been more consistent with the cognitive restructuring component and easier to objectively report rather than attempting to elicit a response using the word "feel." Asking too many questions at once convolutes Noah's line of thinking and causes confusion when Noah does provide a response. Asking for concrete evidence or examples of Noah's emotions also maintains the objective structure consistent with the treatment model. Furthermore, asking about specific examples of experiences occurring over 10 years ago can elicit possible subjective interpretations of those experiences. Overall, the therapist was able to form a good therapeutic relationship with Noah that fostered his receptiveness to treatment methods proposed. Noah

showed positive progress in managing his worrisome thoughts as evidenced by his assessments and self-report.

If Noah had continued with treatment, the therapist planned to opportunity to create a hierarchy of intolerance and begin imaginal and in vivo behavioral experiments as methods for increasing tolerance of uncertainty and restructuring his negative problem-orientation. In particular, the therapist intended to use "thought flooding" as in vivo exposures in session. Examples of possible exercises include Noah imagining making mistakes and then progressing to making intentional mistakes within his day-to-day routine. In addition, the therapist planned to improve Noah's problem-orientation skills by educating him about the problem-solving model and practicing problem-solving exercises on a weekly basis. Finally, the therapist planned to end treatment by discussing relapse prevention strategies such as predicting potential obstacles that could exacerbate Noah's anxiety symptoms and using problem-solving strategies to manage these symptoms.

Conclusion

Noah presented for individual therapy due to chronic anxiety and panic symptoms experienced over the course of his life. Although psychopharmacological treatment reduced the severity of his symptoms, individual psychotherapy was needed to teach psychosocial strategies to manage anxiety associated with interpersonal conflicts with his biological father, work demands, and school stressors. Initial assessments indicated that Noah symptoms are consistent with GAD with panic disorder specifier. Treatment targeted Noah's intolerance of uncertainty by educating him about the cycle of worry, differentiating between productive and unproductive worry, and learning to cognitively challenge and restructure his worrisome thoughts. Noah also utilized PMR to manage his somatic manifestations of daily worry. The decrease in anxious

symptoms indicated that treatment strategies utilized in therapy were helpful for Noah in managing his worrisome thoughts. Noah's decreased scores on the assessments (i.e., SCARED-R, PSWQ, IUS, and MCQ-30) also concur an overall decrease in anxiety symptoms within eight weeks of treatment. Although he did not complete all treatment components, the therapist deemed Noah's response to therapy techniques as successful for the treatment of GAD.

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Transcript: 11/17/15 Session 5

T: How have things been since last week? (Check-in for updates)

C: I only completed 3 out of 5 PMR exercises but that is more than 50%.

T: That is good! Very good. I am glad you brought that up. My plan for today was to bump you down to 8 muscle groups today. As you remember, the whole concept of PMR is to train yourself to understand how your body feels when it is anxious and when it is relaxed. How do you feel you are able to differentiate between the two states? (Validation for completing any portion of homework, while providing socialization to treatment.)

C: Better.

T: How so?

C: I can identify the tension and let it go.

T: What are some things you do in particular you to let it go? (Inquiry for examples to ensure conceptual understanding.)

C: Well, so, I don't just lay down somewhere and do the PMR but what I can do is tighten my feet up and let it go and that helps relieve some anxiety.

T: Wonderful. You are right on track with understanding the whole concept with PMR. I will assign the eight muscle groups for you to begin practicing. I will go through each muscle group with you real quick (presented client with PMR practice sheet with eight muscle groups written on bottom of paper). You will tense the entire arm by placing your arms in a 90-degree angle and tensing both lower and upper. You will tense your entire leg by extending it outward and flexing your toes upward. Stomach is the same. With the chest, you hold your breath (same as before). With the shoulders, imagine you are a puppet on a string and a puppeteer is pulling your shoulders up on a string. The back of the neck is the same as before. The face is simply squinting your eyes and the forehead is simply lifting your eyebrows. After a couple of weeks of practicing this, we will progress down to only four groups. The more you practice, the easier you will be able to cue your body to calm when in stressful situations. (Psychoeducation for eight muscle-group PMR as part of relaxation training)

T: Last week, I gave you some measures and I wanted to discuss the difference in results from last week to the first time you took the measures. When I say "measures," what does that mean to you? (Reviewing treatment progress)

C: "Measures" as in how I am doing?

T: Yes!

C: Have other cases not been as successful?

T: No, it's nothing like that. In order to measure treatment progress, it is good to give measures at the beginning, during, and at the end of treatment in order to gauge how your symptoms change--what's getting better, what's getting worse, and to look at whether there is anything in

particular we need to focus on. This is why I want to discuss your measures from last week and give you more measures today that I think will help me understand specifically how your anxiety manifests within you and what your thoughts are in general pertaining to your anxiety. This (handed him the measure) is the first measure you took with the first therapist in which your score was a 97, which indicated high levels of anxiety as the cut off score for this measure is 56. Last week, I gave you this measure again and your score was a 63, which is significantly lower. What that score is telling me is that some of your anxiety symptoms are starting to decrease. After hearing your scores, what are your thoughts about this? (Discussing treatment outcome measures.)

C: Doesn't feel like that big of a decrease.

T: OK, so the numbers show a decrease but you don't feel it. What specifically do you feel hasn't changed? (Reflection and inquiry to determine client's cognitive evaluation of worry.)

C: Ok, well, I guess I'm not as anxious over the tiniest things; just like… unwarranted thoughts that pop up.

T: That is nice to hear because that is something that the SCARED-R measure indicated that you are not as afraid of having unwanted thoughts. What else have you noticed? (Providing support & validation utilizing treatment measures.)

C: I am less irritable.

T: What do you attribute to that? What do you think makes you less irritable? (Inquiry for cognitive evaluation.)

C: I don't know, I am not actually sure why I am less irritable.

T: Although I haven't had you officially monitor your worrisome thoughts every day, do you feel you are able to get a handle on your triggers? You know what specific things trigger your worrisome thoughts? (Fostering self-awareness of triggers of worrisome thoughts.)

C: Yes. Time constraints.

T: Any particular types of time constraints? (Further inquiry for worrisome thoughts.)

C: Being early. I get really worked up about being places. If I am not early, I freak out like I've done something wrong.

T: What would it mean to have done something wrong by being late? (Down-arrow technique to elicit intermediate beliefs.)

C: People will get upset but it doesn't happen. I just get worked up about it. (If-then assumption: "People will get upset if I do something wrong.")

T: Even though you've already cognitively challenged that thought in understanding people will probably not get upset with you but you still worry regardless. (Evaluating the role of worry)

C: Yes.

T: What function do you think the worry serves for you? (Inquiry for role/function of worry.)

C: Again, it is survival instincts but for me… well it keeps me on top of things. It keeps everything going for me but it does keep me busy. I don't know. I don't have a lot of free time because I am always working on something or working ahead. My worry dictates that.

T: What are some of the things that worry gets in the way of? What are some things you would like to do? (Inquiry for function of worry.)

C: Sleep.

T: Ok. Your worry gets in the way of sleep. What about other things? (Inquiry for more examples.)

C: I have not played X-box in a couple of months. That is something I do miss.

T: Ok. Let's go back to being late. What is so important about not being late? (Probing for specific example to discuss role of worry.)

C: Being on time. I am not sure why. At work, I get a 10-minute grace period so 10 minute after my shift starts, if I clock in during that time, I will not be penalized. But I feel like if it is 4:01, I feel like I've done something wrong. I've broken some kind of unspoken rule that I'm not supposed to be that late. I already know that I have until 4:10 and although I am literally at work on time, I am getting worked up about it.

T: How long has the time thing been an issue for you? (Inquiry for history of worry surrounding being on time.)

C: Since I was 10.

T: Ok, what do you think has started that? Going back to your childhood or age 10, what do you think started that whole thing? (Inquiry for events or experiences that could trigger worry.)

C: I have no idea.

T: Did you ever feel pressure demands from your parents that you had to do things perfectly or just right? (Inquiry for information about the development of core beliefs.)

C: My dad. (quickly interjects)

T: At our first meeting I remember you briefly hinting that previous conflict with your father greatly contributing to your mood and anxiety. Would you say that is true? (Inquiry for information about the development of core beliefs.)

C: Yes.

T: When we look at your anxiety and worrisome thoughts, we like to look at patterns over time of when they started and what triggered them. What are some things you've noticed in your childhood experiences? (Handed client a diagram of Leahy's Form 4.1: Generalized Anxiety Disorder: Antecedents and Underlying Processes form.)

C: Responsibility to worry (Client ignores portion of diagram of childhood experiences). I feel like if I am not worrying, I am not functioning correctly.

T: But if you are not worrying correctly, what's going to happen? (Inquiry to beliefs about worry.)

C: Nothing at all. Other than if I am not quite worried enough, I might put something off and that would hurt me in the long run.

T: Ok. So what happens if you do put something off? Have you done that in the past? Worried so much that you've procrastinated? (Inquiry for examples of avoidance from worry.)

C: yes.

T: Tell me about that. What happened? (Que for more information.)

C: I got a low grade in that class. I had to withdraw because it was too much work for a 6th grader.

T: So, it really was too much work. (Simple reflection.)

C: Everyone else in my class felt the same way (Noah laughs.)

T: OK, so you put it off and…wait that was in 6th grade. You haven't procrastinated since the 6th grade? (Amplified question to elucidate long-term effects or role of worry.)

C: No.

T: Ever? On anything since? (Amplified question.)

C: I can't.

T: What would it mean to procrastinate? (Exploring cognitions around procrastination.)

C: I would be a failure.

T: From what I've gathered from you, the word "perfectionistic" comes to mind. Does that ring true to you in your character? (Reflection of role of worry leading to perfectionistic attitude.)

C: Sure.

T: So, it sounds like you are either perfect or a failure. There's no gray area in between, right? (Amplified rigid dichotomous thinking associated with perfectionistic attitude towards worry.)

C: Yes… Well, there's "ok" but "ok" leans more on "failure".

T: Think about some people in your life that you would consider to be successful, perfect, role models. (Attempting to elicit examples to cognitively challenge perfectionistic attitude.)

C: I don't have role models. That was my dad but he screwed up so…

T: I am gathering that.

C: After that, I haven't had many role models.

T: Are there individuals who are not directly involved in your life that you look up to as role models or successful people? Such as entrepreneurs, businessmen, etc. (Attempting to elicit examples to cognitively challenge perfectionistic attitude.)

C: I've never really cared about materialistic things.

T: What makes a person successful? (Inquiry to define perfectionistic attitude.)

C: Making an impact on someone's life. I've always wanted to be a teacher.

T: Do you think teachers have to be perfect in order to have an impact on someone's life?

C: No. There are some who are not perfect, that swear like sailors, but that's one of the best things about them… because they are human.

T: Do you aspire to be a teacher yourself?

C: Yes.

T: So what is going to define you as being a perfect teacher? (Inquiry to define perfectionistic attitude.)

C: An awesome cool teacher. Not a snooty teacher. One that people actually appreciate and want to learn from. Which the world needs more of.

T: Who defines your "coolness"?

C: I guess it's up to the students whether or not I am cool.

T: Is that something you think you have any control over? (Cognitively challenging ability to control perfectionistic standards of being a "cool" teacher.)

C: Not at all.

T: Do you understand my train of thought here when we are discussing this dichotomous thinking? It is similar to what we discussed last week about assessing how much things are really under your control. As much as you do feel that sense of responsibility, how much is the outcome of that responsibility really on you? What percentage? (Cognitively challenging percentage of control over being perceived as a "cool" teacher.)

C: It depends on what I have to do so I guess I couldn't tell you.

T: So when we talk about being perceived as a cool teacher, how much responsibility is that on you? (Cognitively challenging percentage of control over being perceived as a "cool" teacher.)

C: Being a good teacher is a start. Other than that, I can't control for anything other than that very well. Maybe if I gave them (students) doughnuts or something.

T: Yes, bribery always works. (laughs.)

C: (laughs.)

T: Quick question, how did the sticky notes work last week? (Inquiry to efficacy of cognitive restructuring assignment assigned the previous week.)

C: Well, they are on my mirror and they are full of all of my sarcastic thoughts. Like, "hey, quick walking so slowly. You walk slower than a grandma. Ok, so they are more like snooty thoughts in my head.

T: That's ok. (Validating Noah's decision to revise the task to cognitively challenge worrisome thoughts.)

C: "What are you looking at?" I look better than you!

T: Good. Did you notice any changes in your worrisome thoughts? (Inquiry about changes in thoughts due to cognitive restructuring exercises.)

C: Minutely, yeah.

T: How so minutely?

C: I still have worrisome thoughts but I can put them off on them a little easier. The sarcastic thoughts are kind of fun. I'm trying to think of the sarcastic thoughts off the top of my head but I'll remember them 30 minutes from now.

T: If the sticky notes continue to work, let's keep using these strategies to practice in understanding how much control or responsibility you have over your worried outcomes... (Validating Noah's ingenious attempt to cognitively restructure worrisome thoughts.)

C: [Interrupting the therapist] Oh, I got that thing turned in. I got a "B."

T: You got a "B!" And you were worried about getting a "C" or worse, right? (Recalling previous discussion about dichotomous thinking around client's grades.)

C: Mmm-hmm.

T: Ok. How did it feel to get a "B?" (Inquiry to thoughts & feelings around getting a grade in the "gray area" that is not "perfect" nor "failing.")

C: I wasn't happy that it wasn't an "A" but I thought "Oh hey, look at that! That's all over."

T: Have you ever celebrated getting a "B?" (Inquiry about thoughts about perceiving something "in between" as an accomplishment.)

C: No (curt response)

T: Hmm.. I wonder what that would be like. (Exploring possibility of classifying middle gray area as a success.)

C: I don't celebrate getting "As" either.

T: Do you feel a sense of accomplishment? What do you feel when you get an "A"? (Eliciting feelings thoughts around success-orientation.)

C: Yay!! I've succeeded! (Smiling)

T: Ok, so what if you said, "Yay, I've succeeded! I got a 'B'?" (Exploring thoughts & assumptions within the "gray area" of perfectionistic attitude.)

C: I've never done that before.

T: I'm curious, what would it be like to celebrate or make a big deal out of your "B"? (Exploring thoughts & assumptions within the "gray area" of perfectionistic attitude.)

C: I don't know what I'd do.

T: You don't know what you'd do?

C: Not the slightest.

T: Would you be opposed to trying anything like that [celebrating getting a "B"]? (Exploring thoughts & assumptions within the "gray area" of perfectionistic attitude.)

C: I'm not opposed.

T: I'm just wondering how it would be to celebrate your "B". Because in your mind, perfection would be an "A" and "C" or below is failing. However you got a "B". Which is neither perfection nor failing. I'm wondering if it would be cool to celebrate that "B" as success.

C: Well it took me two months to get that "B".

T: There you go! You worked really hard to earn that "B"! And we've discussed how your anxiety is helpful to motivate you to get your work done; therefore, we don't want to get rid of it. However, it may be more helpful in differentiating between an unproductive and a productive worry thought. You stressed and work hard to complete this project. How many days did you have before the paper was due and you were already finished with it? (Introducing concept of productive and unproductive worry thought.)

C: Two days.

T: Did you feel that was down to the wire or too close to the deadline?

C: Not down to the wire, but I was glad to have it done early.

T: Ok, so you had it done, you felt relief and didn't care what happened afterward. It was done and turned in. (Amplified reflection.)

C: I didn't think quite like that. I was just happy it was done. I felt like I could forget about it for the time being…

T: That's right. You mentioned that you were still worried that your teacher was a harsh grader and obviously this is somewhat true because despite your best effort and stressing to get the

perfect "A," you still got a "B". It's not failing. (Suggesting how much his grade is out of his control and his worry serves him no purpose for his grade.)

C: It's not failing.

T: But it is not perfect, either. And that is ok… I am still wondering if there is some way to celebrate getting that "B"….

C: [Shakes head.]

T: I am not saying you have to overtly celebrate with a party hat or anything like that… but something special to you that would signify a sense of accomplishment that would say, "I got a "B"! I worked really hard for this and I am proud of this B."

C: Sure.

T: It would help to signify to you that you are not a failure or inadequate. How does that sound?

C: Different. It's something I've never done before. Self-talk kind of seems weird to me.

T: How so?
C: I am not a self-talker.

T: What do you do?
C: Mumble and grumble internally?

T: Oh, I see. When you say "self-talk" you are saying that speaking positively to yourself feels weird. (Seeking clarification.)

C: Yes. I don't know why either.

T: Hmm.. could it be that it feels fake to you or something like that?

C: Yeah.

T: It sounds like you are not excited to celebrate this "B," is this correct? (Reflection.)
C: Yes.

T: Why not?
C: I don't celebrate things that often. (Long pause.) I am sorry if that [statement] was disappointing to you.

T: No, no no. Perhaps I was reading into that statement too much. So you are telling me that when good things happen to you, you don't celebrate them at all? (seeking clarification.)

C: -ish. I am always thinking about other things too. I think about a lot of things at once.

T: So your mind is racing so much, it is hard for you to slow down and enjoy the very moment. (reflection.)

C: Yeah, and part of that is just Asperger's syndrome.

T: Ok. I'm curious. What happens to your thoughts when you do the PMR exercises? (Ensuring efficacy of relaxation training.)

C: I am still thinking.

T: Do you ever try to stop thinking? (Inquiry to determine efforts to control worrying.)

C: That doesn't work.

T: Obviously not. I was just checking (joking). Because we both know, the moment you try not to think about something, that is all you can think of. Do you remember in the PMR CD I gave you the instructions to notice the worrisome thoughts and let them go by? How is that working for you? (Verifying efficacy of relaxation training.)

C: Well, they're still there. The problem is that I can still focus on them. My brain adapts to focusing on a lot of things at once.

T: Give me an example of a worrisome thought that pops up when you are trying to relax and engage in the PMR. (Eliciting an example of worrisome thought.)

C: "Oh, I rang that up wrong at work!"

T: Then what happens in your mind? (Inquiring about worrisome thought.)

C: "That was quite a large purchase. She was probably one of the mystery shoppers. Oh no!"

T: Ok, so you keep going with that thought to a chain of other thoughts, right? (Reflecting chain-reaction of unproductive worrisome thought.)

C: Yes.

T: Ok, that's my fault for not explaining what it means to "notice" your worrisome thoughts and bring your attention back to the task at hand. So let me explain what it means to "notice" your worrisome thoughts. When a worrisome thought does pop into your head, you say, "Oh look, a worrisome thought! Now, what muscle group should I be focusing on right now? What does that muscle tension feel like? How does that feel different than when that muscle is relaxed? It is not that you are turning off your brain during PMR and simply not thinking. You are training your brain to focus your attention to the muscle groups and allowing your train of thought to progress with the tightening and relaxing of your muscles instead of indulging in the worrisome thought. Does that make sense? Do you feel you are able to do that? (Providing corrective education on relaxation training.)

C: Yes, I will do that.

T: Ok, great. Let me know how that worked for you next week. Oh, also, I wanted to talk about one more thing today. I wanted to discuss another strategy for differentiating between an unproductive and productive worrisome thought. What is an example of an unproductive worrisome thought? (Introducing concept in differentiating between unproductive and productive worrisome thought.)

C: "Ah, I wrung that up wrong!"

T: How is that unproductive?
C: It is distracting and lingering?

T: Is it something you can answer or determine whether you did ring it up correctly at that moment you are worrying about it? (Listing elements of unproductive worry.)

C: No. not immediately. I don't actually know.

T: Is it a type of thought that evokes thoughts of a single event or does it evoke a chain of events? (Listing elements of unproductive worry.)

C: Chain.

T: Ok, does that thought elicit the need for you to find the perfect answer or solution? (Listing elements of unproductive worry.)

C: Yes.

T: Is that the type of thought that makes you worry about it until you feel less anxious; knowing that is impossible because you won't actually know until you go back to work and check to see if you did in fact ring the item up correctly? (Listing elements of unproductive worry.)

C: Yes. Eventually, I try to do something else. I'll sit up and read but I can't sit there and ruminate about that thought.

T: Does this thought bother you to the point where you feel the need to solve the problem? That is, you begin having thoughts about driving to work at 11:00 PM to check despite the fact that the business is closed? (Listing elements of unproductive worry.)

C: Although I won't actually do that. I do have those types of thoughts.

T: Ok, those questions I just asked you… those are helpful in determining the difference between an unproductive and productive thought. A productive thought is the opposite of that. I have a handout that illustrates this for you (handed him a sheet listing the difference between productive and unproductive worried thoughts). A productive worry is one that is solvable, involves a single event, allows for the acceptance of an imperfect solution, doesn't utilize your anxiety for rumination and allows you determine what you can and can't control. Basically a productive worry is a problem you can solve today. Does this make sense to you? (Psychoeducation on unproductive worrisome thought.)

C: Sure.

T: I'd like you to start examining your worrisome thoughts using these questions as guides and tell me how this helps. How do you feel about what we've talked about today? We've discussed a lot of concepts today. What skill or strategy would you like to continue practicing this week? (Collaborating on homework assignment.)

C: I can do more sarcastic sticky notes.

T: That sounds great to me. Now, I am wondering what your thoughts are about doing something out of character for you involving making a mistake on purpose. What would you think of that? (Incorporating concepts discussed in today's session into homework.)

C: Why would I do that?

T: To see if your worst fear actually comes true. (Cognitively challenging the thought.)

C: That is a terrible idea. It is a horrible idea!

T: How so?
C: I am trying to think… it rubs off as a bad idea. I don't want to screw anything up. I am trying to keep things going in the right direction.

T: I can understand given that you have been striving for perfection your entire life, your disinterest in purposely trying to make a mistake. I can clearly see the anxiety manifesting within you now as we are simply discussing the idea of making a mistake. What are you worried that I would ask you to do? (Building therapeutic alliance in collaborating on homework assignment.)

C: I don't know. I can't see myself trying to sabotage myself for feeling better in knowing that what I am worried about may not happen because there's always a risk that something bad could, in fact, happen.

T: That "what if" always plagues you. And that is the truth that you can't be certain of. (Elucidating the intolerance of uncertainty tendency of Noah.)

Long pause….

T: Ok, so for today, let's continue with the sticky notes and practicing the PMR. This week, it would be really cool or interesting if we could take the challenging questions from the form I gave you last week and turn them into sarcastic challenging questions. Kind of like, making this challenge more like your personality. What would you say to do that? (Assigning homework.)

C: Sure. Yeah-yeah.

T: Ok, do you see any boundaries getting in the way of doing these for 5 days next week and reporting back to me what worked and what didn't? (Discussing boundaries to homework.)

C: No.

T: Ok, then that is all I have for today. Thanks for coming in and I look forward to hearing your progress next week.