# One Size Doesn't Fit All: An Inclusive Art Therapy Approach for Communication Augmentation and Emotion Control in Children with Autism

by

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#### **Abstract**

Autism is a pervasive developmental disorder resulting in problematic social interactions, activities, and language development, where communication, or the deciphering and transmitting of emotions, is hindered by a tendency for uncontrolled emotions. Current knowledge recognizes the positive effect of art therapy on developmental disorders. This study examines how art therapy could be applied to optimize recovery of children with autism. Specifically, it explores the question: How might art therapy intervention be designed to facilitate communication augmentation and emotion control in children with autism?

This study argues that, given the complexities of autism, a 'one-size-fits-all' approach of standardized processes and techniques might not be effective. An experiential model of art therapy intervention is proposed, which focuses as much, or more, on the experience of the child in the art making process as on the art piece created. This inclusive approach builds on, and accommodates, the diversity exhibited by children with autism.

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# Dedication

To E, the light of my life

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## 1 Introduction – The Case for Art Therapy

The value of art therapy intervention in the recovery of children with developmental disorders has been increasingly recognized over the past two decades (Evans and Dubowski 7). Autism is a pervasive developmental disorder characterized by problematic social interactions, activities, and language development. Uncontrolled emotions in children with autism hinder their communication with the outside world. Complexities associated with autism reduce the efficacy of standardized interventions. This study examines existing processes of art therapy intervention and proposes an inclusively designed approach to art therapy involving parents, art therapist and the child, which would facilitate communication augmentation and emotion control in children with autism.

### 1.1 The Unknown, Uncertain World of Autism

Autism, simply defined, is the incapacity to formulate a normal response to everyday stimuli, whether related to day-to-day routine or to basic needs such as hunger, thirst, etc. (McCarthy and Kartzinel 11). There are ongoing debates and theories on diagnosis and early intervention in autism that have yielded numerous labels to describe the many facets of this condition - with many symptoms or few symptoms, or in severe or mild form. Phrases such as 'autistic-like,' 'autistic tendencies,' 'pervasive developmental disability (PDD),' and 'Asperger's syndrome' are commonly used (Emery 143). It is important to use language such as 'child with autism' that puts the 'child' before 'autism' because the child is not defined by

her/his condition<sup>1</sup>. That being acknowledged, the term 'autistic child' has been used in some places in this report, wherever brevity was necessary to enhance clarity in communication.

The Autism Society of America has publicized the following variables for defining, identifying and diagnosing autism (Flowers 1):

- Delayed and/or disturbed physical, social, and language skills;
- Abnormal responses to sensations affecting one sense or a combination of sense or responses: sight, hearing, touch, balance, smell, taste, reaction to pain, and the way the child holds his or her body;
- Absent or delayed speech and language, despite normal thinking capabilities;
- Abnormal manner of relating to people, objects, and events.

The cause of autism is still a much-debated issue in the medical field. Insufficient data and scarcity of professionals serving the field add to the complexity of what appears to be an intricate system. Pediatricians, neurologists, psychiatrists and other medical professionals are in search of the Holy Grail of universally applicable standards structured for diagnosing and treating children with autism, both medically and psychologically. All these gaps and obstacles leave the parents of autistic children with

http://www.rtcil.org/products/RTCIL%20publications/Media/Guidelines%20for%20Reporting%20and%20Writing%20about%20People%20with%20Disabilities.pdf.

little room for understanding the autism phenomena and, consequently, for choosing the most appropriate treatment and/or alternative therapy.

Recent approaches examine not only the developmental stages and processes, but also take into consideration biological processes that may be responsible for the proper functioning of the brain, behaviour and social skills. Whether autism analysis focuses on neurological disorder, gastroenterological viral issue, or immune issue, there is no general consensus among the specialists as to the cause or cure of autism, leaving parents and caregivers under tremendous pressure to find answers and solutions (McCarthy and Kartzinel 10).

Usually, the autistic child's brain develops and organizes one or more different patterns, a fact that poses extreme challenges to parents and professionals. In comparison with the average children at the same development stage, some autistic children may exhibit a very limited vocabulary or even the lack of it, and have obvious difficulties relating to their peers. None of these mismatched puzzle pieces could be re-shaped or replaced without causing much emotional intensity and distress to all those involved in the recovery process (Emery 143). It is also noted that, along with the factors related to dysfunctional communication and language delays, researchers in autism emphasize that 'repetitive behavior' and lack of imaginative engagement play a critical role in identifying some of the main developmental issues related to autism.

In summary, children with autism need more help to react to others as well as to

be understood. Communication, which could be viewed as the deciphering and transmitting of emotions, is hindered by their tendency for uncontrolled emotions. The next section further examines these two aspects of communication, in preparation for attempting to find a way for the emotions to be unlocked and translated into a flow of meaningful communication.

#### 1.2 Communication and Emotion in Autism

Autism spectrum, or the range of symptomatic severity exhibited by children with autism, is marked by different stages in language development, the lack of response to social triggers and poor integration of social, communicative and emotional behavior. Some specialists suggest that the apparent lack of pride and feelings of pleasure, as well as the incapacity to understand and relate to the emotions of other people, lead to language delay, although it is accepted that further research is required on language and social development mechanisms in these children.

There is an increased interest manifested by the professionals working in the autism field towards considering art as pivotal in developing a visual dialogue. It is pointed out that the mother-baby interchange of primary audible and visual signals constitutes the first intelligent dialogue encountered by infants. Hence, the therapy that enables and encourages experimentation on a more symbolic level constitutes the base of "protoconversation", a term coined by child psychologist Trevarthen. He

showed that the protoconversation model features similar characteristics as those revealed in the 'conversation' between a mother and her infant. At this developmental stage, the baby is able to engage in dialogue only by producing various tones and sounds. Currently, many art therapists choose to take such protoconversation approach as the starting point in creating dialogue with autistic children (Evans and Dubowski 51).

Arguably, communication of the autistic child, initially emotionally based, could thus begin to shape around the verbal expression, step by step. Still, controlling their powerful emotions remains critical for further development on many other levels, such as sensory integration and social interaction.

If the aim of any therapy is to ground the autistic children and introduce them to what is perceived as general norms expected from a social individual, there is certainly a need for understanding emotion. What is emotion? How does it really function? How could one use emotions to transmit accurate signals to others so as to receive anticipated responses? These are questions that might constitute a terrain of research possibilities for a scholar to thrive, but, at the same time, they also rapidly metamorphose the life of an autistic child's parents into an endless maze.

In many ways, the process of deciphering the very complex emotional language of the autistic child is critical for carrying out the details of everyday life. Emotion is the only two-way-bridge that autistic children allow for linking their

far-away world with the extremely practical and challenging adult world. The need to understand the child's emotion emerges almost violently, the same way as the child's emotions come and go at high speed.

The authors of a recent research study on the subject of emotion emphasize that, not very long ago, experimental psychologists ignored emotion due to its highly subjective nature; only recently has emotion become central to their research interests (Shiota and Kalat 2). The main methods to be used in measuring emotion were identified as self-reports (narrations of participants' own feelings), physiological signals (body changes under a certain emotional stress) and behaviours (facial and vocal expressions). Yet, none of these has been established as the most accurate measure for pinning a certain emotion.

Four critical factors surfaced from the research results, constituting a vicious circle: cognition/appraisals, feelings, physiological responses, and behaviours. Each of these factors influences the others, and although they are thought to "hang together, most of the time," they don't always do so. As a result, "controversy persists about [...] whether the structure of emotion consists of a few basic emotions or continuous dimensions." The conclusion that the researchers cite is that emotion is complex, elusive, and hard to define (Shiota and Kalat 30). The variables for identifying these emotions are so many and so fluid, that there is no universal recipe that can be taken for granted.

The autistic child plays a complicated game of feelings, creating a dynamic field

of subtle energy that surrounds everything. She/he uses emotions to communicate every need and desire. Parents, by virtue of their constant association with the child, are best equipped with the intuition necessary for understanding what a child transmits through emotion. For this reason, they would form an essential part of any intervention.

Emotion is always present, but not always well understood. It could be compared with an endless ocean in which every drift and wave has a different nuance of the same or different colour. The autistic child seems to live in a world of colours that is mostly invisible to others who are locked out on the shore. They have no means to navigate on this ocean whatsoever. The child is not well equipped for letting them read her/his emotions. The only viable option is to find a way of controlling, by some means, the transmission force of such emotions, so as to enable the "others" to grasp and send a feedback.

This shifts the concern from the necessity to accurately define and/or identify the nature of every emotion launched by an autistic child to the need to develop the child's ability to read the main or even basic emotions triggered in others by a certain event. By developing that, the child would be able to formulate and transmit back a predictable response.

As noted by Uljarevic and Hamilton, there is no evidence as to whether or not autistic persons "are impaired in their ability to read basic emotional expressions. [...]. For the emotion reading impairment to be considered a

fundamental deficit in autism, impairments should be apparent across studies, paradigms, and control groups." (2) According to the authors, one way to test this is to conduct a formal meta-analysis.

These researchers have focused on "the big six: happiness, anger, fear, disgust, sadness, and surprise," all expressed by face and body (Uljarevic and Hamilton 2). The literature on the best-accepted methods employed for determining how autistic children identify the nature of others' emotions is impressive. What are the children's cardinal points in mapping the emotions reaching them from outside, in order to process a response? The methods considered by the cited authors were based on the analysis of three variables: participant's age and IQ; publication bias; and differences between individual emotions.

The first two methods do not seem very reliable. The controversy related to IQ variable seems, even in a less exceptional context, impossible to be reliably employed by the researchers, and thus, "it might seem surprising that this question still remains unresolved" (Uljarevic and Hamilton 6).

The second variable, publication bias, refers to the analysis of available publications. Inevitably, the studies on the subject are biased and plagued by the heterogeneity of results due to the huge diversity of the tests and cultural backgrounds that are all nuanced by the various experiences and areas of interests of the researchers as well as of the participants. Uljarevic and Hamilton revealed that different theories, trends and orientations in

interpreting various statistics and test outcomes add to the difficulties of unifying the research results published, and to avoid research bias (7).

It is worth mentioning the study published by Grinker and Cho, describing "reluctant mothers on the brink of accepting autism as a diagnosis, but caught in a web of social meanings that push them to resist it" (1). In South Korea, parents of autistic children as well as professionals involved in any developmental or educational process reject the 'autistic' label, replacing it with another one, 'border children' ('gyonggye-seon aideul'). The psychology underlining this trait is intrinsically related to the social status of the parents, which would be severely altered by the manner the society (family members, neighbours, friends, work peers) view the child of those parents. By labeling a child, a community has the intrinsic ability to determine the image of her/his family members, and thus, their access to social network, jobs, and ultimately, wellbeing. In addition, in a country where competition in schools is fierce, the marks received by children could pave the path to economic and social success, in the child's later life. The illusion of gaining recognition and wealth via reputable universities is, by all means, perpetuated.

The 'border child', appears as breaking the standard norms, and thus, he or she is conveniently considered to be too intelligent to exactly fit into the system. Any sign of unusual behavior, improper use of language or emotional burst is more often ignored. It is customarily believed that none of these specific

conditions would continuously affect the 'border child', and it is a matter of time and circumstances for the child to align with the usual norms, and eventually fit into the desired environment, whether educational or social. As the specific social settings and events shaping the child's public image are considered as being temporary, and thus limited in time, these are never viewed from the perspective of a continuum phenomenon. Therefore, the term 'border' became a label to stay for a long time.

As South Korean media and TV programs (via soap operas) depict autistic persons as doomed, embarrassing or weak people, the perspective of importing from the Western world of the foreign term of autism seems, if ever accepted, to potentially stigmatize the 'border children' and their families.

Grinker and Cho point out that, in sharp contrast, "the growth of disability advocacy and special education in the United States has depended in large part on the increasing acceptance of psychiatric diagnoses as markers of abnormality that, when deployed in institutional settings, can (ideally) yield therapeutic, financial, and educational benefits" (2). As a result, the US Government took the autism syndrome per se into consideration, issuing specific regulations and policies that help in distinguishing autism from other syndrome subcategories, and setting up certain standards for diagnosing autistic persons. The exclusion from funding and from social settings of the persons affected by any of the multitude syndromes and variations of autism became inherent. The vicious

circle was born. Parents and caregivers of children suspected as being affected by one of the syndromes of the autism spectrum disorder triggered a widespread rush towards obtaining the autism diagnosis (Grinker and Cho 51).

Research done in this extremely complicated weave of cultural, social and economic environments, has not supported the ambitious project of the formal meta-analysis researchers from the perspective of publication bias.

The third variable of the formal meta-analysis - the role of different emotions - engaged the researchers in complicated tests aiming to demonstrate whether autistic children could differentiate between happiness and fear, happiness and sadness or surprise etc. Unfortunately, as the authors Uljarevic and Hamilton pointed out, the magnitude of the data collection process was overwhelming.

The efforts employed for deciphering the capability of these children to read emotions are vast and yield confusing outcomes, leading one to question whether the formal meta-analysis approach is a realistic, or even reliable, one.

Gene V. Glass, a renowned researcher in this field, emphasized that "in education, the findings are fragile; they vary in confusing irregularity across contexts, classes of subjects, and countless other factors." (Glass, 1-2) Although he accepts the necessity of furthermore developing the formal meta-analysis approach, the author proposes a reorientation of attitudes and values. As the cited approach is heavily based on quantifying methodology, "the research literature has been abstracted systematically for over 50 years, but

integrations of this huge literature are rare" (Glass, 7).

Obviously, none of these studies could possibly help to diminish any effort to solve some of the mysteries of helping the autistic child to understand the outside world through transmitting and deciphering emotion. Controlling the various emotions triggered by different events remains for the time being the most reliable way to build an emotional 'control tower.' Moreover, as shown in most of the cited studies, inducing emotions could trigger ethical dilemmas. The most desirable way to help the autistic child manage emotions is by encouraging her or him to evolve, thrive and *find a common emotional language through arts*.

## 1.3 Evolution of Art Therapy

In her book "Healing Arts: The History of Art Therapy," Hogan reveals that art, as a form of therapy, evolved from the utilitarian philosophy of 'treating the insane' on the basis of what was dubbed as 'moral' treatment (33). Towards the end of the eighteenth century, various institutions were established for the purpose of treating insane persons by using 'moral techniques'. Assimilating and internalizing basic cultural rules and values were intrinsic to the 'moral development' of the individual in society of the time. Meanwhile, morality began to follow the route of a culturally acceptable system of rules and values within a given society or community. The direction to be taken was indisputably established by the society's members who were

assigned to judge the actions of all the others on the grounds of a previously formulated set of moral values (Hogan 34). Both visual and textual descriptions of asylums of that era indicate that the conditions in those institutions were hideously marked by brutality and mistreatment, "dominated by degradation and misfortune." (Hogan 35) The usage of punitive techniques such as drowning, chaining and rigid confining was employed to "frighten men into their senses, to subdue and train, to overcome and tame passions" (Hogan 235).

Regardless of the various attempts made by some medical practitioners to discredit such pseudo-scientific approaches, the so-called moral treatment was deeply rooted in the social norms. This set of rules was continuously implemented in the treatment practice of people with mental impairments with total disregard to medical knowledge. Stricter treatment was especially prescribed to women who were severely sanctioned for "deviances," such as entering the arena of politics. Women needed to prove their upholding of certain established moral values, such as "virtue and self-restraint," in order to escape from any undesired scrutiny (Hogan 40).

At the end of the 18<sup>th</sup> century, religion played a crucial role in society and therefore, it was used to back up certain practices and policies. For instance, the belief that madness should be cured through "spiritual counsel,

charismatic healing, prayer and fasting" was customary amongst the society of that époque (Hogan 38.)

The first attempt to break this continuous encroachment of the morality and religion into medical practice was made by the influential religious community of Quakers. They contributed significantly to preparing the grounds for psychiatry as a medical discipline per se, determining various groups of scholars to advance a more refined view on 'moral' treatment (Hogan 38).

Scholars with modern views believed that madness was a result of disturbed feelings, and therefore, in order to be treated efficiently, madness should be detached from the 'land of thought' (Hogan 34). They tried to prove that art provides not only an aesthetic experience, but also a powerful tool to be used in the process of healing mental impairments (Hogan 35).

The mental health institution of the nineteenth century managed to evolve, despite the fact that physical restraints (manacles, etc.) and forced labor continued to be used as important parts of the treatment plans. Visual arts and music began to be viewed as tools meant to distract patients from what was classified as psychopathological ideas. Most asylums and mental institutions featured galleries displaying paintings, but they were considered as being only an adjuvant in this therapeutic environment, designated to positively affect the thought and emotions of the patients. The patients themselves were never part of any therapy involving art-making. Some

physicians started to practice art with their patients, but most of them were reluctant to consistently do so, for fear that the "unrestricted expression of imagination" would damage and disrupt the morality of those treated (Hogan 41).

As early as 1847, artists were appointed to some of the British health care institutions to work with patients on drawings, an occupation believed to be a preparatory segment in curing mental illnesses. Whenever any predicted curing treatment yielded no result, the occupation of practicing arts was advanced as a palliative care option and a method to detract from the misery of the disease (Hogan 44).

William Morris, who exposed the alienation of the working class due to isolation and lack of access to aesthetic living, contributed to the development of art therapy by leading the Art and Crafts Movement in Britain as a search for aesthetic design and decoration and a reaction against the styles that were developed by mass, machine-produced goods. Morris, who was concerned with "the relation between arts and crafts and life" campaigned at The Great Exhibition of the Works of Industry of All Nations in 1851 in London for engagement of arts as means of achieving personal satisfaction, and encouraged "the revival of further impetus to the use of arts in hospitals in nineteenth century" in Britain (Hogan 45).

Freud's psychoanalytic theories, through the understanding of the imaginative and symbolic processes in diagnosing adults, provided further development in the evolution of art therapy. He identified two sets of processes. The primary one, imaginative and symbolic, was represented by "non-verbal and non-discursive modes" (Hogan 43). This process has been associated with neurosis, regression, wish fulfillment and general ill health. The secondary process, verbal and rational, was identified with analytical thought processes. This psychoanalytic theory is actually considered by psychotherapists as critical in opening the path for treating and curing through art therapy.

The client-therapist relationship started to constitute a subject of scientific research in several educational institutions, while the quest for the most adequate treatment methodology continued. For instance, the use of images was regarded as an opportunity to express personal instincts. The production of images was employed for satisfying the need to manifest those instincts on one hand, and for defeating the unconscious wishes by "preventing the individual to become consumed by one's own feelings," on the other (Hogan 67).

Art therapy—seen as a path towards developing and strengthening stamina as well as offering individuals an opportunity to represent their intimate inner world—gained new therapeutic value. However, at the same time, psychiatry specialists feared the potential pitfall of art-making: it was believed that it

could over-stimulate the patients by providing pleasure at an *imaginary* level, and that they would find *real-life experiences* unsatisfactory (Hogan 74).

Slowly, but steadily, analytic art therapy developed into art psychotherapy. Art psychotherapists started to emphasize the verbal analysis of the art works produced by the clients, although many art therapists use the two terms interchangeably today.

Using art for the healing of children with disabilities or adults affected psychologically is a relatively new approach. The first published details of such a project were recorded during the post World War II period, when traumatized children were exposed to art therapy. In a study conducted shortly after the war, but published only in 1961, Melanie Klein, the first analyst to use artwork with children, described the case of a ten-year old boy, who was equally divided between his own distress caused by the war distraction and the need to protect his mother. Klein clearly used a classic psychoanalytical blueprint that considered the symbolic representations in the child's art as manifestations of the subliminal. For instance, Klein focused her attention on the boy's perspective about aspects from the intimate life of his own parents. She noted that "the boy had no name for genital functions" and yet the representations of the ship masts or submarine periscopes carried a phallic symbolism (Hogan 68).

Similar studies using art-making as an auxiliary to verbal psychoanalysis started to spread quickly. Many of the interpretations given to the results of the experiments carried out were often contradictory. For instance, spreading paint over the entire surface of the artwork was interpreted as a clear indication of 'general immaturity' in some children, while other interpretations pointed toward the presence of 'independent personality' or 'self-confidence' in other children (Hogan 72).

Regardless of the huge mass of theories published until now, it is generally accepted that all forms of art therapy ultimately urge the clients to regard and manipulate art media as a means of exploring and exteriorizing intimate feelings and thoughts. From this point on, experimentation started to develop in various directions, of which the *Group Interactive Model* is of particular importance (Hogan 22). For the first time, the personal journey of the participant in art-making is developed by experimenting and interacting with peers. The Group Interactive Model considers that by laying greater emphasis on the interaction with peers, one could be helped to easily define and shape one's own personality structure. This continuous process of shaping the inner self soon became the main approach in conducting art therapy sessions. By focusing on specific interaction models present in everyday life, art therapists encouraged their clients to disclose and share current constraints framing their present life and experience. This approach became especially useful with children.

It is commonly observed that children's drawings and art often externalize their emotional experience. Psychologists and educators, who equally regard children's art as the expression of their thoughts and feelings, have studied the art produced by traumatized children in search of clues for the best educational and therapeutic paths that could help them out. This capability is influenced and developed by changes in the "cognitive, emotional, social and physical dimensions of their life" (Day and Hurwitz 45).

Again, several experts have examined the developmental phases through which children are expected to go during art making process. Day and Hurwitz talk about an initial manipulative stage (ages two to five), followed by an intermediary stage of symbol making (ages six to nine) and the preadolescent phase (ages 10 to 13) (46). Robert Schirrmacher defines five developmental stages: scribbling, pre-schematic, schematic, gang age, and pseudo-naturalistic. These are briefly described below (Schneider).

#### 1.3.1. Scribbling

Children aged two to four have rather undeveloped fine-motor skills. Their drawings reflect a randomness brought about by holding a drawing instrument with the whole hand while large arm gestures are used for drawing. More often, the child would not look at the painting surface. At the end of this phase, commonly called *Scribbling*, children have been shown to develop greater ability of holding and using drawing tools through more precise wrist movement. At

this stage, a mark found in most children's art is a circle that is often divided by lines running through it, commonly known as a 'mandala' (Day 51).

Loosely translated from Sanskrit, mandala means 'circle,' and could be seen as "a model for the organizational structure of life itself, a cosmic diagram that reminds us of our relation to the infinite, the world that extends both beyond and within our bodies and minds", as shown by <a href="Lori Bailey">Lori Bailey</a> <a href="Cunningham">Cunningham</a>, the founder of MandalaProject, a non-profit educational organization. As suggested by Schneider in Children's Developmental Stages in Art study, many common elements of these symbolic drawings are found in children's art.

#### 1.3.2. Pre-schematic

The *Pre-schematic* phase is characterized by children's ability to produce recognizable shapes on a surface, such as squares and triangles that are not related to one another, floating within the boundaries of the painted surface. The children are able to draw a stick figure that starts to present facial elements and expression. They may also develop colour preferences (Schneider).

#### 1.3.3. Schematic

With their increased engagement in daily activities, children aged seven to nine may start developing x-ray drawings, that also feature the inside of the

figures. They should be able to begin their drawing with a baseline that holds several other elements, overlapping each other. This is called the *Schematic* phase (Schneider).

#### 1.3.4. *Gang Age*

The *Gang Age* phase is associated with the developmental stage of children aged nine to twelve. They become sensitive about their artwork and the objects they paint, by relating to one another; e.g. they may pay attention to clothing in their figures or they connect the horizon line with the skyline (Schneider).

#### 1.3.5. Pseudonaturalistic

Between ages twelve and fourteen, children start crossing the *Pseudo-naturalistic* phase, characterized by attempts to use linear perspective and overemphasized sexual features in their figures (e.g. big breasts in female figures and big muscles in males) (Schneider).

Although art therapy is not new to psychoanalysis, practicing art therapy with children in the autism spectrum has been taken into consideration quite recently. With its powerful intervention techniques, art therapy could be expected to help alleviate autistic behavioural symptoms and stimulate communication and emotion control. Some of the first of this kind of program have been developed in the 1960's and 1970's when they were developed for

children in institutional settings (special schools, social services), as well as within private practices. However, the discipline gained greater momentum only during the 1990's.

#### 1.4 Use of Art Therapy in Autism

Although approaches for working with children tend to build a bridge between the practice of psychotherapy/psychoanalysis and the developmental theories and practices, the latter are most influential. With proven results, art therapy started to be strongly promoted as an invaluable tool in the treatment of autism by more and more schools, organizations and private practices that are involved in treating children with autism (Evans and Dubowski 7).

Janek Dubowski developed a model of developmental art therapy for children with communication and learning impairments in the 80's. He began advocating a strategy based on existing developmental studies with special emphasis on the parallel development of language and ability to communicate with pictures. Dubowski also noted that language itself is a dual process that functions internally (intra-communication), when a person's mind makes sense of own thoughts, feelings, intuitions; and externally (intercommunication), within a given social context, which is necessary for communicating with others (Evans and Dubowski 11).

In recent years, all these factors being taken into consideration, art therapy has started gaining in importance steadily among the other expressive therapies available, using music, dance/movement, drama, poetry/creative writing, and play for improving an autistic child's physical, mental, and emotional well-being.

According to Evans and Dubowski, art therapy also possesses the intervention techniques needed in communication development and sensory integration in children with autism (8).

Given that language is the primary instrument of communication among humans, it is critical to understand how a person interprets all the different and complex stimuli that bombard the senses and cause the brain to produce the appropriate sequence of responses. It is believed that the human mind is born with the capacity to learn language, not with the language per se. It is through "interaction with other language users, in particular parents or primary caregivers, that this innate predisposition for language unfolds. Many of the patients we work with lack this ability" (Evans and Dubowski 11-12).

The responses of autistic children to external stimuli are varied. Often the autistic brain has difficulties in dealing with such stimuli and finds them overwhelming and painful, resulting in 'avoidant behavior'. In these circumstances, the brain often prompts different parts of the body to move stereotypically and repetitively, a dynamic that often results in emotional breakdowns. Art therapists customize their intervention strategies based on each child's condition and ability to respond to stimuli, ensuring that she or

he receives and shares a quality experience with another person during art therapy sessions. The session is gradually oriented toward stimulating a variety of senses that help promote communication, whether verbal or non-verbal, in parallel with the expression and control of emotions. (Evans and Dubowski 16).

Some of the intervention therapies (e.g. TEACCH<sup>2</sup>, Makaton<sup>3</sup>, and PECS<sup>4</sup>) depend on the use of pictorial images. However, the new approaches in Art Therapy follow the same path, through encouraging the child to "recognize representational images and generate them". Consequently, art therapy aims to instill the need for dialogue within a relationship based on the use of imagery (Evans and Dubowski 10).

Beside developing a positive self-image, autistic children can benefit from the positive qualities historically associated with art-making: "development of ground discrimination, directionality, concept development, cause and effect, spatial relationships, form discrimination, body in space, perceptual motor skills, sequencing, tactile / kinesthetic awareness, fine motor skills, attention

<sup>&</sup>lt;sup>2</sup> Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) is a service, training, and research program for individuals of all ages and skill levels with autism spectrum disorders.

<sup>&</sup>lt;sup>3</sup> Makaton is a language program designed to provide a means of communication to individuals who cannot communicate efficiently by speaking.

<sup>&</sup>lt;sup>4</sup> Picture Exchange Communication System (PECS) is a form of augmentative and alternative communication. It is typically used as an aid in communication for children with autism and other special needs.

span, eye contact, pride in accomplishment, and an appreciation of beauty in the environment." (Flowers 1).

Through the practice of arts, therapists try to break the communication barriers with autistic children and bypass specific speech, sociability and behaviour problems. Artistic merit (or talent) is not a parameter in the process and, thus autistic children need only to engage in some form of art, by making use of a wide variety of materials (paint, crayons, water colour, canvas, paper, wood etc.) Art therapists will gradually add materials and tasks for increasing the visual vocabulary and helping children build upon their strengths and competencies (Betts 22). It has been demonstrated that art therapy can help autistic children increase or develop communication skills and cognitive functions, a sense of self in relation with others, and a positive bond with their therapist while negative emotions start to significantly decrease (Flowers 5).

Sensory integration, often referred to as the "vestibular system," and body awareness, referred to as the "prioceptive system," are also two main developmental goals that are known to benefit from art therapy. As already shown, the sensory information, sight, sounds, touch, smell, taste, connects with the brain which, in turn, instructs the body to act in a certain way. As long as the brain has great difficulty in processing and organizing the sensory information, the body has no chance to react properly and control its parts

and movements (*sensoryinfo.com*) This so-called 'cutting-off' process results in the crisis of anxiety occurring in autistic children when they cannot cope with certain external stimuli. Their ability to interact with others is greatly affected, too, while the instantly triggered distress is often followed by "avoidance behaviour or withdrawal" (Evans and Dubowski 98).

In summary, this chapter presents current knowledge in the areas of autism and art therapy for children, involving concepts such as *Sensory integration*, *Experimentation at the symbolic level*, and *Protoconversation*. Emphasis has been placed on art therapy intervention as a critical tool in the process of helping children with developmental disabilities in communication augmentation and emotion control.

#### 1.5 An Inclusive Approach to Art Therapy Intervention

Art therapy processes have been shown to lead to better understanding of child development phenomena. Experts agree unanimously that child development is not a standard process, as each child differs from another child in terms of mental, physical and artistic capabilities, changing rapidly from one developmental stage to another. Yet, specific, somehow standardized, developmental milestones are expected to be present in a pre-established order, at every stage of development. As an example, a child aged between two and four years is expected to develop scribbling and copy an imperfect circle, while children of nine to twelve years are expected to pay particular interest to

clothing and immediate environment in their drawings (Schneider).

Inclusion is about accommodating the full range of human diversity. New educational approaches such as 'Developmentally Appropriate Practice' place greater emphasis on the human diversity factor. Putting aside the standardized framework of developmental evolution, they aim to study ways of accommodating all children. The focus is on providing all children with a flexible learning environment and tools that are "responsive to the major attributes and salient needs and interests that characterize a given life period" (Schneider).

The main psychoanalysis theories discussed in the previous section do not associate art therapy with verbal analysis. Greater importance is given to the actual art that is produced than to the gestures made during the process of creating art, and the reaction of the participant to her or his own artwork.

Every child develops uniquely and, thus, understanding the mechanisms employed by autistic children to engage with the surrounding world is of high importance. It is essential for professionals involved in treating children with autism to embrace this perspective and tailor customized intervention plans that would better suit the needs of every child. It is believed that a customized treatment program could do wonders for the child in need to learn rapidly how to manage and control own disabilities (Emery 144).

Given the complexities of autism, and developed further on, a more inclusive

approach to art therapy could optimize benefits for children with autism. Inclusive design is design that is inclusive of the full range of diversity in the user group for which the design is intended<sup>5</sup>. The following chapter discusses such an approach in greater detail, where the focus is, as discussed above, not so much on the art piece created as in the experience of the child in the art making process.

# 2 Art Therapy as an Experience

This chapter lays out the researcher's synthesis of relevant knowledge from the fields of autism, art therapy and inclusive design to create a collage of six recommendations that fit together as an inclusive approach to art therapy for children with autism. These elements are described in the six sections below.

#### 2.1 Gaining Entry into Their World

Art making translates through communication at a symbolic level which, in turn, paves the way to more direct communication. The initial assessment is an essential step in establishing the necessary connection to bridge the art therapist and the autistic child. Eventually, this would develop into a relationship based intuitively on trust and understanding. The therapist may visit the child in his or her familiar surroundings to observe inclinations, behaviour, likes and dislikes, and to familiarize the child with the newcomer. During the assessment and consecutive sessions, videotaping could be used. This technique is extremely efficient for allowing in-depth analysis, merely needed to gather the data necessary for planning and/or adjusting the intervention strategy. It actually enables the therapist to heighten her or his awareness of the cues of the child's behavior, and analyze them at microanalytical level. This model of close observation guides the therapist in finding the best way to initiate a dialogue with the child under observation (Evans and Dubowski 98).

Evans and Dubowski continued to analyze the approach adopted by art therapist using blocks of paint, several sheets of paper of various sizes and shapes, brushes, a bowl of water and soft coloured pencils in a clear attempt to create interaction. In one of the analyzed cases, an eight-year-old girl soon immersed herself into the sensory experience of paint and water, utterly unaware of the presence of the therapist. Throughout the session, the child interacted minimally with the painting surface, leaving invisible watermarks on the paper. She became so obsessed with the new sensations through repeatedly stirring the water with brushes and smelling the paint, that she needed to be constantly and patiently brought back to the painting exercise (Evans and Dubowski 16). This case is typically presented to exemplify the so-called "communication and imagination developmental deficit." Hence, the numerous consecutive sessions need to be adjusted through consistent introduction of the child to diverse experimental elements. This method of persistence would encourage the child to expand her or his own sensorial field, facilitate communication and acquire social skills.

In what the authors refer to as an "approach-retreat case", they revealed how a seven-year-old boy displayed very elaborate communication sequence, without having even one direct contact such as eye, touch etc. (Evans and Dubowski 19). The initial interaction with the therapist took place in a game-like setting, where the child created an intricate system of hiding places that would eventually help him to escape from having any contact with the other

participant. Although the therapist initiated activities that would potentially interest the child, the reluctant boy showed great ability in controlling the whole process. As the child used the immediate comfort of the hiding places as buffering zone between himself and the therapist, any trespassing would be sanctioned through promptly launching a violent reaction.

Art therapists find themselves in a permanent quest to break the cycle of such redundant behavior. More often, these children's artworks reveal the presence of distress caused by some change in their immediate environment. The case of a nine-year-old boy is relevant from the perspective of communication deficit and emotional imbalance (Evans and Dubowski 40). It was noted that, over time, the child developed a very meticulous, schematic formula for drawing only animals. Thus, nothing could have deterred him from representing anything else. When the art therapist tried to divert him from his obsessive drawing by asking him to produce a drawing of himself, the child suddenly sank into great distress that was difficult to relieve. Much time and patience were needed for allowing the therapist to make close observations and adjustments, and to develop a customized strategy. When later on, in progressing of art therapy sessions, the new element of paint was introduced, the boy was able to grasp the change, analyze it, and adjust his behaviour accordingly.

Building a trust relationship with the child is essential for the therapist to provide a reparative bond and promote emotional control, and therefore the art therapists usually start stimulating communication by personally involving into each step of art-making processes developed by the child (Betts 23). The approach consists of genuinely mimicking the child's behaviour and emotions during the therapy. Initially, the art therapy operates actually at a symbolic level, as almost every time, there is no room for any verbal communication between the child and art therapist. Imitation and direct involvement could trigger a 'mirror effect', fostering the development of more direct communication and reshaping the entire thought process (Betts 24).

Drawing mandalas is another approach with which therapists can experiment in their practice with autistic children. Originating in ancient India, the mandala is far more than a simple blend of various shapes and colours. Buddhist rituals use mandalas as tools for offering spiritual orientation and enlightening the human mind. Jungian psychology considered mandala nothing but a symbol appearing in one's dreams. Its meaning is to be deciphered from the perspective of the dreamer's strive for unity and completeness, making it a potent tool in cognitive and behavioristic forms of psychotherapy (Expressive Therapies Institute of Australia.)

Thus, through understanding of the child's needs and reactions, the art therapist gains entry into the child's world where a fluid phase of experimentation with numerous art media begins.

## 2.2 Choosing Media Innovatively

Whether the art therapy sessions are structured in a one-on-one setting or involve small groups, exploring feelings using art materials is encouraged in all forms of art therapy. The usual paper, paint, collage, clay, sculpture etc. are materials or blend of materials that could be successfully used as alternative form of language, the 'visual vocabulary'. Their usage and substance have huge potential, unveiling deeply rooted feelings and emotions of the autistic child, and may empower one's work of art with 'magical' qualities that carry a big symbolic importance (Hogan 22).

Art therapists commonly design their sessions by focusing on helping the child to develop new abilities to communicate, pay attention and control emotions. While many autistic children respond very well to the use of water and fluid materials, others prefer pastier media, such as paint or clay. These obvious preferences usually dictate how the initial phases of therapy are to be conducted, and when the momentum is right to introduce new materials without causing distress to the child.

A primary focus on child's sensations and feelings is essential for the purpose of designing interactions. Wetness, smell, sound, texture, sharpness etc. are

all aspects that a therapist will share with a child. Considered as being a prerepresentational or non-representational stage, the process of introducing the child into the world of art materials actually represents a starting point in building a visual language in the child. This initial learning may develop into an enhanced connection between the child and art therapist, which is based on understanding, awareness, trust and empathy. By introducing new materials, the therapist helps the child broaden their language skills and emerge in a sense of self (Evans and Dubowski 61).

As seen in the previous chapter, the first technique is 'scribble', which is a drawing composed of random and abstract lines (see Figure 1). As a natural part of human development, it helps children to express her or his feelings and relieve stress easily. "Before scribbling, creating a relaxing atmosphere is a critical condition to encourage children to participate. Also, making them swing their body lightly is a good way" (Seo).

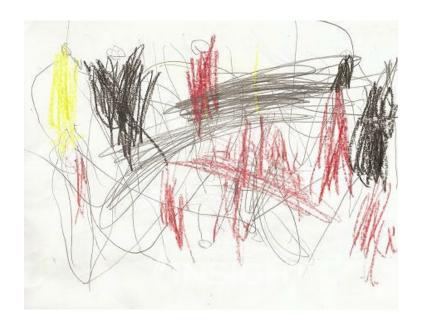


Figure 1. Scribble.

Scribbling is seen as a natural developmental phase and the child should be provided with surroundings that encourage such activity: a relaxed environment, various art materials, and space to allow the body to move freely throughout the process. Drawing random and abstract lines helps children express their feelings and relieve stress, and may inform the therapist about both emotional and intellectual processes happening in the mind of the autistic child. The therapist might guide the distressed child to gradually transfer the violent reactions, translated through uncontrollable body movements, onto paper. Hence, the art material itself could serve as a kind of shock-absorbing chamber that a child could be taught to easily access when faced with sudden disturbing changes.

Clay offers a rich media for sensuous experiences due to its soft, moist and malleable texture. By touching, rubbing and modeling clay, children relieve emotional distress, while developing a strong sense of dimension and orientation due to the endless possibilities to reshape and restore the initial form of the material. Playing with clay helps children develop a sense of accomplishment and confidence. Some art pieces created using clay are displayed in Figure 2.



Figure 2. Clay figures.

Often, art therapists engineer, through building on the children's fascination with a medium, an elaborated intervention technique meant to divert them from repetitive and obsessive behavior (Betts 23). In one of the case studies, the therapist introduced sand in the play to deter a boy's fascination with his own saliva. The art therapist observed that the boy would be entirely

preoccupied by the trails made by his own saliva. By introducing sand, a new object of interest was created, which successfully erased a disturbing trait from the boy's memory, by focusing on an imaginative and intriguing alternative.

The involvement of the parents into the art making process is also essential to the success of the art therapy process. In many cases, presence of the parents encourages the children to explore freely many of the household materials: water, flour, grains, sticks, pasta, and such (Seo). Any new element may be transformed into a potential art material. Therefore, children with autism must be allowed to express their preferences for any specific material as a part of art therapy.

However, suggestion for use of household edible materials as art media requires a cautionary caveat. Autistic children often manifest food allergies and sensitivities and might be undergoing some bio-medical treatment where extremely strict diet restrictions might be prescribed, such as avoiding gluten, sugar or casein. Understanding and addressing such food sensitivities is very important when using food ingredients as art materials (McCarthy and Kartzinel 30). Involvement of parents provides individualized care in these respects.

Finding ways to stimulate the imagination of an autistic child could be challenging most of the time, thus understanding the critical traits of the child is significant. Parents, again, would be able to help the therapist in this area. Many autistic children seem inexorably connected with nature, which soothes their intense emotions and immerses them in a pool of creativity. In such cases, art therapy sessions could be structured in public and leisure settings. Due to the richness of the environment newly opened for exploration, the child could easily become more interested in painting on previously unknown surfaces, like a large piece of bark that was detached from a fallen tree overturned by storm, or a wooden bench, rather than on the usual canvas. This framework could play multiple roles and have further benefits as illustrated in section 2.4.

Kathy Malchiodi presents a very relevant perspective on the importance of art materials considering that a person's interaction with this medium actually occurs on multiple levels. The exploratory process happens at kinesthetic/sensory level, and involves multiple senses: motor, touch, sight, smell, sound, etc., leading to "body experience of sensory expression through art materials" (Malchiodi 66-67).

Researchers in neuroscience believe that creating art can bring about positive physical changes in the body by way of enhanced emotion control. Therapeutic art programs have proven beneficial for pain management in hospitalized patients. Brain scans showed that creative thoughts and activities increased blood flow to the brain. They also raise the alpha wave patterns responsible for restful alertness,

in addition to raising the levels of serotonin, the neurotransmitter responsible for reducing tension and alleviating the feelings of depression. Stress reduction, increased capacity to communicate feelings about symptoms, improvement of blood pressure, and better regulated heart and breath rate are too, among others, the proven effects of art therapy (Malchiodi 174).

### 2.3 Keeping the Session Format Flexible

Autistic children are highly sensorial; they have sole proprietorship of an exquisitely aesthetic sense of the environment surrounding their everyday life. Anything that appears dull or loud (whether a room, street corner, a grey subway hall, some scratching wheels, unusual barking of a dog on the beach or violently accelerated engine on the road) could make such a child retreat almost instantly. Anything colourful, musical or whimsical might keep the child focused, joyful, and awake for a long time. Letting each child further develop this strong perceptual experience could be a valuable tool in a successful art therapy session. Art therapists should give their young clients every opportunity to express the inner self through colours, music and touch.

One of the first countries to regulate the practice of art therapists was Great Britain. The British Association of Art Therapists (BAAT) outlines the framework of these professionals: "Art Therapy is a form of psychotherapy that uses art media as its primary mode of communication." "Art therapists have a considerable understanding of art processes underpinned by a sound

knowledge of therapeutic practice, and work with both individuals and groups in a variety of residential and community based settings, for example: adult mental health, learning disabilities, child and family centers, palliative care and the prison service. [...] Applicants must have a first degree in art, although other graduates are sometimes considered, and some proper experience of working in an area of health, education or social care."

Art therapy rapidly became a branch of psychotherapy that could not always be employed for the purpose of customizing the art therapy programs. Rudolf Arnheim noticed: "We have neglected the gift of comprehending things through our senses. Concept is divorced from percept, and thought moves among abstractions. Our eyes have been reduced to instruments with which to identify and to measure; hence, we suffer a paucity of ideas that can be expressed in images and incapacity to discover meaning in what we see." (Arnheim 24)

Unleashing creativity should be a *sine qua non* for any art therapy program; no coercion should be employed. The art media offers endless opportunities for changes and metamorphosis: the edges of a certain surface could easily disappear under thick paint; the paper could be covered by various layers of art materials and transformed into textile, and next, even glued on the wood of the bench in public parks. The margin could become the center, meaningfully.

Max Beckmann (1884-1950) was a pioneer in use of space as a unique means of expressing the state of mind, fearlessly translating his horrific First World War experiences into unforgettable art works. "Space, and space again, is the infinite deity which surrounds us and in which we are ourselves contained." (Beckman 50) His art pieces could serve as a starting point for creating new avenues in approaching and interpreting the context of any visual vocabulary expressed by autistic children.

J.M.W. Turner's painting 'Light and Colour – The Morning after Deluge' (c. 1843, Tate Gallery, London, England) (Figure 3), with its endless creative space, resembles wide spirals and waves often found in works by autistic children. "The whirling mass of vibrant colour seems to suck human life into infinitude", as Turner called it, "totally overwhelming the viewer with the elemental forces of water and air, expressed through light" (Beckman 47).



Figure 3. J.M.W. Turner -The Morning After Deluge

The art therapist could potentially explore further facets of the art sessions by replacing the constraint of so-called occupational therapy activities with meaningful steps. These could be linked to a certain routine: organize the workspace, clean it, and so on. Gathering, disposing or choosing the kind of art media to be used during the art therapy session might seem basic tasks, but not for anxious children with autism. Everything could fit in place quite rapidly, while manipulating art media. The whole process, fragmented in sequences of activities, space, motion and periods of time, could start soon to

have a good logic for the child who eventually starts viewing art as means of translating feelings and creating meaningful works.

Art classes, while following a subtle routine, could fast emerge as a necessity, with the child manifesting expectations before going to the class setting where her or his imagination could run free. No constraints should be employed. The apparent lack of rules could lead the child toward developing the desire to create her or his own set of rules. The exceptions could be easily transformed into some kind of norms. Everything should be permitted: observation, adaptation to different spaces, some of which could be extremely distracting (due to the noise, movements or people traffic).

Not long after starting the art sessions, it might be possible for the child to cope increasingly well with the public presence of many other strangers. The anxiety could be possibly converted into curiosity, analysis and exploration. Therefore, the experience of interacting with people should be part of the art session routine.

The framework of these sessions might sound like a paradox, as certain schemes and schedules could be established and precise rules put at work; however, no standard or enforcement would play any role. No imposed or predetermined skill or capability should be put to work. As customization and exploration are vital for successful art therapies, no chapter of any standard professional manual should be literally taken into consideration whatsoever.

The pure emotions and free experimentation should be the compass in directing the art sessions. Consultation with parents would be beneficial in managing the process of customizing the art therapy sessions and adapting them to various emotional responses of the autistic child.

Finally, following this process, the autistic child should be encouraged to reassess and enjoy the result of her or his art effort. Therefore the effect of the art session should be extended to the home with the help of the parents. By exhibiting the child's works and talking about them with the guests entering their living space, parents could play a critical role in the fragile process of building the self-esteem of the child affected by autism. A new sense of being motivated and useful could manifest itself in the child.

The space, time and emotion shaping every day of these children are reflected in these words:

"The endless cycle of idea and action,
Endless invention, endless experiment,
Brings knowledge of motion, but not of stillness;
Knowledge of speech, but not of silence;
Knowledge of words, and ignorance of the Word.
All our knowledge brings us nearer to our ignorance [...]
Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information?"

T.S. Elliott (1888-1965) in "The Rock" (1934)

### 2.4 Using the Environment as a Surprise Factor

Resistance to change is a typical manifestation in autistic children, being caused by anxiety to changes of situation. This results in redundant and repetitive behavior. Therefore, it is best to provide the autistic child with a wide selection of art materials. However, in its attempt to create a 'predictable' environment for the child, the typical art therapy session environment is quite rigid; thus, there is a 'good chance' to create in some children an image of a clinical environment that could actually enhance their repetitive behavior (Evans and Dubowski 69).

An efficient approach would be based on the need to break the routine that could appear at one point not merely tedious, but coercive, too. The art environment should perpetually be renewed, replacing the current with a new, more challenging and engaging one. Inducing expectation becomes a pre-requisite of such an art session, where the space waits calmly for the child to rush in and explore. Whether the session would take place at the therapist's home (indoor or in the back garden), at a public space (art gallery) or outdoor (public parks, gardens or beaches), a new element should always be present for the child to acknowledge, touch, gaze at, study, smell etc. A new light, another bench, different surroundings, energies of the new space (sounds, motion, colours, voices etc.), a placemat, a texture, a bowl etc. should be part of the intelligent mise-en-scène, carefully set up for the senses to record and process.

### 2.5 Encouraging the Child to Lead

Art is a powerful tool employed by people to express their feelings, a more natural way to convey their thoughts, emotions, and even desires. In recent years, art has increasingly been recognized as an effective method to heal emotionally damaged people who have difficulty revealing themselves.

As shown previously, art therapy needs to be governed by free exploration of the work environment and art media. The child must be offered complete freedom in choosing amongst momentums, tempos, motions, techniques, etc. In this hypothetical process, the child is gently guided to step out from the 'no-man's-land' and open the door of many opportunities. As a consequence, the need for taking decisions, controlling and communicating slowly start becoming clearer and stronger.

Many autistic children find a way to overcome the language barrier and transform their unintelligible sounds into gestural language. This finding could be successfully used by the art therapist for teaching such children how to express own wishes for instance, by pulling closer or pushing away the hand of the art therapist while accepting or rejecting a colour handed by the therapist (Emery 146). After building a primary way to communicate, the art therapist would be able to expand the gestural expression toward verbal communication, by blending the painting sequences with corresponding action verbs or some meaningful, more intricate nursery rhyme.

Understanding riddles and irony requires understanding of figurative language and even word gaming, and this helps in improving the child's ability to relate to and/or enjoy the momentum, marking important progress.

It is often mentioned that the lack of sense of self, common in autism, is usually translated for the autistic child as a total lack of desire to possess things. Therefore, the child appears to have no sense of being in charge or taking leadership, at least, over her or his space and time. The method to instill these values could be quite simple. Before leaving for the art therapy, the child should concurrently be engaged in preparing her or his own bag. Later, the child could be successfully motivated to carry the completed art work, back home, which should be displayed in a visible place in the house to cultivate a sense of pride and ownership.

#### 2.6 Using Colours as a Channel for Self-Expression

Self-expression is the first step in conveying emotion through communication. Whereas this process is inherently difficult for children with autism, art therapy is found to facilitate its development. In "Homo Ludens," Huizinga mentions the freeing role of creative play, as a way of helping the players discriminate the ordinary from the extraordinary, and reorganize the process. Art therapy demonstrates its ability to open channels of communication in the autistic brain, by developing a symbol system that can

be used to express more complex and intimate thoughts and experiences (Evans Dubowski 58).

The child must be helped to take ownership over the colours that are considered by the art therapists as "manifested" emotions. Thinking of the impressionist artists who were fascinated by the relationship between light and colour in expressing pure emotion on canvas, it is understandable why each change in using a certain colour or a surface by autistic children seems to similarly reflect a feeling or type of thought triggered by the work environment. Experiencing art making in a foggy, cold day at a different setting could help in reversing patiently the negative emotions into remedial values like getting patient, taking more time, feeling more relaxed and comfortable. Figure 4 shows the drawing of an autistic child who gradually developed a predictable taste for changing shades and colours, experimenting hues of blue over a longer span.

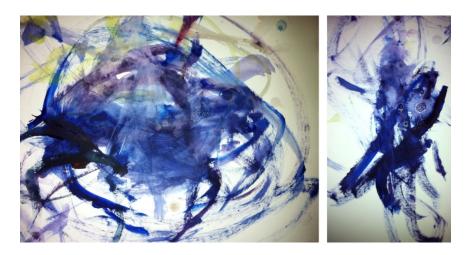


Figure 4. Drawing experiments by an autistic child

Korean art therapists, who are focused on transforming autistic children into competitive leaders, routinely use an interesting chart (see Table 1) for interpreting colours through the complicated prism of emotions. Art therapists could effectively use the below chart in trying to interpret the emotions of their young clients.

	Red	Blue	Yellow	Purple	Green
Symbolic Meaning	Sun, Warm, Passionate, Active, Vital, Love, Eros	Hope,	Purity, Delight, Joyful, Warm	Mixture of Red and Blue, Imbalance, Anxiety	Nature, Spring, Harmony, Hope, Peace
Personality	Extrovert, Dynamic, Impulsive, Aggressive	Self-	Delightful, Adventurous , Jealous, Philosophical	mystery	Gentle, Diligent, Patient, Modest,
Remedial Value	Get motivated, Encourage to move, Relieve anxieties, Become stable	Get patient, Feel relaxed and comfortable,	Enhance Willpower, Be positive	Get creative and intuitive, Sentimental, Energetic	Get balanced harmonized, Feel stable, calm

Table 1. Emotional value of colours - used by Korean therapists

Most autistic children fully immerse themselves in experimentation with various art media, and thus, usually, the resulting artwork is a surprise to all.

From expanding and constantly changing the choice of colours, substrate or technique to producing a series of works focused on similar hues or patterns, the final work of an autistic child is always unpredictable. From artist's painting tools to glazing kitchen brushes or stamps, the child's work, although gestural, and often elaborate and delicate, exhibits multiple layers and materials that appear to carry thought, intention, order and meaning.

Some art pieces the autistic children have displayed reveal the impact of specific material on their coded language used for transmitting emotions and thoughts. Figure 5 below shows a Triptych demonstrating the flow of creative expression of the inner world of a 5 year old autistic child



Figure 5. Flow of creative expression.

Figure 6 shows a painting that seems to be inspired by the Mandala technique, as the artwork has been created through liberal use of colours and the wheel-like formation.



Figure 6 Drawing inspired by Mandala technique

Figure 7 shows art by two autistic children that was exhibited in March 2009 at the Plymouth Center for the Arts through the school program called Plymouth Public Schools' Youth Arts Month Exhibit.

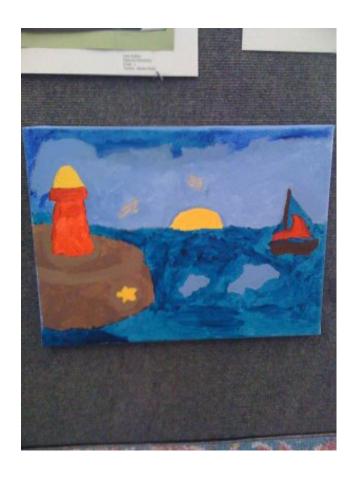


Figure 7 Art by two autistic children.

Of particular interest are Images 8 and 9, art pieces created by Kaitrin, a young artist with Asperger's syndrome living in Cambridge, Ontario. Her intricate art, in pen and pencil, portray whimsical themes and fantasy

settings. Her graceful art works, under the general title "Windows By Kaitrin" are extensively exhibited and offered for purchasing by public.



Figure 8. Wicked Memories, close up. (Windows by Kaitrin.)

Kaitrin articulates her journey in artistic development: "Just like my curly hair, Asperger's is a part of me. It shapes my personality and the way I view the world. From an early age, I started using pictures to communicate ideas and to share with others how I saw the world around me. They say that a picture is worth a thousand words. Those were the thousand words that I didn't have. I still use my art today to express important messages and ideas [...]. I call my art "Windows by Kaitrin" because windows go both ways. They

allow me to look out to the world, but they also allow you a glimpse into my peaceful world. (Windows By Kaitrin.)

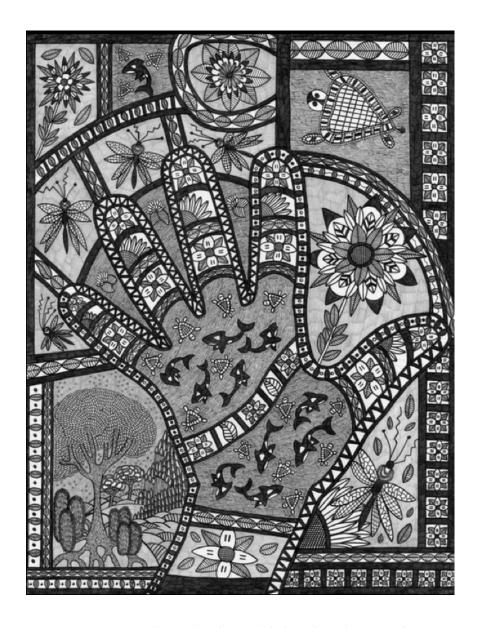


Figure 9 Reach Out for the World. (Windows by Kaitrin)

In summary, the above pieces of art produced by autistic children reveal the relevance of art therapy in their recovery along the paths of communication and emotion. By adopting an open and flexible approach to the design of the art therapy sessions as suggested in this report, this process could be further facilitated. This inclusive approach also highlights the intricate interrelationship between the autistic child, her or his parents, and the art therapist. All three are essential in the process of healing through art therapy.

# 3 Unique Contribution

This work makes two important contributions to the research areas of Autism, Art Therapy and Inclusive Design: the description of an inclusive approach to art therapy intervention for children in the autism spectrum; and the important interrelationship among parents, art therapist and the child in that process.

Recommendations that are central to the proposed inclusive approach to art therapy intervention are listed below:

- 1. The art therapist has to first procure access into the child's world using imaginative responses to unpredictable situations, and build the necessary trust.
- 2. Once the sessions begin, the child's interest has to be sustained through innovative use of art media.
- 3. Keeping the intervention framework flexible is essential to manage uncertainties.
- 4. An element of surprise needs to be frequently introduced to the therapy process through the use of varied environments.
- 5. The process should include activities that exhibit and encourage leadership behaviour in the child.
- 6. Use of colours as an index of emotions will facilitate and induce the child's self-expression.

Each therapist can further adapt this approach to fit with the uniqueness of each child.

Many parents of autistic children make tremendous efforts to regain their children's ability to express emotions and to communicate. Every child is affected differently, and her or his recuperation requires a unique approach. Therefore, each parent brings a unique contribution toward understanding of, dealing with, and paving the way towards the healing of their child, while engaging proactively within a complex framework engineered by varied professionals focused on recovering the affected child.

Co-intelligence or intelligent collaboration represents a critical framework for encapsulating the entire body of traits, lifestyle, chosen healing routes, developmental approaches and goals. Crafting intelligent collaboration is a long journey where ideas and deliberation, expectations and results, motivation and knowledge, dynamics and awareness, openness and integration, uniqueness and inclusiveness work hand-in-hand throughout the process.

The inclusive approach to art therapy intervention articulated in this report is possible only with the collaboration of parents, art therapist and the child. All essential aspects of their reciprocal contributions and interchanges are portrayed in Figure 10.

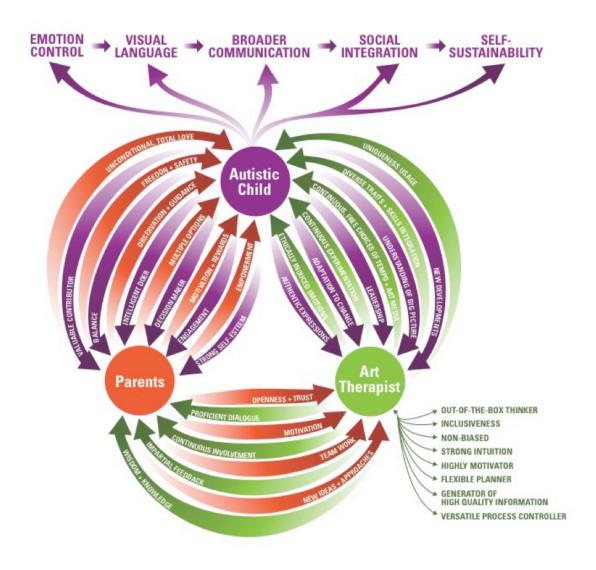


Figure 10. Interrelationship among parents, art therapist and the child

All this having been said, it has to be acknowledged that a lot of uncertainty does still exist in this area. The next section articulates some of it.

# 4 Uncertainties and Next Steps

During the process of this research, several questions were encountered. Not all of them could be explored, but they have the potential for future research. Some such questions are presented below:

In her paper "Does Art Therapy Work?" Lynn Kapitan states that art therapy produces measurable effects, at least in working with adults. She argues that art therapy functions not as a map that indicates the positioning of places, but as an entire way-finding system, because it guides users toward finding a certain path they may be looking for. "The test of a map lies not in arbitrarily checking random points but in whether people find it useful to get somewhere." (Kapitan 49) However, are art therapy effects measurable in children? This is a question so far unanswered.

The concept of therapy is defined as a treatment intended to heal or alleviate a specific condition. If autism is treatable, then art therapy has a temporary aspect. Can emotional balance and communication channels become so self-reliant that the art therapy should stop once recovery happened?

Another intriguing aspect is related to the much media-advertised usage of the digital medium in art therapy. About eight years ago, Google began to develop a digital project for children with autism. As declared on their official webpage, "Project Spectrum was created to give people with autism the opportunity to express their creativity and develop a life skill using

Trimble SketchUp 3D modeling software" (Sketchup). According to them, SketchUp played on the strengths of people with autism "who tend to be unusually strong visual and spatial thinkers" (SketchUpdate). However, it is observed that some of the digital applications existing in the market lack a certain immediate, effective and engaging sensory quality that makes digital art therapy so expressive and appealing to many other autistic children. In this technological context, the following questions emerge:

In the case of high functioning autistic children, applications such as SketchUp has worked wonders so far; why is it, then, that for some others, digital art media appear to have various degrees of attractiveness and efficiency that would not suit their specific needs? Is technology able to somehow overcome certain hurdles, especially those grounded into a very high sensorial "soil"? Could the same technology become so sophisticated that every potential user would be empowered to select and incorporate such variables into a customized project? What if the screen surface could be customized to change its texture or create a nexus between an autistic child and a remote therapist, therapy setting or community of children? What effect could it have on children if this technology would enable a child to

<sup>&</sup>lt;sup>5</sup> Examples of such digital applications are *Visual Schedule* created by Good Karma Apps, *LivingSafely* by AbleLink, *Behavior Assessment Pro* by Vermont Behavioral Solutions, and *EverydaySkills* by AbleLink.

connect in a virtual space to create a collaborative piece of art, as in Eric Whiteacre's 'Digital Choir'?

Some articles reveal how, for the last couple of years, the medication prescribed for treating autism has been ridden with controversy and personal dramas. Transparency about health risk or adverse effect of any medical treatment should be the responsibility of the media, public health services, medical professionals and the pharmaceutical industry. One important question that arises is: Who decides the level of transparency of such disclosure and how could the interests of children with autism be protected?

It has already been demonstrated that a formal meta-analysis is needed for collecting and processing the relevant data on autism across vast social structures and communities. As there are not enough resources and methodologies to put at work a formal meta-analysis, allowing such a theory to trickle into mainstream thinking may reopen the doors of phrenology, possibly resulting in isolating and demonizing children and their families. The question we need to ask is: what research methodologies could be used effectively for studying autism?

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<sup>&</sup>lt;sup>6</sup> Examples of such articles are: "Controversial Treatment for Autism May Do More Harm Than Good" published by Baylor University Researchers and "Dubious medicine - The Tribune reports on controversial autism treatments and the history of the doctors behind them" published By Chicago Tribune Health.

These are questions for future research on the subject on autism; it is hoped that the answers will be found through future research endeavours.

### 5 Conclusion

Autism remains the focus of increasing research on methodology, approaches, treating and healing programs, in an attempt to reduce the speed at which it is manifesting among the children affected by autism. Whether or not the standardization of each process developed in any of the research fields is medically reliable or financially sustainable, there is plenty of room for the uncertainty triggered by the critical drawbacks of such a standardization process.

The methods and approaches should be tailored and trimmed for every child with autism. It is well known that standards are born out of the need to rationalize the available resources (social, professional, financial.) Hence, the idea of customizing every program is viewed as redundant and unsustainable. While a child may fail any DAP (Draw a Man Test), KFD (Kinetic Family Drawing), or KSD (Kinetic School Drawing) test in a classroom or therapist office, the complete social context is missing. Art therapy is an 'integrative practice' that would allow the focus to remain on the idea of wholeness of the autistic child rather than on the condition of being autistic. Where the standardization efforts have proved their unreliability, a customized methodology might be a workable alternative.

Besides proposing a viable approach to art therapy for children with autism, this report also focuses on the role of parents in the healing of their child. The significance of parents is stressed here because prevalent measures for treating autism are seen to completely miss the 'parents' variable. The critical role of parents' contributions needs to be underscored in order to ensure the future success of children with autism, to evolve, integrate, create values, and share them in the future to the betterment of the society in which they live.

The central idea of this work strives to showcase the necessity to empower, by every means possible, the parents of autistic children. These parents should be involved in the whole process designed for making the autism syndrome fade by creating a collaborative platform for communicating and processing of the existing information related to structures and resources that would better suit their needs, desires, and cultural background, as well as the needs, diverse capabilities and individual weaknesses of their children. By trusting parents to assess, deliberate and provide valuable feedback, and by entitling them to make critical decisions at any stage of the developmental process, the complicated mission of healing children with autism would become much easier. There should be a dynamic, continuous interchange between parents and society, rather than perceiving their need for help as a heavy burden laid on the resources and capabilities of the communities in which they live.

The conclusion arrived at through this work is that healing autism should be an inclusive process with fully aware parents as the main engine. Whether they choose conventional routes such as Behavioral and Educational Interventions (best known as Applied Behaviour Analysis or ABA) and Occupational Therapies that are supported more or less by medication regimes, <sup>7</sup> or those that are less frequently used, such as *Integrative* Therapies<sup>8</sup> and Expressive Therapies, the parents have the right to be informed and to select freely, without constraints of any sort.

The term 'art therapy' could be redefined, perhaps renamed as 'art healing', and recognized not as a superfluous, expensive and unreliable treatment scheme, but as a surprisingly joyful journey along the path to emotional healing for the autistic child, a path that promotes the unlocking of her/his true self.

Examples would be antipsychotic drugs, mood stabilizers, antidepressants, stimulants.
 These are based on bio-medical/ naturopathic approaches.

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