### **REPORT OF PSYCHOLOGICAL ASSESSMENT**

Confidential Material

NAME: Sebastian Smith DATE OF BIRTH: 5/8/1985 CHRONOLOGICAL AGE: 16 years 3 months PARENTS: Mary Smith & Sebastian Smith GRADE: completed ninth grade

DATES OF ASSESSMENT: 7/17; 7/27/01 DATE OF REPORT: 8/3/01

# INDENTIFYING DATA AND REASON FOR REFERRAL:

Sebastian is a 16 years 3 months old Caucasian adolescent, who was referred for a psychological evaluation to determine his current cognitive and emotional status. Sebastian has a long history of poor school performance due to numerous. Despite extensive private tutoring and accommodations from his school he has failed to succeed academically. The contributing factors include poor school attendance, possible attending and learning problems, and complex family dynamics.

# SOURCES OF INFORMATION:

Background information was obtained from his mother, his previous social worker, former psychologist, and numerous psychological, educational and medical reports. This information was obtained from interview, developmental history and rating scales as well as medical records. This information appears to be from reliable sources and valid.

Current status of his learning and behavior was obtained from observation during testing and from standardized psychological, neuropsychological and achievement tests. The validity of his performance on most tests was deemed to be accurate due to his cooperation and motivation to perform the tests.

# **BACKGROUND INFORMATION:**

## Current Concert:

Sebastian has long struggled with his academic performance and proper social behavior. His relationship with both parents is complex and he often is torn between both. His ability to maintain motivation in his schoolwork is of concern and recommendations will be made with these factors in mind. The most pressing concern at this time is his use of illegal substances (marijuana).

#### Medical and Development History:

**Pregnancy and birth history:** Sebastian's mother reported that she was 29 and his father was 31 at the time of his birth. There were no complications of pregnancy or

delivery reported and he was born by Caesarean section. His birth weight was normal; but he experienced some jaundice following birth.

**Developmental history:** Sebastian experienced sleep difficulties as an infant, rarely sleeping for more than 2 to 3 hours at a time. His appetite was also reported as poor. Developmental milestones were reported as within normal range for language and gross motor development. However, he has poor fine motor coordination, especially for writing. Development of bladder and bowel control at night was also somewhat late. He had numerous accidents as a child including with soccer, skateboard and moped. These resulted in numerous broken bones.

**Medical history:** He had the usual childhood illnesses of chickenpox, ear infections and strap throat.

## Family and Social History:

Mary Smith is Sebastian's biological mother and currently serves as an administrative assistant. She indicated that she has no learning or attention problems. Sebastian Smith (Sr.) is Sebastian's biological father. According to Mrs. Smith, he is unemployed much of the time. When they were married, he worked at grocery stores, gasoline stations as a gas attendant, and at a carwash. He is reported as being violent with her and on a few occasions with Sebastian. Mr. and Mrs. Smith are divorced. Sebastian has a step brother, Lucas, who is described as hyperactive and displays poor handwriting. Mrs. Smith reports a history of depression on both sides of the family.

## Summary of Previous Evaluations:

Sebastian has a long history of numerous assessments to determine the sources of his learning and behavior difficulties. A full neuropsychological evaluation was conducted in 1996. It was noted that he exhibited mixed dominance of hands, left dominance for eyes and feet and prefers to use his left hand for fine motor and right for gross motor activities. His intellectual capacity was measured in the overall low average range with a significant difference in verbal and performance skills, verbal begin higher. It was noted that there was a deterioration in his performance from the testing of the previous year. Possible influences were the medication protocol he was on during the testing. However, there were clear indicators of problems with visual motor, visual sequencing and processing speed. Adequate problem solving was noted. There were some differences of opinion regarding his attention/concentration capabilities. The question of the impact of anxiety on his concentration was asked. Verbal memory was superior to visual memory and it was observed that he had more difficulty with complex visual information without the opportunity to use verbal medication. Speech and language efficiency was observed to be within the normal range; but a significant problem was noted with spelling. Problems were also noted with his handwriting. Sebastian demonstrated a deficiency with identification of tactile stimuli with his left hand, as well as a reduced speed of visual motor output.

Deficiencies were noted in all previous evaluations in the area of written language and spelling skills. Psychological evaluations gave indications of a possible anxiety disorder as well.

Follow-up assessment and academic recommendations in August of 1997 included the recommendation that a mainstream option be pursued. This was to

include "structure, consistency and predictability in his day to day activities." This was suggested within the context of continued family therapy.

A psychological evaluation was conducted in January of 1998 for the purpose of further diagnosis and treatment planning. There was concern with a possible depressive disorder and the results indicated an elevated score for depression on all measures, with some concern with anxiety symptoms. Problems with attention and concentration were also noted.

Achievement testing in 1999 indicated that his achievement scores were consistent with his ability scores for the first time in many years.

Further testing in June 2000 indicated that Sebastian was functioning in the average range of intelligence with a significantly higher capability with verbal tasks as compared to nonverbal performance. His achievement scores as measured by the WIAT indicated above average ability in reading and language, with some delay in math and writing. Spelling and numerical operations were most problematic and at least two years below his age expectancy.

## **BEHAVIOR OBSERVATIONS**

### Testing Behavior:

Sebastian is an attractive young man, who readily established an easy rapport and was open and forthcoming about his struggles. He was evaluated over a period of two days. He was motivated to perform the tasks and failed to show signs of resistance, hyperactivity or distractibility. Most notable was his slow speed of processing information that required a visual motor response and his resulting frustration. He tended to drum his fingers when tasks were monotonous or boring. He became engaged and more alert when tasks challenged his interests and capability.

#### Behavior Rating Scales and Interview:

The Primary Sources Inventory by Jensen, developmental rating scale, diagnostic criteria checklist for AD/HD and interviews were the sources of additional information regarding Sebastian's behavior in a variety of settings.

**Home:** Sebastian's mother indicated that he enjoys music and skateboarding. Positive ratings on the PSI included problems with understanding directions, excessive feelings of guilt, slow to seek friends, fidgeting with his hands, easily distractible, easily frustrated, doesn't appear to be listening, many temper tantrums and anger. He prefers to be shown how to do something and is very concerned with making mistakes. She noted that he has been in a regular class with individual tutoring.

**School:** His former teacher indicated that Sebastian has low motivation for school achievement, with problems in reading and classroom behavior. He understands language, is creative and has good abstract thinking. He is viewed as fearful, with nervous and repetitive habits, is fidgety and restless, with mood swings. He demonstrates a poor approach to planning, ignores mistakes, has a problem with follow through, and is disorganized. He appears to focus and achieve somewhat better in a one on one situation. However, he gets frustrated and depressed when he realizes he is having a problem with his schoolwork. His social interactions have improved and he is gaining self-esteem. He responds well to structure and boundaries

and began to express his natural compassion and leadership and improve his social skills.

#### TESTS ADMINISTRED:

Standardized assessment targeted the domains of intelligence, learning processes, academic achievement and emotional/psychological development.

STANDARDIZED INSTRUMENTS: Weschler Adult Intelligence Scale-Third Edition Cognitive Assessment System Weschler Individual Achievement Test Gordon Systems Continuous Performance Test Trial Making Test A and B Stroop color Word Interference Test Rey Osterrich Complex Figure Drawing Minnesota Multiphasic Personality Inventory—Adolescent Form House Tree Person Projective Test Brown Attention Deficit Scales

INFORMATION ASSESSMENT TECHNIQUES: Development History Form Interviews Primary Sources Inventory Diagnostic Checklist for AD/HD symptoms Behavior Observations Review of medical reports

### **RESULTS FORM TESTING:**

Using information from multiple sources, the following domains of functioning were analyzed in terms of the effect on Sebastian's learning and behavior.

### Cognitive-Intellectual-Executive Functioning:

Sebastian's intellectual potential and cognitive processing abilities were measured by the Weschler Adult Intelligence Scale-Third Edition and the Cognitive Assessment System by Das and Naglieri. The WAIS III is a test of general intelligence for adults over 16 years of age. It is composed of 14 subtests, divided into two scales: a verbal scale and a performance scale. The IQ is a composite of all subtests. Additionally, there are measures for Verbal Comprehension, Perceptual Organization, Working Memory and Processing Speed.

The CAS is a series of subtests designed to measure the cognitive process of Planning, Attention, Simultaneous and Successive cognitive process of children between the ages of 5 and 17 years. This test is based on the theory that provides a view of human cognition based on the four essential elements, which the individual employs to alter the base of knowledge. The Planning processes provide cognitive control, utilization of processes and knowledge, internationality and self regulation to achieve a desired goal; Attention processes provide focused, selective cognitive activity over time; Simultaneous processing is the way the individual integrates separate stimuli into a single whole and Successive processing is the way the individual integrates stimuli into a specific serial order to form a chain like progression. These concepts are useful for determining the effect of learning disabilities, attention deficit disorders, emotional factors, and executive functioning disorders on learning and behavior. Sebastian scored at a percentile rank of 16 on the Planning subtests, suggesting some difficulty with executive or working memory tasks. Simultaneous tasks were slightly below average indicating some problems with visual memory for complex designs and difficulty translating verbal information into visual spatial components.

Evaluation of Sebastian's intellectual potential yielded scores in the average range of functioning, when all subtests were combined. However, this general score doesn't reflect his excellent cognitive capabilities in many areas. There was a significant difference between Verbal Comprehension and Performance Organization subtest scale at the .15 level of confidence with the verbal tasks higher. Some scores were depressed due to his difficulties with slow speed of scanning and comparing information, and holding information in mind for the purpose of using active working memory. His strengths were with abstract problem solving capability, both with verbal and nonverbal, visual and auditory information. These scores were well above average and reflected excellent abstract thinking. He was highly motivated on many tasks and became animated and actively engaged, even when the task was difficult. He also demonstrated strengths with long term recall of information, finding similarities among words, identifying missing pieces of visual information, and completing complex visual patterns.

The most notable scales were the Working Memory score at 14% tile and the Processing Speed score at 32% tile, as compared to all other scales above the 80% tile. (Verbal Comprehension at 96% tile and Perceptual Organization at 86% tile) This slowing of mental processing was noted for both auditory working memory and visual/perceptual motor tasks that required concentration and speed.

One area of primary concern in any evaluation is the frontal lobe capability commonly known as executive functioning. This represents several aspects of cognition, including the allocation of cognitive resources, planning, problem solving, response inhibition, self-monitoring and regulation and maintenance of mental sets. These executive functions are important components of working memory and often lead to reading, language or mathematics disability. A weak processing deficit of either the visual spatial or verbal nature, when coupled with an executive dysfunction can be sufficient to result in an academic disability. Conversely, a strong executive functioning can be used to compensate for processing deficits. Higher level academic tasks in later school years rely heavily on these executive functions and problems may occur due to a variety of conditions, including attention/concentration problems, working memory and lack of focus due to anxiety or depression.

Based on the assessment data, it appears that Sebastian has varied capability with tasks that require working memory and consequently relative difficulty with some aspects of executive functioning. When information is complex and challenging, sufficiently interesting and requires abstract conceptualization, he can become mentally engaged. On tasks that require mechanical, role processing, or retrieval of short-term sequential memory, or written responses, Sebastian tends to withdraw his engagement from the information. This can either be the consequence of primary attention processing disorder and/or related to mental disengagement from anxiety and depression. Although he has the capacity for intact executive functioning, he sometimes disengaged from such tasks.

### Attention-Concentration:

One of the major concerns with Sebastian's learning and behavior problems was the possibility of an attention deficit disorder. Currently, this disorder is viewed as a biochemical disorder involving neurotransmitters, primarily dopamine and norepinephrine. These brain messengers are responsible for arousal and alertness in the brain. This disorder primarily involves the frontal and parietal areas of the brain and the many connections with these areas. It is believed to be primarily genetic in origin and occurs generally in the presence of an intact brain. However, attention deficit disorder does not appear to be a simple disorder; but rather is often accompanied by various emotional and/or other neurological or co-morbid disorders. There are many varied theories regarding the nature and origin of attention deficit disorder; but it appears that two distinct conditions may actually occur. Attention deficit disorder with hyperactivity (ADHD) involves the frontal lobe and sometimes is characterized by externalizing problems of hyperactivity and conduct disorder. The dopamine system is implicated in this type of attention problem.

In contrast, the person with ADD is generally distracted, has chronic problems getting started or completing tasks, has a sluggish cognitive tempo and slowed perceptual motor speed. There is not usually a problem with executive functioning with this type. Generally the parietal system, possibly right hemisphere, is implicated with a decrease in norepinephrine. Individuals with this type of ADD often have comorbid disorders of anxiety or depression. They may be mis-diagnosed as ADHD due to the symptoms of anxiety, which look like hyperactivity or inattention. ADD is viewed as an internalizing disorder with more attention/cognitive/anxiety traits. Difficulties are observed with the sustain and focus elements. ADHD is seen as an externalizing disorder with more attention/behavioral and impulsive aspects, including a disturbance of executive functions that allow for forethought, planning, self discipline, faculty judgment, decision making, error correction and persistence.

Although there are no pure tests of attention, several objective measures and observation tools can be used to measure a component of attention skills. There are numerous theoretical approaches to understanding the constructs underlying the symptoms of AD/HD. Alan Mirsky identifies attention as the core deficit and proposes different elements including the capacity to <u>focus</u> on or select some aspect of the environment, the ability to <u>sustain</u> or maintain focus for a period of time, the ability to <u>encode</u> or manipulate information held in memory and the ability to <u>shift</u> from one aspect of the environment to another. Utilizing this model, Sebastian's attention capabilities were measured by various neuropsychological tests. Additionally, there must be evidence of this behavior early in the person's development and occurring in multiple situations. Using the history information, self rating of behavior, parent and school ratings of behavior and objective testing, an assessment of Sebastian's attention capabilities was made.

The <u>focus/execute</u> element was variable as measured by the Coding and Trails A tests. Cognitive slowing was evident with his poor performance on Coding. However, he was able to perform a sequential task on both forms of Trails and he demonstrated good ability to note missing details on the Picture Completion subtest. Good capability was noted with the <u>sustain</u> element, as noted by his performance on the continuous performance test. He performed well on both the vigilance and distractibility portion with only 2 errors of commission on each. No errors of commission (indicating impulsivity) were noted. He commented that he was "getting tired and when not doing anything active my mind drifts." The distractibility portion made more alert and attentive, but he noted that it "makes me want to zone out." His

fidgeting and finger tapping subsided when the task demands were greater and he had to concentrate more.

The ability to <u>encode</u> or manipulate information held in mind is often described as working memory and related to executive functions as described above. Sebastian demonstrated the most difficulty with these types of tasks. He was able to remember only 4 digits backwards, but used the strategy of verbal rehearsal to stabilize the numbers forward before reversing them. His ability to perform math problems in mind was low and significantly below his abstract reasoning ability and math reasoning score. The Planning subtests on the CAS indicated difficulty with organization and regulation of mental activity. This aspect of attention is highly affected by emotional factors and may be compromised in Sebastian due to his anxiety and depression. The ability to <u>inhibit</u>, as measured by the Stroop and Gordon tests was adequate and no mental impulsivity was noted. However, there was some evidence of slow processing of this information. The ability to <u>shift</u> his focus of attention was borderline, as noted by his performance on the Trails B. This mental flexibility was confirmed by this capability on various other academic tasks.

An additional useful model to analyze the data on attention as well as learning capability is that of Levine. The advantage of this approach is the useful recommendations for therapeutic intervention provided. The attention control systems consist of three variables. The first is the available mental energy or inconsistent alertness and effort. Processing difficulties include saliency determination, processing depth, mental activation, maintenance of focus and control of satisfaction. Production difficulties include previewing, tempo control, self monitoring, facilitating and inhibiting and reinforceability. Sebastian experiences difficulty with a number of these factors. He exhibits problems with mental energy, as manifested by inconsistent concentration, fatigue, problems getting started and finishing his work, inconsistencies of effort. He also has difficulty with the production aspect. He has problems with self-monitoring of his responses and consequently is often surprised by both his mistakes and his correct answers. Most notable is the uneven tempo or speed of processing information. He does some things too slowly, some too quickly and fails to organize his time. This difficulty is most likely also related to the learning difficulty noted below.

Although Sebastian has several characteristics that are associated with attention deficit disorder, there is insufficient evidence to make a definitive diagnosis. This is a disorder that is observed on a continuum and must sufficiently interfere with functioning and not be explained by another disorder in order to become diagnostically significant. Co-morbid problems of a learning disability, as well as anxiety and depression complicate the manifestation of his symptoms of inattention and distractibility.

#### Memory:

Sebastian demonstrated some difficulties with visual memory due to inadequate encoding of visual perceptual information. This was evident by his poor performance on the immediate memory phase of the complex figure drawing. He did not create an interior mental model of the design, failing to note details. He also had great difficulty constructing the proper relationships of parts to the whole. This problem with encoding did not provide a sufficient mental image from which to recall. This difficulty with using a visual memory strategy to enhance his performance was also noted on the production of the Coding responses. He has not developed a strategy for scanning and encoding visual data. This encoding difficulty most likely affects his acquisition of new information and consequently recall. This formation of an interior visual image can be enhanced by use of verbal cues to organize his canning and focus on parts of the whole. Other types of cues may include color coding. The kinesthetic act of drawing the image first was not sufficient to encode the image in his memory.

Rote memorization for verbal and auditorally presented information was below average range for immediate recall. This was measured in part by repetition of digits. Some complex tasks of working memory in the auditory channel proved difficult as well, as noted by his Arithmetic score on the WISC.

Visual memory was also problematic for Sebastian. He had some difficulty encoding complex visual information and recalling it even when the factor of a written response was minimal. He was able to note details and fill in missing visual information on nonverbal visual tasks. However, he exhibited difficulty translating verbal directions into a visual spatial response. This breakdown in visual encoding, especially in translating from a verbal input, may be the basis of his previously identified dysgraphia.

#### <u>Sensory-motor/Perceptual Processing:</u>

Sebastian demonstrated some considerable difficulty with visual perceptual scanning and organization, and visual motor copying ability as indicated by his performance on the complex figure drawing, Coding, Matching Numbers and Planned Codes. He often failed to develop a strategy for scanning and comparing visually presented information when a visual motor response was required. In contrast, his ability to note missing details was excellent on the Picture Completion. The response was limited to pointing or naming, and he was able to utilize his cognitive resources to scan the picture and fill in the missing element. It appears that his visual perceptual capabilities are depressed under the following requirements: a complex motor response, sequential visual scanning, speed of processing, and complex encoding or working memory. Visual construction and nonverbal problem solving are relative strengths for Sebastian. These difficulties may contribute to his difficulties with attention and concentration. Giving spatial referents may be a useful tool for Sebastian to use as he engages in such tasks as math computation, and written composition. Visual construction and nonverbal problem solving are relative strengths for Sebastian and can be utilized to enhance his working memory problems.

## Speech/Language:

Sebastian demonstrated mature use and understanding of spoken language and his speech patterns and articulation are normal when he generates the information. He demonstrated excellent capability for explaining complex abstract concepts and defining words. There were mild difficulties with attending to and responding to auditorally presented information that required short terms memory or working memory tasks.

He demonstrated excellent abstract verbal concepts and was able to explain the concepts of how words are similar and what the appropriate response was to complex problem situations.

### Academic Achievement:

Sebastian is preparing to begin the 10<sup>th</sup> grade in high school. However, his previous school attendance and been varied and many academic and social skills may be deficient due to limited experience.

He has not repeated any grades, but receives individual tutoring to assist with his academic challenges. His teachers reported difficulty with distraction and preoccupation. His basic skills are intact; but he receives assistance twice a week due to his poor achievement. This tutoring also offers a quiet place to help him concentrate. There is some concern with his auditory processing, math capability and written expression. It is difficult to get him to do his work in the classroom and he has trouble paying attention to directions. His strength is in reading, with good decoding and comprehension skills.

Sebastian's basic academic skills were assessed using the Weschler Individual Achievement Test as well as some informal tasks if achievement. Basic reading of single words was well above average (77%tile) indicating good decoding abilities. Math reasoning (95%tile) and reading comprehension (99%tile) were in the superior range and reflect his excellent abstract problem solving abilities. Problems were noted in skill areas that require production of written responses. Basic calculation was at the 37%tile for numerical operations; and written expression was at the 5%tile. Spelling continues to be somewhat problematic at the 39%tile. The problems with visual motor production, working memory and encoding were most evident with these scores.

Sebastian has excellent abstract cognitive processing capability as well as efficient word decoding ability. However, he lacks the ability to sustain his interest and concentration and to engage his mental energy to produce a sufficient response. His slow speed of visual motor processing and difficulty with working memory and concentration appear to impact his performance even when given the tasks in a one on one situation. His performance and motivation are greatly impacted in the context of an active classroom. He requires external support to begin and maintain his engagement with academic work. It is believed that a specific learning disability exists in the areas of working memory and written production. This is in contrast to his excellent capability in numerous other areas of functioning.

### Emotional Personality:

Sebastian's emotional/social status was a focus of this evaluation due to a concern with depression, and a long history of emotional and behavioral difficulties. This information was gathered from interview, self-ratings, projective drawings, the Minnesota Multiphase Personality Inventory for Adolescents and independent raters.

His responses on the MMPI-A resulted in a valid profile although he presented himself in a defensive manner that attempted to project a favorable image. He appears to be somewhat naïve and immature with a strong need for attention and affection. He may often react to stress or avoids responsibility by becoming ill and develop vague, nonspecific physical symptoms. He has little insight into this tendency. Many symptoms of anxiety, tension, worries and sleep difficulties were reported. He may be too dependent for his age and relate to others in an immature fashion. Many of his interpersonal relationships tend to be superficial and he uses somatic complaints to get attention. He is nonassertive and attempts to control others indirectly, rather than openly expressing his negative feelings. He likes to be around people and prefers to spend time with others rather than being alone. There is evidence of weak ego development and some inhibition of aggression. He has difficulty with authority and yet fails to stand up for his needs. Adolescents with this profile tend to have little insight into their problems and present with complaints of physical problems instead. They may initially respond to reassurance and direct advice if not unduly threatened. Adolescents with this pattern are also suggestible and may respond to authoritative advice. Confrontational or insight-oriented therapy may be resisted. An approach that focuses on building stress management skills should be considered.

There was no overt psychopathology observed at this time. However, indications of depression and anxiety are prevalent and should be a consideration during treatment.

Further evaluation of his emotional status was gained from a qualitative analysis of projective drawings. The drawings indicated high intelligence and sensitivity. Feelings of insecurity, inadequacy, hypersensitivity and anxiety were noted. There was also a need for support combined with a low self concept. He has immature, dependent and submissive tendencies and often feels depressed.

These projective responses, self-ratings and observations were consistent with the reports from his teachers and parents. Depression and anxiety appear to have a significant impact on his attention capacity and academic achievement. Slowed mental processing, memory problems and mild attention deficits often characterize patients with depression and anxiety.

Emphasis should be given to developing resiliency and adaptability, as well as on increasing his motivation to engage in his academic tasks. Opportunities for feelings of personal gratification and a sense of mastery should be provided. Activities that interfere with use of his mind for intellectual purposes should be limited. For example, hours spent playing video games or watching television interfere with the development of the capacity for deep thinking. Sebastian may respond to a written contract with listing of his goal and accomplishments. This technique can be used to encourage homework completion and engagement in classroom assignments. He doesn't respond well to threats or intimidation regarding his behavior and achievement. There may be some initial compliance; but his resentment and anger will only be magnified. Sebastian needs encouragement with concrete evidence of his capability and successes pointed out to him. Structure, consistency, vigilance, along with excessive positive reinforcement for his accomplishments and attempts at compliance are crucial at this point in time.

### **SUMMARY:**

Sebastian is a 16 year old Caucasian adolescent who was referred for neuropsychological assessment to determine his learning and emotional status and to make recommendations regarding a treatment plan. He has experienced difficulty with motivation and attention in school. There is concern that he may also have symptoms of attention deficit disorder in addition to a previously diagnosed dysgraphia. An evaluation of his early development, cognitive capability, emotional status and academic achievement resulted in a determination of a complex set of characteristics that are contribution to his difficulties.

Sebastian performed at an average range of cognitive functioning with no notable differences between verbal and nonverbal functions. However, there were many variations in his basic processing of information. Excellent abstract cognitive capability was noted for abstract thinking in both verbal and nonverbal visual spatial modalities. These good capabilities are reflected by his outstanding ability with math reasoning and verbal comprehension. His oral language is also mature and demonstrates good verbal communication skills. His academic skills are all within the average or above level of ability; but he often fails to utilize his capacity to achieve up to his potential. He demonstrates some positive symptoms of an attention deficit disorder, but there is insufficient evidence to make a diagnosis of AD/HD at this time. Most likely the underlying anxiety and depression, as well as the identified learning disability contribute to these symptoms of poor working memory, slow processing speed, superficial processing and lack of motivation. Any treatment must consider the interaction of these co-morbid conditions.

Specific problems were noted with encoding of information, including the executive functions of working memory and planning. These functions are highly sensitive to emotional factors as well. Problems with superficial processing or low mental energy and engagement with tasks were noted. The learning disability is primarily in the area of production and includes some visual motor processing problems, speed of processing and translating verbal information into a visual motor response. Additionally, there are problems with short-term recall of information, both visual and auditory. These problems are in addition to the dysgraphia (fine motor coordination for writing) as noted previously. All of these factors impact his school performance and add to his frustration and discouragement.

Further evaluation of his emotion/social status indicates numerous areas that would respond to some cognitive/behavior therapy that challenges his beliefs and assumptions about his inadequacy. He has excellent abstract cognitive capacity that would enable him to profit from this sophisticated form of therapy. He is currently fragile and immature in his recovery and social development and requires consistency and structure in all of his activities. Treatment and accommodations for his concentration and learning problems will hopefully remove some of the barriers to learning and success that lead to frustration and discouragement.

### **RECOMMENDATIONS:**

In order to best serve Sebastian's needs there are several areas that may be targeted for intervention.

- Primary focus should remain on managing his depression and anxiety symptoms. He is learning to communicate in an assertive fashion and should continue to develop his capacity to express his needs and to initiate conversation. A strong therapeutic bond is essential with anyone who is engaging with Sebastian. He has the capability to benefit from some cognitive therapy techniques in addition to stress management and positive reinforcement. Concrete examples of his positive growth should be presented and reinforced.
- 2. It is imperative that Mrs. Smith establishes structure and boundaries that will enable Sebastian to follow through with his schoolwork. This consistency on the part of everyone who has a close relationship with Sebastian will enable him to internalize these controls and allow him to begin to monitor his own behavior. He needs to have a modeling of proper roles and boundaries in families in order to develop his own sense of self.
- 3. A multistep progressive program that gives increasing independence and responsibility may prove helpful. Some type of outward bound or challenge program may give him needed confidence and resiliency to empower him to stand up for his own needs. He will require much structure and support, with continual monitoring during this fragile time. Consistency in all environments is especially important so that he can solidify the gains he has made and feel a sense of security and predictability. Otherwise he will be set up for failure in any program that he attends. Any plan for Sebastian's schooling that is

instituted at this time should be continually monitored, with full re-evaluation of the effectiveness every three months.