PSYCHOSENSORY AROMATHERAPY RESEARCH PROJECT (PARP): Ten Years Later

Sylla Sheppard- Hanger, June 2008
Auckland, New Zealand

This paper is an update of an older paper on using essential oils with children who have behavioral and emotional disorders. First, I will present the original paper and then discuss subsequent papers that followed. I will present a follow-up on one participant, Colin, brief statistics on autism spectrum disorder (ASD), and introduce Cranial Structural work as a treatment showing good results for children with ASD.

Intersection Points for Aromatherapy and Psychotherapy in the Treatment of Behavior and Emotional Disorders

By Sylla Sheppard-Hanger, NHCP, LMT and Trevor Stokes, Ph.D.
1996, Atlantic Institute of Aromatherapy

In order to contribute to the scientific understanding of the psychotherapeutic applications of aroma, touch, sound, and other sensory processes, the Psychosensory Aromatherapy Research Project (PARP) was developed as a long-term collaborative program. Research began in 1997, as a partnership between the Atlantic Institute of Aromatherapy and the University of South Florida. This paper reflects the early stages of this research and describes the preliminary findings.

ABSTRACT: Psychotherapy and aromatherapy can be regarded as complementary procedures in the psychological treatment of children with behavior and emotional disorders. We will present initial research findings about the application of safe (non-toxic, non-irritant) blends of essential oils in contributing to the effectiveness of treatment for children with disorders such as autism, attention deficit disorder, and sensory defensiveness. Examples of research includes the effect of children's preferred personal blends of essential oils, both in terms of aroma and application to the skin, in the development of new skills such as relaxation, interpersonal communication, and concentration. In addition, the role of parents as participants in therapy and the use of essential oil blends in enhancing widespread effects of treatment will be presented. In this paper, we present preliminary data and impressions so far from our project. This is our second status report.


Dr. Trevor Stokes with Stephanie

INTRODUCTIONS:

Trevor Stokes, Ph.D., is a licensed Psychologist who is a Professor at the University of South Florida, in Tampa, Florida, USA. Professor Stokes is an internationally recognized scholar and clinical researcher in behavior analysis and therapy. His research over the past 30 years has related to the treatment of behavioral and emotional disorders in childhood. He is a native of Perth, West Australia.

Sylla Sheppard-Hanger, NHCP, LMT has 27 years of experience with essential oils as a Natural Health Care Practitioner and Licensed Massage Therapist. She is the Founder and Director of the Atlantic Institute of Aromatherapy (Tampa, Florida) and is the author of *The Aromatic Mind Book* (2008), *The Aromatic Spa Book* (2007), *The Aromatherapy Practitioner Correspondence Course* (2002), and *The Aromatherapy Practitioner Reference Manual* (1995). Besides her research, Sylla teaches, consults, and maintains a private aromatherapy practice (as a Licensed Massage Therapist, Structural Energetic Therapist, and Licensed Cosmetologist) in Tampa, Florida.

BACKGROUND:

This research project was conceived several years before it officially began in January of 1997. Because of the longstanding relationship between the two researchers, many discussions led to the actual, formalized studies presented here. For Sylla, it began when she noticed that one of her child clients, who was diagnosed as slightly autistic, was obsessed with smells. Of course, he was fascinated with the essential oils and the aromatic plants in her office garden. After consultation with Trevor, who was also a client of Sylla's at the time, we tried a blend on one of Trevor's clients, another autistic child, and received a favorable response! We realized that there could be a direct relationship between smelling and behavioral modification. This led to the formalized study.

As a Professor, Clinical Psychology Researcher, and Practitioner in the academic world, Trevor became curious about the effectiveness of aromatherapy massage. Through Sylla, he had the opportunity to consider this from the perspective of a regular, bi-weekly client. His sometimes intense and stressful professional life included cases of suicide, abuse, and aggression—all kinds of nastiness, despair, and unhappiness. In his words,

> "It was valuable to learn how to relax my body and allow myself to let the pressures of my daily schedule be put aside while someone else helped me to relax. In fact, I truly learned what relaxation meant. Prior to this experience with aromatherapy massage, I understood and taught relaxation during psychotherapy, but not to the extent that I understand it now. I also found myself thinking of the associations related to the aromas present during my massage. One was that of hot, dry summers in Perth (Sandalwood) and another that of the Australian bush

(Eucalyptus). These were pleasant, nostalgic, and relaxing associations. I came to appreciate the power of good aromatherapy. I was impressed and curious as a scientist-practitioner in psychology."

Sylla observed that one of her child clients, diagnosed with autism, was acutely interested in smells and scents. He was fascinated with the essential oils and the aromatic plants in her office garden. She began to discuss these observations with Trevor. These observations and many conversations led to the actual, formalized studies presented here. After the consultation with Trevor, they tried a blend with one of Trevor's clients, another child with autism, and received a favorable response, suggesting possible therapeutic applications. Trevor noted,

> "When Sylla started to discuss science and practice issues with me, my interest increased. Eventually, after I had been informed by Sylla's competency and interest in expanding the knowledge base of aromatherapy and psychology, we collaborated on the development of a research protocol for review by my university, the University of South Florida (USF), a major state research university with 45,000 students."

After USF approved the research for human participants, we proceeded and developed the Psychosensory Aromatherapy Research Project, (PARP) as a joint project. We began to examine the effectiveness of aroma and the application of safe blends of essential oils in psychotherapy with children who have behavioral and emotional disorders. Our initial questions included: *Can we determine whether the child has a preference for a particular essential oil blend? Does this choice remain constant over time? Can we teach others to assess this preference?* Our consent forms noted that this is a "Voluntary participation" and it "may not be effective ... nevertheless, the participants may enjoy participating."

PREFERENCE ASSESSMENTS

We developed a protocol to determine a preferred essential oil blend for the person, using paired comparisons, presented randomly. We then blended the choices and used them in our interventions with them to assess their effect on behavior. Following the premise of aromatherapy that the "perfume becomes the medicine," the attraction to certain essential oils because of their fragrance indicates that they may be therapeutic for that individual as well. Both parent and child were assessed to determine choices. In some cases, the children could not speak at all, and the mother's confirmation of an affirmative answer was necessary. Starting with 20 oils and by a formal process of initial deletions and randomized paired comparisons, selections were narrowed down systematically to the 3 most preferred oils. Scientific proof requires that results must be repeatable by different individuals. So, we wanted to see if an inexperienced person could introduce, affirm, and blend the essential oil choices into a pleasing overall aroma. To assess this, Trevor did

all of the oil presentations under Sylla's supervision. Trevor was able to do this without any prior training, indicating that an inexperienced person could carry out the task.

MATERIALS AND METHODS[1]:

We developed an initial kit of 16 oils, to which we later added several more, ending with 20 total oils. The particular oils were chosen with the exception of Rose and Jasmine, for their ready availability to non-aromatherapists, so that perhaps eventually, we could develop a kit they could use (which is now, in 2008, in production along with a little booklet on how to use them.) We chose oils based on their variety (e.g., woods, spices, herbals, flowers) and also those what represented the ranges of top, middle, and base notes in fragrance. We tried to stay away from heavily medicinal smelling oils—those with rare chemotypes, novel oils, and anything too expensive. We also kept in mind safety factors and used only oils that had been formally tested for safety, toxicity, and skin reactions, since we would be using them on the skin as well as for inhalation.

Originally, Rose and Jasmine were diluted to 20%, but we reverted to full-strength to keep all oils the same aroma strength. Oils were numbered and placed in 5-ml bottles with inserts to prevent spillage. Other materials included small disposable pipettes that fit into the bottle insert and a separate bottle of alcohol to clean pipettes in field use. Sample bottles (2-ml perfume sampler vials) were used to make blends and those used for "sniffer" blends contained a cotton blotter.

PROCEDURES:

By process of elimination, using a rating scale of 1 to 3, 20 original essential oils were narrowed down to between 8 and 12 in the first round. Oils were then presented, two at a time, in the form of a paired comparison or forced choice. Random pairing was accomplished by computer-generated number pairing. Eventually, these were narrowed down to 5 choices, which were compared to each other to determine the final 3, from which the blend was made.

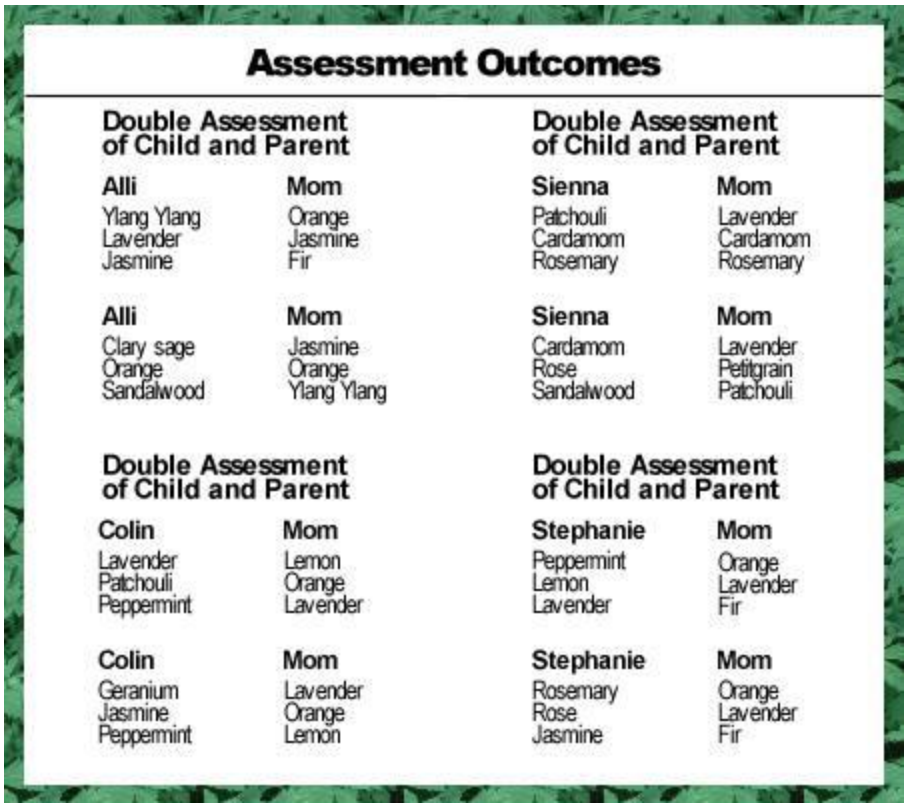
Participants inhaled directly from the bottle, which was held under the nose for up to three seconds. This presentation style saved time and helped prevent adaptation and burnout during assessment.

Dr. Stokes presents an essential oil while her mother observes.

ASSESSMENT OUTCOMES:

Outcome choices are presented below. During the initial assessment period of one week to two months, we removed obviously disliked oils and substituted others. The original samples remained the same with the exception of one. Our Lemon sample had become contaminated by Peppermint due to an accident, so we obtained a fresh sample and bottle. (We also switched to another method of sniffing after spilling a bottle on a nice table. One method we tried was a screw top cosmetic type jar with cotton and the oil, which they put their nose into, but again tops got switched and noses touched the oil. Eventually, we used plastic bottles with flip caps and put some drops on a cotton ball, then we just gently squeezed the bottle to get the scent delivered.)

Similarities between mother and child were noted. In most rounds, both mother and child chose at least one of the same oils, which is consistent with aromatherapy theories that close relationships are often attracted to similar or complementary oils. Another question we asked was concerning the stability of choices. Do they remain over time? In most cases, the oils chosen between the first and second assessment were consistent. Due to the addition of several more choices, the second round changes often included some of the oils that were added.



DISCUSSION:

One purpose of the research was to explore effective strategies in psychotherapy that included the use of aroma. The development of collaborative actions required flexibility and communication between our two areas, psychotherapy and aromatherapy. We tried to approach these case studies without preconceived notions of procedures or outcomes, allowing us to quickly adjust the assessment and treatment procedures according to what we learned from the project participants. Therapeutic activities were based on psychological principles found within the fields of clinical psychology, learning, motivation, and behavior analysis. The first principle relates to psychological motivation for learning—aroma motivation. As applied to this research, there is an emphasis on the sensory consequences of a person's behavior and emotions, specifically as they result in pleasure or painful experience for the person. That is, is the behavior or emotion followed consistently with effects that cause pleasure or pain? Does the access to the aroma make the person feel good? If a person makes an effort toward improvement, does the pleasure of the presented aroma reinforce that improvement? Technically, this is called reinforcing function.

The principle relates to the therapeutic experience itself—aroma memory. This involves associations, which have developed prior to therapy or are developed during therapy. Aroma memory may help a person feel relaxed, sad, excited, or a host of other emotions because of the meaning they have for a person. Technically, this is called a discriminative function.

CLINICAL EXAMPLES:

The general goal was to contribute to the quality of life of the children and families involved. The procedures discussed were part of a general therapy program, which included other interventions not relevant here. This presentation is based on preliminary results and impressions using data collected by direct observation and participant records. As these are initial case studies, no claims are made as to the experimental control of the effects or to the general application of these outcomes to other cases. Obviously, replication will be necessary before definitive conclusions can be drawn in a manner consistent with scientific standards regarding probability and experimental control. Clinical examples from the research can be found next.

CASE STUDIES

ALLI

Alli is a seven-year-old child who presented with extreme tactile defensiveness. She found it extremely painful when clothing was in contact with her skin. When she was three, she complained that clothing hurt. By five years of age, she refused to wear clothing, despite the conscientious attempts of her parents to encourage and require the wearing of clothing. She was extremely aggressive, complained frequently about pain, was anxious and depressed. She had social problems, thought problems, and attention problems. All of these challenges were in the serious clinical range, compared to other children her age. Alli had a psychological diagnosis of oppositional defiant disorder. This, in fact, was a very adaptive reaction to the pain imposed by adults and other caregivers insisting that she dress. She also had a generalized anxiety disorder. Following six months of treatment, Alli showed considerable improvement and moderation of problems to within a normal or typical range, although variation is still noted within a chronic course of such a severe challenge. The initial treatment involved various interpersonal and motivational changes in Alli's home. Of particular relevance for aromatherapy is the incorporation of aroma motivation procedures to encourage Alli to engage in morning distraction and calming exercises prior to going to school. If Alli demonstrated her own initiative in completing distraction exercises, which included jumping on her bed and bouncing around on the floor, and if crying, whining, and complaining were relatively mild (on a scale with ratings of mild, moderate, and severe), and if Alli's general state of agitation, anxiety, and discomfort were mild, she was allowed to have a smell strip with her preferred blend of three oils on the way to school in the car. Alli's blend included Orange, Clary sage, and Sandalwood. The results show that there has been a consistent improvement in Alli's ratings by her mother following the use of the aroma motivation procedure. That is, Alli is more consistently completing her exercises without problems, and she is less agitated and anxious when she leaves for school and earns the access to the preferred aroma in the car during transportation.

COLIN

Colin is an eight-year-old child with autism and anxiety challenges. He attended special classes at his local primary school. As is typical of autism, Colin showed limited social interaction and communication skills. His attention to his schoolwork and homework was often short-lived, and he appeared to not react normally to the environment around him because of his neurologically-based attention deficit disorder. Colin's concentration skills and homework completion were the focus of intitial treatment evaluation. Colin was asked to study 10 spelling words for two minutes, and then complete a spelling test by writing the words when asked. After a short break, he was asked to complete 10 math problems (e.g., 12 minus 6). After another short break, Colin was asked to listen to a story read by an adult, and answer 10 questions about the story in order to check on his comprehension. Prior to the use of the aroma motivation procedure, Colin's attention to these tasks was inconsistent and limited. He also engaged in many actions to divert attention away from the academic requirements. For example, he would ask irrelevant questions, repeat comments made by adults, ask to go elsewhere or change activities, and say he didn't know how to do what was asked. He had to wear his hat all the time. Following the introduction of the aroma motivation procedures, Colin would take off his hat, he concentrated more, and the quality of his work improved. The procedure involved the presentation of the vial of essential oils to allow access to the aroma when Colin had been concentrating, answering questions, and completing homework for a few minutes. The aroma blend used for Colin was Lavender, Patchouli, and Peppermint.

Colin enjoying the aromatic plants in Sylla's office garden

SIENNA

Sienna is a 10-year-old child who was born 10 weeks prematurely, with intracerebral hemorrhage, apnea, and later was diagnosed as having cerebral palsy and autism. Psychological treatment prior to the involvement of aromatherapy involved the management of severe aggression, withdrawal, and communication problems. The collaborative treatment involving aromatherapy focused on facilitating relaxation and better sleep at night. During preference assessment, Sienna chose Cardamon, Rose, and Sandalwood, which were mixed for her

personal blend. This blend was used for an aroma memory procedure, which associated the aroma with the relaxation of an evening bath, and with later diffusion of the aroma into the bedroom during the night. Five drops of the blend of oils were placed into a full bath of water and the oils dispersed throughout the water by hand agitation. Sienna bathed for 15 minutes. Five drops of the personal blend were placed on a scent diffuser in her bedroom 10 minutes prior to going to bed. This aroma blend was only used for Sienna's bath and in her bedroom at nighttime. The outcome of these procedures was that Sienna slept through the nights more consistently and she slept longer. Previously, she woke up many times during the night and was ready to get up for the day at 4:00 a.m. After the aroma protocol, Sienna woke up significantly less often and slept for an extra hour or two in the morning.

MADAME X

Madame X is a professional woman in her 30s who experienced sleep disturbance. She awakened in the middle of the night and had difficulty returning to sleep because the anxieties of her daily activities intruded into the nighttime. An aromatherapy bath prior to going to bed has been the treatment for Madame X. Her choice for a personal blend of essential oils was Orange, Lemon, and Jasmine. Procedures were similar to those used for Sienna. For an evening bath, the personal blend was mixed (one part) with fractionated coconut oil (three parts). This dilution was used to avoid possible skin irritation from the orange oil. Ten drops of the bath oil were dispersed in the bathtub after it had filled with water. Then Madame X soaked and relaxed in the bath for 15 minutes. Later, 10 drops of the undiluted blend were placed on the diffuser prior to bedtime. The outcome of these procedures was that Madame X had more undisturbed nights' sleep. However, following particularly, highly-stressful days, she still awoke and experienced the anxieties and had difficulty returning to sleep.

CONCLUSION

Acknowledging these to be preliminary findings, we nevertheless feel that the research is quite successful. Overall, we had very good, consistent results, and the promise of more concrete findings is quite exciting. In spite of the difficulty of a right-brained therapist submitting to the rigors of working with a scientist, our collaboration shows this is entirely possible and preferable to get the results appreciated. Obviously, it is necessary for the aromatherapist to associate with a highly-qualified psychotherapist, but these preliminary findings for both of our fields, aromatherapy and psychology, are quite promising indeed. Working within the scientific field to produce and evaluate results is the only way aromatherapy can be incorporated into mainstream psychotherapy, and anyone so interested should not hesitate to use his or her skills to do so.

We discovered that, despite the discomfort of learning to work together from different perspectives, we could produce valuable results. Our relationship as friends, as well as our therapist-client relationship, and our mutual respect for each other's individual competencies definitely enhanced our work. So much remains to be done to aid those afflicted with autism and behavioral disorders. The use of aroma is definitely a more pleasant route toward this therapeutic goal. Let us not forget that what each of us can offer as a seemingly small step in this field can be monumental in adding to the overall knowledge that can ultimately affect the well-being of the entire universe.

(Note: This is the end of the article that originally appeared in Aromatic Thymes, Winter '99, Volume 6.4, ISSN#1520-524X)

PARP UPDATE: Since 2000, we have gone on to show aroma performing better than touch and music for reducing self-stimulation behavior in brain-damaged children. The work that followed the preceding initial research is listed below. The titles of the papers are included with an explanation of our work.

Fischer, B. L., Stokes, T., Mowery, D, Medina, C., McQwown, S, Sheppard-Hanger, S, Bryant, J. B., & de Perczel, M. Y. (2000, November). Aroma as a sensory reinforcement to motivate engagement by children with autism. Presented at the 34th conference of the Association for Advancement of Behavior Therapy, New Orleans, Louisiana.

Sensory consequences have been used as reinforcers to motivate appropriate behaviors by children with autism. Touch, auditory, visual, and taste sensations have been used as reinforcers. However, little research has been done with olfaction. This study involved two children with autism and developmental disabilities. One child was a 9-year-old boy and the second child was an 11-year-old girl. This study examined the effectiveness of using the aroma of essential oils to improve attention, academic productivity, and communication. Absence of self-stimulatory rocking was also assessed by the differential reinforcement of other behavior. Within a multiple baseline design, the results showed that presentation of the aroma functioned as a reinforcer of behavior for both children. The first child's academic performance and attention to his work improved substantially. The second child's communication improved; however there was a downward trend during treatment. Her self-stimulation decreased dramatically with the presentation of aroma. These results show the usefulness of aroma consequence in increasing positive behavior.

Wright, M. F., Wallace, J., de Perczel, M., Healy, C., Sheppard- Hanger, S., & Stokes, T. (2001, May). Assessment of the effects of music and aroma

on relaxation and animation. Presented at the 27th annual convention of the Association for Behavior Analysis, New Orleans, Louisiana.

The effects of Aroma on relaxation and animation were tested in this study. The hypothesis was that when the twelve-year-old-child with cerebral palsy and autism was animated after listening to upbeat music, aroma presentation contingent on relaxed behavior would have a prompt effect on relaxation. A single case alternating–treatment design was employed and percentage of movement was measured during both treatment conditions. 10 sessions were held at the child's house, consisting of three 5-minute music periods alternating with three 5 minutes of aroma. A post-hoc no-treatment assessment was held at the end of the study in which aroma and music were withheld in the identical setting. Results show that the child exhibited more relaxed behaviors during the aroma presentation in the treatment condition. The opposite can be observed during the no-treatment condition, when she exhibited more relaxed behaviors during music. The data supports the conclusion that she was most relaxed when reinforced by aroma. Additionally, in the absence of aroma, touch served as a sensory reinforcer that facilitated relaxation.

Wright, M., Sheppard-Hanger, S., & Stokes, T. (2003, May). Sensory reinforcement of relaxation by children with complex health disorders. Presentation at the 29th Annual Convention of the Association for Behavior Analysis, San Francisco, California.

We examined whether the presentation of the aroma of non-toxic essential oils combined with deep touch pressure of the shoulders, arms and hands, when delivered contingent upon a reduction in frequency of movement, would improve the relaxed behaviors displayed by three girls with developmental disabilities. Participants demonstrated more relaxation when reinforced by touch plus aroma combined than when presented with touch alone, and the combined treatments were effective within a multiple-baseline design, examining changes in movement and heart rate.

The following two presentations were variations and combinations of the above three:

Stokes, T., Wright, M. F., Mowery, D. & Sheppard-Hanger, S. (2002, April). Sensory reinforcement. Presented at the Festschrift Conference for Professor Donald M. Baer, Lawrence, Kansas.

Stokes, T., Mowery, D., Wright, M., & Sheppard-Hanger, S. (2002, June). Sensory factors in behavior analysis treatment of children with

developmental disabilities. Presented at the third international conference on Child and Adolescent Mental Health, Brisbane, Australia.

COLIN FOLLOW-UP 10 YEARS LATER

I have watched Colin grow up, seeing him almost monthly on a regular basis. He is now 18-years-old and taller than his Dad. He continues to enjoy the aroma here when he visits, and over the years, he has been particularly attracted to the combination of Rosemary and Geranium. Interesting that Rosemary was the first plant he chose from my garden, at the time we began to notice his fascination with it. He must always stand next to the Ultrasonic Diffuser and have some good sniffs when he comes in, raving about how good it smells and how he loves it because it makes him feel so good! Then he usually takes a walk around my office to see what scents are new or try out other aromas. His favorite continues to be the above-mentioned combo, and he returns several times during his visit to sniff again and again. For his 18th birthday and graduation from school, I presented him with his own diffuser with his favorite oils, and I interviewed him on growing up with oils, aromatics, and plants. He confirmed that, "Everyone should use aromatherapy!" And especially children! He promptly went home and set up the unit in his room, and he is delighted to have his own diffuser now.

AUTISM

What Is Autism? Autism is a complex developmental disability that typically appears during the first three years of life and affects a person's ability to communicate and interact with others. Autism is defined by a certain set of behaviors and is a "spectrum disorder" that affects individuals differently and to varying degrees.

Prevalence: In February 2007, the Centers for Disease Control and Prevention issued their ADDME autism prevalence report. The report, which looked at a sample of 8-year-olds in 2000 and 2002, concluded that the prevalence of autism had risen to 1 in every 150 American children, and almost 1 in 94 boys. Other statistics found on the site: www.autism-society.org say that it affects 1-1.5 million Americans as the fastest-growing developmental disability with 10-17% annual growth. During the 1990's, the US population increased 13%, disabilities increased by 16%, but autism increased 172%. 90 percent of the $90 billion annual cost is for adult services, but the cost of lifelong care can be reduced by 2/3 with early diagnosis and intervention.

Causes: There is no known single cause for autism, but experts on autism spectrum disorders believe that most cases are caused by a combination of genetic vulnerabilities and environmental factors, including, for example, brain damage at birth. Parents of autistic children recently have fingered environmental toxins, and vaccines, in particular the mercury-

based preservative thimerosal as causes, but researchers have repeatedly failed to find a link. At this time, it is generally accepted that there may be hundreds of roads to autism, involving numerous combinations of genes and external factors.

While there is no known cure for autism, there are **treatment and education approaches** that may reduce some of the challenges associated with the condition. Intervention may help to lessen disruptive behaviors, and education can teach self-help skills that allow for greater independence. Children do not "outgrow" autism, but studies show that early diagnosis and intervention can lead to significantly improved outcomes. With the right services and support, people with autism can live full, healthy, and meaningful lives.

Structural Energetic Therapy (SET) and Cranial Structural work as part of ASD treatment.

In Tampa, Florida, Don McCann has now begun teaching SET therapists (having done over 1,000 cranial structural treatments) ways to help ASD children. Don has 30 years in practice as a Licensed Massage Therapist, Licensed Mental Health Counselor, Certified Postural Integrator, and Reichian Release Therapist. In addition, he adds to his holistic practice expertise in N.I.C.S Craniosomatic Therapy, Bioenergetic Therapy, Gestalt Therapy, Rebirthing, Electronic Acupuncture and Hypnosis. He developed the SET protocols described below.

Structural Energetic Therapy® uses deep tissue, therapeutic, medical massage techniques, Quick Release Technique, all integrated with Cranial/Structural Soft Tissue techniques, which are applied in specific protocols designed to bring the structure out of distortion patterns (including rotated iliums or rotated pelvis) and into structural balance. In doing so, chronic painful conditions like low back pain, sciatic pain, headaches, carpal tunnel, shoulder pain, tendonitis, foot and ankle pain, plantar fascitis, hiatal hernias and acid reflux, knee pain, heel spurs, TMJ, scoliosis, along with the restrictions from surgical scar tissue and adhesions, and so much more, can be very effectively treated, allowing the client to resume normal daily activities, in most cases pain free.

[1] "Case Study: Autism and Vaccines" *Time*, Monday, Mar. 10, 2008 By Claudia Wallis) What's unique about Hannah's case is that for the first time federal authorities have conceded a connection between her autistic symptoms and the vaccines she received, though the connection is by no means simple. A panel of medical evaluators at the Department of Health and Human Services concluded that Hannah had been injured by vaccines — and recommended that her family be compensated for the injuries. The panel said that Hannah had an underlying cellular disorder that was aggravated by the vaccines, causing brain damage with features of autism spectrum disorder (ASD).

Having already worked with new mothers and newborn babies, in the last few years, he began working with children with autism. He found amazing results from the Cranial Structural work. In many cases, the frontal bones are released, allowing swelling and facial sensitivities to go down; children who would not allow any touch on their faces could now be touched. In one case, the child began to sleep through the night, for the first time in eight years. Don has begun the first round of classes in this technique this year, so hopefully as more work continues in this area, other therapists can be taught the protocol and many more children can be helped. (See http://structuralenergetictherapy.com/)

So, this is another new area of exploration available for parents. But just as there is no one symptom or behavior that identifies individuals with ASD, there is no single treatment that will be effective for all people on the spectrum. Individuals can learn to function within the confines of ASD and use the positive aspects of their condition to their benefit, but treatment must begin as early as possible and be tailored to the child's unique strengths, weaknesses, and needs.

In conclusion, I only hope this paper is helpful and insightful on using aromatherapy on children with special needs; and that our work has opened the door for more therapists and parents to begin to explore the healing that our essential oils and bodywork can offer for their families.