

Wellness Interventions for School Counselors: A Case-Study in  
Treating Asperger's Disorder

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### Abstract

The Five Factor Wellness Inventory-Elementary Version (5F-WEL –E) was used in a pre- and post-test design to determine the wellness of a 13 year-old male with Asperger’s Disorder. Wellness in the Creative and Physical Self domains was low. Thus, the school counselor implemented a 5-month treatment plan, based upon the Wheel of Wellness, in the school and home to increase wellness in these areas. Physical Self wellness increased. Wellness in other domains was maintained, increased, or slightly decreased. Implications for further research as well as application of wellness-based treatment planning by school counselors are discussed.

## Wellness Interventions for School Counselors: A Case-Study in Treating Asperger's Disorder

Autism and related disorders, such as Asperger's Disorder, increasingly are being diagnosed among children and consequently, are receiving increased attention from the media and helping professionals. Much discussion has included questions about the pervasiveness of these disorders among current populations of children as compared to previous generations, etiology of the disorders, prevention of such disorders, and which treatment modalities are most efficacious. Ongoing research can answer some of these questions, yet counselors must immediately and effectively treat clients affected by these disorders.

Treating Asperger's Disorder is especially challenging for school counselors who work within a generally non-clinical, school environment. Currently, there are some resources for school counselors; however, many treatment modalities are deficit-based, reactionary, and intended to raise functioning to minimal standards in order to help students fit into a school environment instead of achieving optimal functioning. Through the ASCA National Model (2003), school counselors have been charged with increasing the overall success of all students, including those with disabilities.

Strength-based models of wellness are alternative paradigms to conceptualizing and treating disorders that emphasize the ability of every individual to achieve optimal wellness, despite pathology and organic limitations. Wellness models have not yet been used to conceptualize and treat Asperger's Disorder; however, considering a wellness paradigm in relation to Asperger's Disorder seems especially relevant since individuals with Asperger's often have unique, inherent strengths that coexist with emotional and

behavioral limits. In this article, we outline the increasing prevalence of Asperger's Disorder among children in the United States and propose a wellness treatment paradigm for use by school counselors. We present findings from a case-study conducted with a 13 year-old male student, diagnosed with Asperger's, in which a wellness-based treatment plan was created to increase wellness in specific domains of functioning. Pre- and post-test data related to wellness functioning is presented and the wellness-oriented, strengths-based treatment plan is detailed. Finally, considerations for school counselors using wellness treatment plans with students who have Asperger's Disorder are provided.

### Examining Asperger's Disorder

#### *Characteristics of Asperger's Disorder*

Asperger's Disorder first was described by Dr. Hans Asperger in 1944, in *Autistic Psychopathy in Childhood* that originally was published in German and Dr. Asperger's description of the disorder remained relatively unknown until 1991, when his work was translated into English by Dr. Uta Frith (Basche & Kirby, 2001). In 1994, Asperger's Disorder was recognized by the American Psychiatric Association and added to the *Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV-TR)* as a Pervasive Developmental Disorder along with Autistic Disorder, Rett's Disorder, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder NOS (American Psychiatric Association, 2000).

When Asperger's Disorder was included in the *DSM-IV-TR*, a set of diagnostic criteria for research was established (Klin, Pauls, Schultz, & Volkmar, 2005); however, these criteria consistently have been criticized as too narrow in scope. Researchers

have called for greater distinction between Asperger's Disorder and Autism to ensure more accurate diagnosis, specifically related to differences in speech delay, IQ level, cognitive development and impairment, and period of onset (Eisenmajer, Prior, Leekam, Wing, Gould, Welham, & Ong, 1996) and some researchers have questioned whether Asperger's Disorder is related to High Functioning Autism (Prior, Eisenmajer, Leekam, Wing, Gould, Ong, & Dowe, 1998) or if it is a distinct disorder (Schopler, Mesibov, & Kuncze, 1998). Although the diagnostic criteria are challenged, many parents, teachers, researchers, and clinicians agree that developmental behaviors exhibited by children with Asperger's Disorder differ from behavior by children without the diagnosis. These behaviors include: a) paucity of empathy; b) naïve, inappropriate, one-sided social interaction, little ability to form friendships, and consequent social isolation; c) pedantic and monotonic speech; d) poor nonverbal communication; e) intense absorption in circumscribed topics which are learned in rote fashion and reflect poor understanding, conveying the impression of eccentricity; and f) clumsy and ill-coordinated movements and odd posture (Klin & Volkmar, 1995). The *DSM-IV-TR* further describes characteristics of Asperger's Disorder as notable impairments in social interaction, limited and characteristic behavioral traits, significantly impaired functioning in social and occupational roles, and lack of significant language and cognitive delays (American Psychiatric Association, 2000).

While the *DSM-IV-TR* criteria for Asperger's note defective ways of thinking, some experts disagree with categorizing Asperger's Disorder as primarily including deficits in behavior and propose that people with the disorder have a "different, not defective, way of thinking" (Attwood, 2005, p. 4), and that they often prioritize seeking knowledge, truth,

and problem solving differently by valuing creativity, correctness, and solutions. Attwood (2005) suggests that Asperger's Disorder is more appropriate as an Autistic Spectrum Disorder since persons with the disorder possess normal range intellect, but present with a distinct profile of abilities such as different types of direct communication and management and expression of affect that often prevents them from satisfying emotional and social needs of others, frequently resulting in anxiety, anger, and social disconnection. In sum, individuals with Asperger's Disorder display impaired social interactions and atypical communication or behavior patterns, but demonstrate normal cognitive and language development as compared to other Pervasive Developmental Disorders such as Autistic Disorder.

#### *Prevalence of Asperger's Disorder*

Diagnoses of Asperger's Disorder have grown notably over the past decade, although varying diagnostic criteria seem to contribute to difficulty in establishing prevalent data. From 1989 through 2001, the estimated prevalence of Asperger's Disorder among children rose from between 10 and 26 children to 71 children in every 10,000 (Gillberg & Coleman, 1992). More recently, estimates range from 1 child in every 250 to 1 child in every 500, with some estimates reaching nearly 950,000 cases in the United States (Basche & Kirby, 2001). Male children are more often diagnosed with Asperger's Disorder than girls with ratios between 5:1 (American Psychiatric Association, 2000) and 10:1 (Attwood, 2005).

Asperger's Disorder generally is not diagnosed until children begin to interact with their peers, often preschool or later, when communication, relationship, and other social difficulties typical to Asperger's become more apparent (e.g., seeming inattention

or disinterest in social interactions; inability to take another's perspective, engage in give-and-take conversations or relationships with others, and to read social cues) (Perry, 2004). Additionally, many individuals have a close family member who also has been diagnosed with Asperger's (Perry, 2004). Since the prevalence of Asperger's Disorder is significant among children, treatment approaches have been developed to meet the needs of families of the affected individuals as well.

### *Existing Treatment Approaches*

Past research focused on perceived deficits suffered by those with Asperger's Disorder such as inappropriate social interactions (Grossman, Klin, Carter, & Volkmar, 2000) and inability to understand another's perspective and have personal insight (Eisenmajer et al, 1996). Consequently, current treatment modalities target deficits instead of identifying strengths and capitalizing on assets. Common interventions include strengthening social and communication skills to enhance problem solving and social awareness (Klin, Volkmar, & Sparrow, 2000), learning to manipulate environments to minimize threats (Perry, 2004), behavior monitoring (Myles, Anderson, Constant, & Simpson, 1989), psychopharmacology (Bashe & Kirby, 2001), adaptive educational approaches (Bashe & Kirby), and social stories (Gray & Gerand, 1993). Many approaches are deficit-based, emphasizing "fixing" maladaptive behaviors versus using inherent assets to compensate for lower functioning.

In contrast, counselors ascribe to a developmental, strengths-based philosophical orientation (Myers, Sweeney, & Witmer, 2000). Numerous clinicians and researchers have emphasized the importance of holistic, strengths-based interventions with children, adolescents, and adults (Hartwig & Myers, 2003; Myers, 2003; Myers &

Mobley, 2004). Thus, new treatment approaches that identify and utilize strengths as strategic elements of treatment planning may further enhance the adaptation of children with Asperger's into social, educational, and occupational settings.

Additionally, there has been minimal attention to gender differences in treatment for persons with Asperger's Disorder, and few gender-specific interventions have been designed for school counselors. Since gender is a key contextual variable to be considered when designing wellness-based treatment (Myers et al. 2000), using a wellness-based treatment approaches may be advantageous for counselors working with Asperger's children. Furthermore, interventions for children with Asperger's often are not designed for unique milieus. Consequently, school counselors who work with children with Asperger's Disorder need resources that are designed to be used within the unique cultures of schools, that are intended to complement protocols and guidelines that schools have in place, and that target appropriate goals for school-based counseling interventions. Along with emphasizing strengths and gender effects upon the treatment process, wellness interventions designed for schools further personalize treatment to the individual and environment.

#### School Counselors Working with Asperger's Disorder

According to the ASCA National Model (2003), school counseling programs promote and enhance academic development, career development, and personal and social development. School counseling programs based on these standards are being implemented by most states and use several types of intervention strategies, including individual and group counseling, classroom guidance, and consultation (Erford, 2003),

emphasizing crisis intervention and remediation, along with prevention and promotion of healthy development (Gysbers, 2001).

A growing concern for school counselors is increasing numbers of students whose mental health needs and developmental disabilities place them at risk for school failure (Keys, Bemak, & Lockhart, 1998). A discrepancy exists between what school counselors need to understand about mental disorders and their knowledge base since counselor education programs typically prepare school counselors to understand students' developmental needs, but do not provide training in recognizing and treating mental disorders, developmental psychopathology, or psychopharmacology (Lockhart & Keys, 1998). Additionally, school counselors' scope of practice is primarily focused upon short-term prevention or intervention compared to mental health counseling which is usually more clinical, and possibly long-term (Keys et al., 1998). Nevertheless, as more students present for mental health services within schools, school counselors often are first contacted for assistance and expected to provide direct, appropriate counseling services or links necessary services (Keys et al., 1998). School counselors must not only understand normal social, emotional, cognitive, and physical development, but also have a working knowledge of various mental health issues and disorders to work with parents, teachers, and other mental health professionals in various capacities such as contributing to Individual Assessment Teams (IATs) to determine needs for psychological assessment, Individual Educational Plans (IEPs) to design educational and treatment plans for students with disabilities, and care-teams (Dettmer, Thurston, & Dyck, 2005). School counselors also must stay knowledgeable about federal laws affecting students (e.g., the reauthorized 1997 Individuals with Disabilities Education

Act, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act) which increasingly require them to help provide services to students with disabilities (Bowen & Glenn, 1998). Aligned with the roles of leadership, advocacy and collaboration in the ASCA National Model (2003), school counselors must be knowledgeable about mental health and developmental disorders that affect students, advocate for services for students, keep up on current research, and utilize resources to respond to students' mental health needs (Kampwirth, 2003). When school counselors collaborate effectively with parents, teachers, and community mental health professionals, students benefit and counselors' positions as invaluable, essential members of school programs are enhanced.

#### Wellness-Based Treatment Models

Wellness is an alternative paradigm to current medically-oriented models of treatment. In wellness models, individuals and corresponding treatment are conceptualized within a holistic, strengths-based, developmental framework versus a medical, diagnose and treat model. Wellness has been defined as “a way of life oriented toward optimal health and well-being in which body, mind, and spirit are integrated by the individual to live more fully within the human and natural community...the optimum state of health and well-being that each individual is capable of achieving” (Myers, Sweeney, & Witmer, 2001, p. 252). It entails preventive, proactive behavior to achieve unique maximum potential by integrating mind, body, and spirit, and enhancing present strengths to increase overall and specific areas of wellness (Myers et al., 2001).

### *The Wheel of Wellness*

Various wellness models have been proposed, but many have failed to incorporate a truly holistic description of human functioning. However, one wellness model is grounded in counseling practice and literature, Myers and Sweeney's (2004) Indivisible Self Model of Wellness. The Wheel of Wellness model was the basis for the Indivisible Self Model of Wellness and illustrated wellness as interconnected life tasks (i.e., spirituality, self-direction, work and leisure, love, and friendship) that are affected by contextual factors such as gender identity, cultural identity, and lifespan development (Myers, Sweeney & Witmer, 2000). Each individual can achieve optimal wellness through attending to each of the interconnected and dependent relationships among the domains of wellness. The Wheel of Wellness has been empirically supported with various populations, including a range of ages, numerous racial and ethnic samples, and men and women (Myers, Madathil, & Tingle, 2005). Additionally, the Wellness Evaluation of Lifestyle (WEL) was developed to assess levels of wellness based upon the Wheel of Wellness (Myers, 1998). Though the WEL demonstrated psychometric integrity, reliability, and validity, further factor analyses indicated that a more descriptive factor model existed and thus, the Indivisible Self Model of Wellness was created (Myers & Sweeney, 2004).

### *The Indivisible Self Model of Wellness*

The Indivisible Self Model of Wellness (illustrated in Figure 1 and reprinted with authors' permission) includes one higher order factor and five second order factors (Creative Self, Coping Self, Social Self, Essential Self, and Physical Self), which are comprised of 17 third order factors.

Figure 1

The Indivisible Self Model of Wellness



From “The Indivisible Self: An evidence-based model of wellness” by J. Myers, J. and T. J. Sweeney, 2004, *Journal of Individual Psychology*, 60, 234-244.

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The third order factors describe additional aspects of functioning: 1) Creative Self includes thinking, emotions, control, work, and positive humor; 2) Coping Self includes leisure, stress management, self-worth, and realistic beliefs; 3) Social Self includes friendship and love; 4) Essential Self includes spirituality, gender identity, cultural identity, and self-care; and 5) Physical Self includes nutrition and exercise. Local,

institutional, global, and chronometrical contextual variables are key elements of understanding human functioning within the model. Local contexts include influences from immediate systems in which we live, such as families and communities. Institutional contexts include government, economics, and media. Global contexts pertain to political events, cultural influences, and environmental occurrences. Chronometrical contexts account for lifespan development. All of the elements are interdependent and change in one area affects other areas.

The Five Factor Wellness Inventory (5F-WEL) assesses wellness according to the Indivisible Self Model of Wellness (Myers & Sweeney, 2004). Comprised of 99 items, respondents answer using a four point Likert-type scale from 1=Strongly Agree to 4=Strongly Disagree (Myers and Sweeney, 1999). Results indicate wellness on the higher order general factor, and for the five second order factors.

#### *Adolescent Wellness Research*

Although some research has been conducted on adolescent wellness (Garrett, 1996; Hartwig, 2003; Myers & Mobley, 2004; Myers, Mobley, & Booth, 2002), minimal research pertains to wellness in children and individuals with special needs. Among adolescents, wellness has been defined as a product of youth embracing healthy lifestyles, utilizing positive coping skills, understanding how individuals relate to their environment, responding to life demands, and feeling part of activities (Sussman, Dent, Stacy, Burton, & Flay, 1995). Wellness models and the efficacy of such have been empirically supported primarily with adult populations; however, existing research has identified gender differences in various aspects of wellness, including moderators of adolescent wellness, and the relationship between wellness in adolescence and

adulthood (Ryff & Heidrich, 1997). Existing empirical studies indicate that specific aspects of adolescent wellness, such as mental health, risk taking, and general health, are affected by social influences (Sussman et al., 1995). Supportive family environments as social influences specifically enhance adolescent wellbeing (Harter & Vanecek, 2000). Gender has been documented as a moderator of wellness for adolescents and adults (Garrett; Ryff & Heidrich; Steiner, Paveleski, Pitts, & McQuivey, 1998) with males scoring more well than females overall (Myers & Mobley; Ryff, 1989). The relationship between adolescent wellness and wellness across the lifespan has been established as well (Sussman et al., 1995; Steiner et al., 1998); thus, it seems reasonable to extrapolate that childhood wellness is important to lifetime wellness.

Considering the empirical support for the importance of wellness among adolescents and the impact of youth wellness upon lifetime wellness, counselors need to actively attend to adolescent wellness. Furthermore, because accountability is paramount to school counseling programs, the ASCA National Model (2003) encourages school counselors to collect outcome data when implementing interventions to determine the value of such actions and how students benefit. Thus, this study examined the effectiveness of a wellness-based treatment plan, executed by a school counselor with a 13 year-old boy diagnosed with Asperger's Disorder.

## Method

### *Participants*

"David," a 13 year-old boy in the eighth grade at a private, Mennonite school in the Midwest, had been diagnosed with Asperger's Disorder. David's parents asked the school counselor to develop new treatment approaches for their son. Therefore,

parental consent, Human Subjects Review Board approval, and David's assent were obtained to develop a wellness, strengths-based treatment plan to optimize David's social, academic, and personal functioning via identifying and utilizing his strengths.

David is the oldest of four boys. He is of European/White American descent and lives in a middle-class family with his biological parents who are both college educated and employed full-time. Despite no familial history of Asperger's Disorder, David was diagnosed with Asperger's at age four by a team of neurologists and psychiatrists at a children's hospital observed David exhibiting inappropriate social skills, screaming, object fixation, and perseveration on items and topics, along with extremely high aptitude for numbers and reading. An Individual Educational Plan (IEP) was developed for David through a public school system. By age 12, David's parents determined that he was not thriving in the system as indicated by David's low self-esteem, academic underachievement, limited positive peer relationships, and inadequate special needs programming offered by the school. At the start of eighth grade, David's parents placed him in a private school and asked the school counselor to develop new strategies to enhance David's academic success.

### *Instrumentation*

David's levels of wellness were assessed using the Five Factor Wellness Evaluation of Lifestyle – Elementary Version [5F-WEL-E] (Myers & Sweeney, 1999) by one of the researchers who also served as his school counselor. The participant was tested in the spring semester to establish a baseline of functioning, which served as the basis of the treatment plan. He also was assessed at the end of the summer break to gather outcome data on the success of the treatment plan that had been implemented

in the spring semester and summer break. Results were obtained by sending the data to the test developer who scored the data and returned the participant's scores to the researchers with a Brief Interpretative Report.

The 5F-WEL assesses levels of wellness (Myers & Sweeney, 1999) via the factors that comprise the Indivisible Self Model of Wellness (i.e., a general wellness factor, five second order factors that describe related areas of functioning, and ecological contexts of wellness). The 5F-WEL-E has 99 self-report statements, to which an individual answers Strongly Agree, Agree, Disagree, Strongly Disagree. In addition to being published in English, Korean, Turkish, and Hebrew, age-appropriate versions of the 5F-WEL are available: Version A, written at the 9<sup>th</sup> grade reading level and intended for high school students and adults; Version T, written at the 6<sup>th</sup> grade reading level and intended for middle school students and/or early adolescents; and Version E, written at the 3<sup>rd</sup> grade reading level and intended for elementary school students. To ensure the participant's comprehension, the 5F-WEL- E was used.

Reliability for the 5F-WEL ( $n = 2,093$ ) general wellness factor as well as the five second order factors is as follow: Total Wellness=.90; Creative Self=.92; Coping Self and Social Self=.85; Essential Self=.88; and Physical Self=.88. Reliability for all but two of the third order factors (Self-Care, .66 and Realistic Beliefs, .68) range from .70 to .87. Convergent and divergent validity of the 5F-WEL has been supported in regard to ethnic identity, acculturation, body image, self-esteem, and gender role conflict. Several additional resources are available for the 5F-WEL, including the 5F-WEL Manual (Myers & Sweeney, 1999) containing norms for over 2,000 individuals of different ages and

ethnicities, a Brief Interpretive Report available with each scoring of the instrument, and a Wellness and Habit Change Workbook (Myers, 1998).

### *Procedures*

David was administered the 5F-WEL-E pre-test in the eighth grade. Instructions and questions on the instrument were read by the school counselor and responses were recorded on an answer sheet by the school counselor per accommodations allowable in David's IEP. The administration was conducted in two parts on two consecutive school days to account for David's limited ability to tolerate testing. A treatment plan was based upon the results.

Following a five month course of treatment, a post-test 5F-WEL-E was administered after one month into the ninth grade. Test procedures and administration were consistent with the first administration except that the second administration was conducted in one sitting due to David's increased ability to tolerate testing. Results were scored and compared to pre-test results.

### *Assessment Results*

Currently, the 5F-WEL-E is being normed; therefore, male norms for the 5F-WEL-Teenage Version were used for comparison. The 5F-WEL-T contains norms from 1142 youth, in grades nine through 12. On a scale from 0 to 100, David's Total Wellness score was 84, higher than the mean Total Wellness score (mean=75.47; SD=7.10). Scores in four of the five second order factors were greater than one standard deviation above the 5F-WEL-T norms with the exception of the Physical Self factor, on which David scored 69 (mean=75.53; SD=13.33). David's pre-test scores are detailed in Table 1.

Table 1

Comparison of Pre-Test and Post-Test Scores on the 5F-WEL-E

<b>Factors and Subscales</b>	<b>Norm Mean Scores</b>	<b>Standard Deviations</b>	<b>David's Pre-Test Scores</b>	<b>David's Post-Test Scores</b>
<i>Total Wellness Score</i>	75.47	7.10	84	82
<i>Essential Self</i>	79.04	10.49	90	90
Spirituality			100	95
Self-Care			88	100
Gender Identification			88	88
Cultural Identification			81	75
<i>Coping Self</i>	74.66	8.33	86	85
Realistic Beliefs			75	85
Leisure			88	79
Sense of Worth			83	100
Stress Management			83	75
<i>Physical Self</i>	75.53	13.33	69	78
Exercise			50	60
Nutrition			94	100
<i>Social Self</i>	74.11	8.17	91	89
Friendship			85	90
Love			85	88
<i>Creative Self</i>	74.22	9.18	80	75
Intellectual Stimulation			75	75
Work			81	71
Emotional Responsiveness			88	69
Sense of Control			88	81
Sense of Humor			83	73

### *Discussion*

David's pre-test scores corresponded with the school counselor's and David's parents' observations of David's psychosocial functioning and academic performance (i.e., adults observed deficits in David's execution of self-care, corresponding to low pre-test scores in the Physical Self domain). David scored highest on the Social Self factor, validating reported and observed parental and family support and indicating a sense of established and valued friendships. High scores on the Essential Self factor and especially on the corresponding Spirituality factor seem to relate to the family's significant involvement in their church and David's enrollment at a faith-based, private school in which Christian teachings are integrated into curriculum. Coping Self scores indicate relative wellbeing in regard to self-awareness and the ability to use various resources, supports, and coping skills, though improvement could be made in these areas. Lower scores on Creative and Physical Self factors imply difficulty around autonomous internal and external self-care, possibly in self-perception and behavior.

### *Treatment Plan*

Based upon the 5F-WEL-E results, a treatment plan was designed to optimize David's current wellness functioning and personal strengths in order to enhance other areas that were less well. David's preferences of routine and consistency, preferences of particular importance to persons with Asperger's Disorder (Attwood, 2005), were identified through interviews with him, his mother, and the educational support team. The school counselor also recognized David's strong memorization ability as a key component to treatment. The treatment plan was designed to effect change in the domains of wellness with lower scores throughout three phases: the end of the eighth

grade school year, the summer break, and the beginning of the ninth grade school year. Results of the pre-test 5F-WEL-E indicated that the Creative and Physical Self factors had the lowest scores and the potential for the greatest improvements; thus, the treatment plan capitalized upon David's existing abilities to improve in these domains.

Phase I of the treatment began one month before the end of the eighth grade spring school semester. Four goals were defined for the Creative Self factor to help David recognize personal responsibility for assigned tasks and interpersonal interactions in the following ways: 1) timely completion of homework; 2) reasonable compliance with in-school directives; 3) increased verbalizations of awareness of household activities; and 4) increased recognition of verbalization about inappropriate and appropriate interactions. Two goals were defined for the Physical Self factor to help David increase awareness of diet and physical activity as evidenced by: 1) increased ability to verbalize healthy versus unhealthy food choices; and 2) increased ability to verbalize beneficial versus unbeneficial physical activity. Performances on goals were rated at consistent and designated times daily by the following ratings: 1=No success in this task; 2=Success 20% of the time; 3=Success 40% of the time; 4=Success 60% of the time; 5=Success 80% of the time; 6= Success 100% of the time. Phase I goals were reviewed with David daily during the school day at 10:00a.m., 12:00p.m., and 2:00p.m., by a paraprofessional student aide assigned to David via an Autism Scholarship provided by the state. Ratings were recorded on a goal rating chart for three weeks.

Phase II of the treatment was conducted at home over summer break. This phase of treatment focused on increasing David's initiative to accept responsibility for completing the identified goals in the Creative Self and Physical Self domains. David's

mother reviewed the Phase II goals with David daily at the three established intervals. A goal rating chart was utilized to review the daily goals over an eight week period.

Phase III of the treatment was conducted at school upon David's return to the ninth grade in the fall. This final phase of treatment maintained the same focus and goals used in Phase II. Ratings were conducted within the school and the rater was a paraprofessional individual student aide. David's ratings were recorded on a goal rating chart for three weeks.

### *Outcome Assessment*

Following implementation of the wellness treatment plan over five months, David was administered the 5F-WEL-E in the fall of ninth grade. David completed the test in one sitting compared to two sittings over two days that were required complete the pre-test 5F-WEL-E.

Post-test scores in the wellness domains were slightly lower than the pre-test scores; however, all of them were higher than the norm means for the 5F-WEL-T. David's Total Wellness score was 82, two points lower than his pre-test Total Wellness score of 84 (Total Wellness mean =75.47; SD=7.10). Additionally, David's results in other wellness domains were greater than one standard deviation above the 5F-WEL-T male norms. The treatment plan specifically targeted the Creative and Physical Self domains to increase levels of wellness. In the Physical Self domain, David scored 78, nine points higher than his pre-test score of 69. David's Creative Self score was 75, five points lower than the pre-test score of 80. A comparison of David's pre- and post-test scores on the 5F-WEL-E are noted in Table 1.

## Discussion

Upon first glance, David's Physical Self scores improved; however, Creative Self scores decreased. Additionally, most scores in other wellness domains were lower; however, these initial interpretations may not accurately reflect the changes that occurred over the course of treatment. It is important to further examine third order factors of the Physical and Creative Self factors that were targeted in the treatment plan, and the impact of conditions present during the assessment period upon the results.

First, the two wellness factors that were specifically targeted following the pre-test were the Physical and Creative Self factors. David's scores increased in overall Physical Self (pre-test=69, post-test=78) as well as the third order factors of Nutrition (pre-test=94, post-test=100) and Exercise (pre-test=50, post-test=60). Since this area had been problematic for David, increased scores are positive.

Scores on overall Creative Self decreased (pre-test=80, post-test=75), but the change was less than one standard deviation. An examination of the third order factors that comprise the Creative Self show how the overall score changed. Scores on Thinking remained the same (75). Emotions, related to expressing and managing emotions, decreased (pre-test=88, post-test=69), along with Control, related to a sense of control over oneself and environment (pre-test=88, post-test=81), Work (pre-test=81, post-test=71), and Positive Humor (pre-test=83, post-test=73). Important contextual factors to consider include the timing of the pre- and post-test assessments and the five-month duration of the treatment plan spanning the spring school semester, summer break, and fall school semester. David's family changed residences during this time,

and David entered high school and assumed more independent responsibilities which may have impacted these scores.

Second, the third order factors that comprise the Coping, Social, and Essential Self factors should be examined for additional context. Overall, Coping Self only decreased one point (pre-test=86, post-test=85), still greater than one standard deviation (SD=8.33). Given contextual variables present, variations in the third order factor scores seem reasonable. Leisure (pre-test=88, post-test=79) and Stress Management (pre-test=83, post-test=75) factors decreased. The pre-test was administered during the spring semester of David's eighth grade year as he was anticipating the coming summer break and the end of the school year. The post-test was administered during the subsequent fall semester, toward the start of the new school year. In contrast however, Self Worth remained constant at 100 and since this encompasses self-esteem, constancy seems especially important. Also, Realistic Beliefs increased (pre-test=75, post-test=85). Considered along with David's behavioral improvements, this increase may indicate improvements in David understanding his abilities and limitations, corresponding with behavioral successes over five months of treatment.

Analyzing other third order factors provides additional understanding of David's changes. Though Social Self decreased (pre-test=91, post-test=89), both pre- and post-test scores were well above one standard deviation (SD=8.17). Scores decreased in the two Social Self third order factors (Friendship pre-test=85, post-test=90; Love pre-test=96, post-test=88). As an adolescent and in the midst of transitioning from eighth to

ninth grade, these changes may be developmentally appropriate within the context of age-appropriate transitions.

Essential Self did not change (90) though scores in the third order factors which comprise this factor varied. Spirituality and Cultural Identity factors decreased (Spirituality pre-test=100, post-test=95; Cultural Identity pre-test=81, post-test=75), Gender Identity remained constant (88), and Self-Care increased (pre-test=88, post-test=100). The increase in Self-Care corresponds with the treatment goals of increasing aspects of and functioning in Physical and Creative Self domains and reflects internal growth that had been evidenced behaviorally via the treatment goals that David met.

Third, changes in scores among the various domains of wellness should be interpreted in light of the testing conditions. It appears noteworthy that for the pre-test, David had to finish the test in two sittings over two subsequent days due to his behavioral needs. For the post-test, David was able to complete the assessment in one day due to his improved ability to manage his behaviors and attention. Some of the score variations may be at least partially attributable to these environmental considerations. Higher scores on the pre-test may be due to the extra help that David had while completing the assessment (e.g., more time and assistance in reading and interpreting assessment questions) and lower post-test scores should be interpreted with consideration of less time that David needed to complete the assessment. Additional factors such as varying degrees of fatigue and stress experienced by David when he took both the pre-and post-tests may have influenced the data.

### *Treatment Recommendations*

This case-study illustrates a departure from traditional problem-focused treatment of persons with Asperger's Disorder. While it is valuable to understand a student's differences (generally regarded as deficiencies), adequate awareness of strengths can facilitate increasing student success. Thus, additional treatment recommendations for children with Asperger's Disorder include increased awareness of strengths that can be achieved through interviewing parents and teachers to learn how a student is able to cope with difficult matters or to succeed in certain areas, as well as observing classroom and peer participation. These strategies can provide key information for school counselors to assist students with academic and social achievement, and to establish consistent, trusting, and supportive relationships with students.

Additional treatment considerations include the need for additional comprehensive and multi-method assessment. Needs of students with developmental and/or psychological challenges are frequently complex and may involve comorbid medical conditions, necessitating additional medical assessment. Thus, medical and mental health professionals should be consulted, along with parents, and teachers to accurately assess and treat children with Asperger's Disorder. Behavior checklists, brain scans, parental input, academic evaluations, medications, and counseling may be combined for overall assessment, treatment, and adequate student development, although many times these multi-method approaches typically have been problem-focused. In contrast, the wellness method advocates identifying and utilizing individual strengths to overcome established problem areas. Due to the less-corrective and

health-focused nature of the wellness approach, school counselors can empower students through utilizing students' inherent strengths to cope effectively with stressors, to accomplish desired behaviors, and to master skill sets. Moreover, treatment planning attends to what students can do rather than what they cannot do, and positively stated goals promote greater levels of individual achievement.

### Conclusion, Limitations and Implications

To date, few treatment interventions are designed specifically for school children diagnosed with Asperger's Disorder and existing interventions often target deficits to be remedied or controlled instead of identifying, nurturing, and building upon strengths. This study directly answers the ASCA National Model's "How are students different as a result of the school counseling program?" (ASCA, 2003, p. 23) by looking at treatment for children with disabilities in a new way and offering a sensible, efficacious treatment approach that can be readily applied to a variety of students. School counselors are uniquely positioned to work directly with children who have Asperger's Disorder, as well as to indirectly intervene by collaborating with parents, classroom teachers, special teachers, and other personnel. School counselors can use wellness-based interventions to demonstrate effectiveness of such interventions and advocate for such approaches in treating other problems within schools including academic underachievement, low self-esteem, lack of social skills, attachment issues, bullying, and noncompliance, while adhering to the ASCA National Model guidelines (2003) of meeting diverse needs of all students, serving as leaders within the profession, working collaboratively, and advocating for all students.

Limitations to this case-study include the relatively short duration of the treatment plan, the participant's demographic characteristics, and the potential influence of the school counselor serving as David's counselor and part of the research team. Consequently, the results cannot be generalized to the larger population of children diagnosed with Asperger's Disorder. However, the results indicate that the participant responded positively to the wellness based treatment plan in many ways. Thus, this wellness-based treatment plan, designed for school counselors who work with students with Asperger's Disorder, provides a strengths-based alternative to school counselors looking for ways to work with children with Asperger's Disorder in their schools and for whom current models of treatment may be inadequate and ineffective in maximizing full individual potential.

Since minimal research exists pertaining to wellness in populations of children with special needs, further research using wellness-based approaches among children diagnosed with Asperger's Disorder seems prudent. It would be helpful to study the use of wellness treatment plans with children with Asperger's Disorder over longer periods of time, and to include males and females of varying ages, from public and private schools, and from diverse socioeconomic and ethnic backgrounds. Expanding the parameters of the research design could contribute to further generalizability and understanding about implementing wellness vs. deficit models of treatment for children with Asperger's Disorder in the schools.

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