

Montreal Autism Centre

For more information visit:
www.AutismCentre.org

What is Autism?

Autism is a form of childhood psychosis - a pervasive developmental disorder - that is associated with mental retardation in 75 to 80% of all cases. Without early identification and intensive developmental-behavioural treatment, it almost certainly will be a serious lifelong disorder.

It is estimated by the Department of Mental Health in the State of California to cost 2 million dollars US per child per lifetime for special services. Estimates of incidence range from 6 to 20 per 10,000 and appear to be increasing at an alarming rate.

The characteristics that comprise autism must be present before the age of three years and include seriously delayed expressive language and object use (especially symbolic play), disrupted social interactions, the absence of imitation, serious behavioural difficulties including temper tantrums and, in the majority of cases, delayed mental ability.

The dual diagnosis of childhood psychosis and mental retardation renders the prognosis extremely poor and the possibility of full recovery bleak. However, there is a growing body of research that indicates that early diagnosis and intensive developmental-behavioural intervention can lead to substantial improvement (Rogers, 1998; Lovaas, 1987; Zelazo, 1999a, 1999b).

The Montreal Autism Centre

is a non-profit organisation that aims to provide state-of-the-art assessment and treatment services to young children with ASD, training and education workshops, outreach services for mainstream integration, as well as research opportunities.

Our specificity

We provide a comprehensive Developmental Psychopathological theory of early autism that is anchored in research on normal psychological development and suggests ways that development may go awry in the case of autism (Zelazo, 2001). Affective, behavioural and cognitive factors play a key role across the domains of diagnostic characteristics, aetiology, confounded factors in the assessment of mental ability, corrections to these limitations using an information processing approach and treatment strategies. This perspective also addresses a poorly understood and insufficiently considered factor in autism - its high co-morbidity with mental retardation.

One must understand the nature of cognitive development in typically developing children and the fact that the defining characteristics and disabilities of autism are the same as the measures used to infer mental ability in conventional tests of mental development. The basis for retardation in many autistic children can be explained, in part, by two factors. An alternative means to measure mental ability using information processing procedures (Zelazo, 1999a) bypasses this problem and distinguishes mental retardation from delays with expressive development.

This distinction can reduce the severity of the problems to be overcome, guide treatment strategies more precisely and substantially improve the prognosis for many children if identified within the first 3 ½ years of life.



Early Assessment

The need for assessment:

Of the 4,000,000 children born each year in the United States and Canada, between 10-20% or 400,000 to 800,000 children exhibit delayed mental development. The traditional approach taken with children who exhibit "slow walking or slow talking" is either that of "wait and see" as was the case of slow talking, or the child is referred for a comprehensive evaluation in the case of motor delay.

Adopting the "wait and see" approach has an extremely high potential of creating additional difficulties for the already delayed child; untreated, expressive language delay is likely to continue at a time when peers develop expressive language at an exponential rate. Often, assessments are deferred until a child is about three years old. The child may then be seen by either a neurologist or a psychologist, both of whom, will, in different ways attempt to infer intellectual or mental capabilities, based primarily on tests of motor skills.

Read more on early assessment at:
www.AutismCentre.org

The Zelazo Information Processing Procedure™

A new way of assessing mental ability and potential:

What has been lacking is a test method that is relatively free of these biases and is a good predictor of mental capabilities. The Zelazo Information Processing Procedure™, (Zelazo IPPT), in conjunction with Free Play & Parent-Child Interaction Session allows the psychologist to make a "differential diagnosis". A direct probe of the child's "central processing ability" allows the examiner to bypass the confoundings of the traditional tests and identify those children who have the potential to overcome their expressive delays.

The Zelazo IPPT Laboratory enables the professional to assess the mental development of infants and children from 3 to 42 months. The methodology is based on the "STANDARD - TRANSFORMATION - RETURN" (STR) paradigm, an information processing approach. The STR procedure relies on the administration of various sequential dynamic stimuli, and measures mental encoding and the development of mental representations by evaluating elicited responses to a series of visual and auditory sequences.

Monitoring and recording of instantaneous heart rate through an electrocardiograph monitor and the recording of behavioural responses such as durations of smiles, vocalizations, eye movements, and measures of attention, are used to measure information processing abilities. The data are then computer analyzed and compared (scored) relative to a typically developing sample.

The speed with which a child forms mental representations of external events is a more accurate or valid indicator of current intellectual ability. The development of talking does not come easily to all children. Many factors can influence the acquisition of expressive language, including biological conditions such as cerebral palsy or Down's Syndrome and experiential factors such as non compliant behaviour. There is a sound body of evidence that indicates that developmentally delayed children do not catch up spontaneously. Children who do not acquire language, generally do not interact socially in a "normal" manner. They fall further and further behind their peers, and with the passing of time, the likelihood of catching up is reduced further.

Even for those children with known biological conditions, such as cerebral palsy, it is extremely helpful to be able to determine the child's level of mental development independent of delayed expressive development such as talking. The importance of an early assessment of mental capability and potential:

An early differential diagnosis, which includes an accurate indication of mental ability independent of the degree of delayed expressive development, is critical for proper intervention at the appropriate time. Intervention that may be appropriate for an 8-month-old is too simple for a child who can process information at the 24-month level. Such mismatched intervention not only would be useless but would further compound the child's problems. A differential diagnosis is an extremely important first step; appropriate practical treatment is the next step. Treatment protocols have been developed and used extensively to benefit children with various diagnoses.





Read more on early treatment at:
www.AutismCentre.org

Behavioural assessment:

In addition to the “conventional” tests and the Zelazo IPPT, it is important to assess the child’s social, familial, and play behaviours. These behaviours are assessed during laboratory based sessions of free and instructional play. The child and his or her parent are observed in several sessions of free play as well as during more structured “teaching” sessions.

Research has shown that during periods of increased external (parental) demands, children may have difficulty in self-regulating their emotional and stress coping systems. As demands are made of the child their intolerance for even moderately stressful situations results in a decrease of appropriate behaviour and an increase in avoidance strategies, including disengagement, resistant non-compliance and tantrums. Age appropriate learning and development is compromised by these behaviours. Essential to an intervention plan is the functional analysis of these behaviours.

Early Treatment

In *Learning to Speak* (L. Erlbaum Associates, 1984), Zelazo, Kearsley and Ungerer describe a parent-implemented treatment that translates a theoretical framework into concrete therapeutic exercises. This therapy, guided by a developmentally-oriented clinical child psychologist, facilitates functional and symbolic object use, expressive language development and emotion regulation that will ultimately yield a reduction in delays on conventional tests of mental ability and produce appropriate social interactions.

Therapists and parents initially work for brief, but intensive, formal periods on gaining compliance with actions and words until normal expressive language is achieved. Generalisation of newly acquired abilities is implemented systematically across people and settings.

Compliance to task demands is a cornerstone of this program but, unlike strict ABA approaches, is viewed from the perspective of the development of stress tolerance and emotion regulation. The natural course for development of stress tolerance, expressive language, cognition, and object use serve as the cornerstone for treatment at each level of a child’s development.

Skinnerian procedures for shaping behaviours using contingent positive reinforcement following specific schedules of reinforcement, including the frequencies and durations of reinforcements, are used to produce developmental changes. Generally, the duration of treatment is from 18 to

Follow-up measures of treatment efficacy:

Yearly re-evaluations that include measures of visual and auditory information processing ability, functional and symbolic play, language development and conventional tests of intelligence, measure each child’s progress objectively and guide future therapeutic goals.

In cases where children display age-appropriate information processing ability despite seriously delayed development, we provide parent-implemented therapeutic intervention. Our initial objectives are to foster compliant behaviour and stimulate talking and appropriate object use. These are essential for stimulating appropriate cognitive development and social behaviour. Only then do we attempt integration of children into normal pre-school, kindergarten or first grade, depending on rate of progress and age. A key role is then conferred on a school liaison professional who trains and directs the transition to a new setting sometimes including a school aide, co-ordinates the principal players and ensures a smooth transition to a classroom with typically developing children.

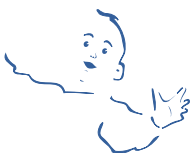
24 months depending on the severity of the non-compliant behaviour, the magnitude of the developmental delays, and the compliance of the parent-therapist with the therapeutic regimen.

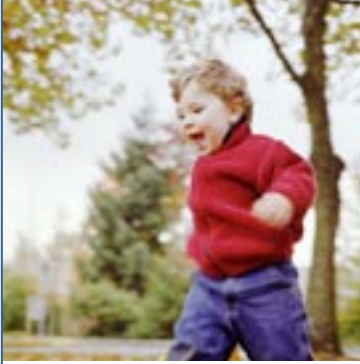
This treatment program is parent-implemented under the direction of a clinical-developmental psychologist, rendering it highly cost-effective. A centre-based component is offered two afternoons per week in some instances, during which trained staff bolster the daily parental effort to provide opportunities for socialisation with peers and unfamiliar adults.

A parallel group for parents allows the meaning of phrases such as “increasing task demands” (a central theme in the treatment program) to be defined more precisely, gives parents experience working with children other than their own and provides them the support of other parents coping with the stresses of autism.

Additional Services

Various adjunct services may be set up and tailored to meet the needs of the children enrolled in our program. For example, one- to three-week long intensive In-House Summer Programs provide the opportunity to treat more children enrolled in this parent-implemented programme. These programs focus more specifically on issues such as sibling relationships, classroom behaviours, academic curricula, and social skills.





Getting Help

If your child is under 42 months of age and has expressive language delays and/or delays with functional and symbolic play, difficult behaviours (such as hand biting, head banging, frequent tantrums, stubbornness or aloofness) or peculiar behaviours (such as finger flicking, hand flapping, toe walking), then he or she may be appropriate for this program.

For a referral to our Centre, please contact us

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or call toll-free:
1-866-8AUTISM

for more information visit our web site at:
www.AutismCentre.org

Read about donations at:
www.AutismCentre.org

Donations

The Montreal Autism Centre is a registered non-profit organization (RN: 88423 728 RR0001). Financial support comes from private and corporate donations. Your support is greatly appreciated.

Gifts

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**Montreal Autism Centre
2100 Marlowe ave, suite 125
Montreal, Quebec, H4A 3L5
Canada**

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Please send name and address of the person being honoured for birthday, wedding, get well, etc.

Memorial Gifts

Send the name of the person deceased and name/address of the next-of-kin.
Include your name/address for tax receipt.

