

Enhancing Effective Interactions
With Individuals with Autism Spectrum Disorders

A Practicum

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In Partial Fulfillment of the Requirements

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Winnipeg, Manitoba

By

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**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of
Manitoba in partial fulfillment of the requirement of the degree
Of
MASTER OF SOCIAL WORK**

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Abstract

The paper reports on an autism training program concerned with enhancing effective interactions with people who have Autism Spectrum Disorders (ASD). The workshop was designed and implemented for presentation to parents, caregivers and professionals supporting those with ASD in both residential and clinical settings. It provides caregivers and professionals with continuing education and enhanced understanding of the role of professionals attempting to address the needs of individuals with ASD. It was presented with cooperation from the Child Guidance Clinic of Winnipeg and New Directions for Children, Youth, and Families.

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I would like to thank my wife Jocelyn Teskey, my mother Ruthlee Teskey, my mentor Ray Atkinson, and my friend Jay Adams.

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CHAPTER I

INTRODUCTION

This practicum sought to meet several evolving needs within the field of social work. First, the desire to improve upon the paucity of autism specific research being conducted within the field was an important factor. Secondly, there is a growing demand for knowledge and understanding of Autism Spectrum Disorders (ASD), and affected individuals, due to the rising prevalence rate. Meeting these needs determined both the content and format of the program. A workshop seemed most efficient in achieving the goal of disseminating information on ASD to parents, caregivers and professionals. It would bring the following benefits: (a) expand knowledge of field workers about the provision of needed services; (b) provide better services to people with ASD thereby improving both their general health and quality of life; and, (c) benefit the society at large by reducing demands on the social system through more effective treatment of individuals with special needs.

In meeting the need for knowledge of ASD, the primary objective in developing and delivering a workshop was to offer field workers useful and applicable information and training in therapeutic techniques for their interactions and communications with individuals with ASD. The workshop intended to further the professional development of participants and enhance service delivery, thereby also improving the quality of life for individuals with ASD.

Additionally, while meeting these goals the practicum was also intended to further the learning and teaching skills of the author. Specifically, it was hoped that the author would achieve the following learning objectives: (a) enhancement of knowledge and

skills in supporting persons with ASD and related disorders; (b) development of abilities in planning and implementing group experiences; (c) development of leadership skills and group facilitation; and, (d) improved understanding of group dynamics.

The practicum itself included two phases: designing the two-day workshop and delivering the workshop. The workshop itself consisted of two days of instruction and activities with a theoretical basis for application to autism, as well as hands on experiential learning. In addition, evaluative tools were administered to participants in order to obtain information on their level of satisfaction and skills acquired through the workshop.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

This chapter will review the literature associated with the subject of the project: the development of a two-day workshop focusing on effective interactions with persons who have ASD.

The literature review will begin with a brief introduction to ASD, including its characteristics and treatment. The review will then focus on adult learning and adult education programs, including a brief discussion on the design of these programs. The literature review will conclude with an examination of the ideologies associated with the author's intervention goals.

2.2 Autism Spectrum Disorders

Historical perspective over the last century.

The conceptualization of autism has undergone major changes that have affected the beliefs surrounding its causation and its diagnosis. The term 'autism' was first used in 1906 by the Swiss psychiatrist Eugen Bleuler to refer to a style of thinking among people with schizophrenia that involved withdrawal into a private fantasy world that is not bound by principles of logic (Nevid, Rathus, & Greene, 1994). In 1943, another psychiatrist, Leo Kanner, used the term autism to describe the first known account of the disorder among a group of 11 children who displayed a similar pattern of specific symptoms that differed from symptoms of other childhood disorders. Kanner (1943) diagnosed this severe symptomatology as 'early infantile autism' that included behaviors such as being withdrawn, aloof, unresponsive, insisting on sameness and failing to

acquire normal speech. Thus, the terms schizophrenia and autism became historically linked in their descriptions of withdrawn behaviour and thinking. Unfortunately, for some people this historical linkage also contributed to erroneous diagnoses and stigmatization. Within the last 30 years, however, the diagnostic system of the American Psychiatric Association (1994) has narrowed the criteria for defining disorders so that autism is now differentiated from schizophrenia. Prior to this progressive tightening of diagnostic criteria, several young children with autism were erroneously diagnosed as having childhood schizophrenia. Currently, schizophrenia is distinguished from the autistic disorder by the presence of hallucinations and delusions. Moreover, a diagnosis of schizophrenia is given primarily to older adolescents and adults rather than children.

Another movement in the history of autism that was heavily debated was related to early views of causation that focused on pathological family relationships. One of the more prominent proponents of this view was psychoanalyst Bruno Bettelheim who theorized that aloof mothers caused their children to become autistic (Bettelheim, 1967). However, as will be discussed below, current biological researchers now support a neurophysiological and biological basis for the occurrence of autism. Despite this acceptance of biological causes of autism, many parents are still affected by stigmatizing views suggesting that they caused the occurrence of this lifelong disability. Today, most professionals are sensitive to the destructive effects of these blaming theories and instead seek to encourage parents to continue to love and nurture their children as best they can.

Current diagnostic criteria and classification.

Since Kanner's description of autism, the American Psychiatric Association (APA) (1994) and the World Health Organization (WHO) (1994) have set out to provide

more precise diagnostic criteria for the disorder. The progress made in researching autism has afforded the recognition of a multitude of symptoms and characteristics that any one individual with autism may possess. The APA further recognizes that the manifestation and severity of the essential features of autism vary greatly from individual to individual (APA, 1994).

Currently, autism is among five disorders that are considered to be forms of the broader category of pervasive developmental disorders (PDD). Pervasive developmental disorders are a group of neurodevelopmental syndromes that are usually evident in the first years of life (APA, 1994). As a syndrome, PDD is recognized as having a group of symptoms that together are characteristics of a specific disorder. Therefore, in any individual case of PDD, a variety of symptoms may be present. Thus, the population of individuals diagnosed with PDD is quite heterogeneous, given that symptoms can manifest in several different combinations.

Pervasive developmental disorders are usually first diagnosed in early childhood and adolescence. Children diagnosed with PDD will display severe qualitative abnormalities that are not normal or typical for any developmental stage and these abnormalities will continue over the lifespan. Overall, three core areas of development are impaired in PDD: reciprocal social interaction skills; communication skills; and, stereotypical behavior, interests, and activities (APA, 1994). These symptoms make up the diagnostic criteria for PDD and are referred to as the 'triad symptoms.' The presence of these impairments tends to affect multiple areas of life functioning including: social skills and language, attention, perception, reality testing, and motor activity. The feature of PDD that is most distinguishable from other childhood disorders, including learning

disabilities and mental retardation, is the presence of profound social deficits.

Although a diagnosis of PDD is warranted by the presence of the triad symptoms, the taxonomy of specific disorders within this broad category is debated among professionals; and therefore, the diagnosis of a specific PDD is often arguable. Currently many researchers and clinicians conceptualize pervasive developmental disorders as being on a spectrum of disorders along which an individual can be diagnosed. The array of disorders that fall within this theoretical spectrum include Autistic Disorder, Rett's Disorder, Childhood Disintegrative Disorder, Asperger's Disorder, and Pervasive Developmental Disorder – Not Otherwise Specified (PDD-NOS). Although Rett's and Childhood Disintegrative Disorders are both forms of PDD, the course of their associated symptoms tends to differ from that of the other PDD. Thus, identification of the spectrum with the use of terms 'autism spectrum disorder' or 'autistic spectrum disorder' typically refers to the group of individuals diagnosed with Autism, Asperger's, and PDD-NOS.

Use of the term 'autism spectrum disorder' has the primary advantage of allowing easier communication and use of common terminology. The advantage of this systematic classification extends to diagnoses, treatment, and research. However, the nosological conceptualization of the autism spectrum also poses the threat of being misleading. Unlike the light waves of a spectrum that disperse from a prism in an orderly fashion, according to magnitudes of wavelength, the behavioural manifestations related to the array of disorders along the autism spectrum do not consistently form a continuous series or sequence. Thus, whether there is a continuous progression of severity in relation to symptoms and behaviours along this spectrum is currently unexplained despite

suggestions that Autism is the most severe disorder and at the end of the spectrum (e.g., Stahmer & Schreibman, 1998). On the contrary, there is anecdotal evidence that supports instances of higher emotional, social and motor functioning among some individuals with autism, as compared to those with Asperger's who tend to have higher IQs and language skills. More specifically, an individual with autism can have a greater communication impairment but display enhanced non-verbal empathy over an individual with Asperger's who has adequate language skills but who cannot use them in the appropriate context to demonstrate empathy for others.

One cannot, then, assume that individuals with autism will consistently display lower functioning in all areas, as compared to individuals diagnosed with another disorder along the spectrum. The assumption that the disorders falling within the spectrum can be ordered according to an increased or decreased ability is also erroneous because individuals who fall within this spectrum do not exhibit even levels of abilities in all areas. That is, the constellation of symptoms that any individual manifests tends to occur at different levels of severity. For example, an individual with a severe deficit in social interaction may have genius like abilities in mathematics. Due to the heterogeneous and uneven manifestation of symptoms within and between individuals with PDD, problems will arise whenever attempting describe an entire group with the same diagnosis or place a single individual along the spectrum.

Even though these problems exist, the term 'autism spectrum disorder' is increasing in use and is a useful way to classify those disorders that share the same characteristics while distinguishing them from qualitatively different disorders. Furthermore, the term also allows the possibility of milder forms of autism, relative to the

severity of behaviours being manifested. Therefore, until such a time that the DSM diagnostic system takes into consideration the heterogeneous and uneven symptoms of PDD, it is likely that the term 'autism spectrum disorder' (ASD) will continue to be used. For the purposes of this paper, the term 'autism spectrum disorder' (ASD) will be used to refer to the broad array of symptoms and behaviours characteristic of Autism, Asperger's, and PDD-NOS; and, it is not assumed that this spectrum represents a continuum of sequential order of abilities.

Symptomatic features of autism.

As mentioned above, Autism is a syndrome that is characterized by impairments in three core areas of development whereby a variety of associated symptoms may be present to warrant a diagnosis. Currently autism and its symptoms are defined behaviourally, despite biological evidence that the expression of autism may be a result of an underlying neuropathophysiological process. Overall, it can be said that individuals with ASD experience pervasive impairments that profoundly affect developmental rate, perception, language, cognition, intelligence and social relationships. Although each of these areas will be discussed separately, it is essential to understand that "these areas of functioning interact, and impairment in one area can exacerbate difficulties in another." (Stahmer & Schreibman, 1998, p. 48). As such, the core symptoms of ASD influence all areas of functioning including social interactions, communication, intellectual functioning, emotional functioning, and stereotyped behaviours and interests.

Social interaction skills. Impairment in socio-affective functioning and reciprocal social interaction can be severely and/or subtly manifested depending on the individual

and the nature of her/his disorder. Social impairments are commonly expressed in ASD by impaired imitation, abnormal social play and poor interaction. For example, the toy play of children with autism tends to include fewer combinational, appropriate, constructive, and functional uses; more restricted repertoires of toy play; longer latencies in approaching toys; and more repetitive manipulations of toys and their own bodies (Sattler, 1992). As well individuals with autism display deficient joint attention skills involving social signaling and appreciation of other people's social cues. As mentioned above, the severity of impairment in these areas often depends on the nature of the individual's disorder. For example, individuals on the spectrum with higher IQ's tend to perform nearly as well as controls on tests of emotional recognition; whereas, those with lower IQ's do not perform as well (Sattler, 1992). Thus, there may be a non-social cognitive difference between groups of individuals with ASD that affects emotion recognition in others and other social skills. Overall, it is believed that the ability to interact in a socially appropriate manner requires a certain degree of abstract reasoning and idea formation that is often compromised among individuals on the spectrum, particularly those with lower intellectual functioning. Among higher functioning individuals with ASD, rather than being socially distant they may become socially intrusive and seem unaware of others' feelings.

Communication skills. Deficits in the area of communication consist of qualitative impairments in both verbal and nonverbal communication skills. Although at least one third of individuals affected by autism have no speech (Bryson, 1996), many individuals with autism develop their speech at a normal rate and sometimes at an enhanced rate. However, individuals with autism seem to reach a language plateau as the

acquisition of language increasingly depends on understanding the social context of verbal and non-verbal communication (Sattler, 1992). As a result of impaired social comprehension and communication, individuals with autism interpret other people's speech very literally and therefore, do not understand subtleties of humour and double meanings of words. These pragmatic impairments of language are present at an early age and at all intellectual levels in autism.

Overall, the occurrence of language and communication impairments can be explained as a result of the individual's lack of ability to qualitatively process the feedback given that would normally eliminate pragmatic impairments from the language repertoire (Ozonoff, 1997). This impaired information processing is considered to be a cognitive feature of autism known as 'mindblindness' or the 'theory of mind' (ToM) that affects perspective taking and higher-ordered reasoning (Baron-Cohen, 1995). It is also felt that impaired information processing may be associated with immediate or delayed echolalia, or repetitive echoed speech, which is common among children with autism.

Intellectual functioning in autism. Although PDD and Mental Retardation (MR) are considered separate disorders, they frequently co-exist in the same individual. While this association is present, it is important to remember that autism is distinguished from MR and other learning disabilities because of its own distinct features (i.e., triad symptoms), and in particular by the presence of profound social deficits. It is commonly accepted that individuals with ASD show the full range of intellectual abilities from profound mental retardation to superior intelligence. Cognitive deficits of ASD include: impaired social-cognitive functioning, difficulty processing information within context, difficulty processing information related to emotions (e.g., facial expressions, lack of

attention to cues), abnormal language, and, difficulty with higher order thinking. Furthermore, all individuals on the spectrum, regardless of IQ, perform poorly on non-social tasks that require the ability to form abstract representations or ideas. Thus, a central cognitive feature of the autism spectrum disorders seems to involve a relative impairment in abstract thinking.

Oftentimes individuals with autism are further classified as high-functioning or low-functioning. To be considered high-functioning autistic (HFA), an individual must have a performance IQ that is equal or greater than 70. Overall, IQ and the presence of MR are strongly associated with the long-term outcome of individuals with autism (Cohen & Volkmar, 1997). As mentioned above, however, individuals on the autism spectrum can display uneven skill development or unusual patterns of performance (e.g., savant skills) regardless of IQ. Therefore, despite average skills in one area any individual with ASD may display spots of weakness within that same area. For example, individuals with HFA tend to be more verbal than low functioning individuals, but they can still display impaired language pragmatics (e.g., poor comprehension of non-verbal communication and cues).

There seems to be a central cognitive feature of ASD that is related to an impairment in abstract thinking. Many researchers associate this cognitive impairment with 'mindblindness' or ToM. The ToM hypothesis is based on normal development theory that certain cognitive skills are needed for people to understand mental states, beliefs, and desires. This cognitive skill begins to develop at 2 years of age and is responsible for the onset of pretend play in normal development. The presence of this cognitive skill has been related to behaviours such as pointing, pretend play, and

monitoring of gaze. Thus, it is suggested that the impaired socialization, communicative ability, and the imagination that characterize autism stem from abnormalities in the brain that prevent the person from forming a 'theory of mind.' In other words, the person with autism is unable to predict and explain the behaviour of other humans in terms of their mental states. Therefore, individuals on the spectrum cannot see things from another person's point of view or cannot understand that people can hold beliefs different from their own. This impaired ability at perspective taking would seem to affect nearly every area of human functioning.

Emotional functioning. Given their lack of responsiveness, individuals on the spectrum are often described as having flat affect. In general, individuals on the spectrum tend to present as happy as long as environmental demands are not excessive. However, when excessive demands are placed on the individual they may become irritable, exhibit tantrums, and be difficult to console. Some individuals may become aggressive by pinching and hitting. Tantrums are particularly common when routines are disrupted. The ToM hypothesis has also been applied to affect and mood. It is argued that individuals with ASD cannot take the perspective of others and therefore, tend not to appreciate the value of sharing experiences or objects with others. As well, ToM explains the inability of individuals with ASD to understand others' intentions and beliefs, and consequently the delayed ability to demonstrate reciprocity in social relations.

Stereotyped behaviours and interests. Repetitive patterns of movement (e.g., hand flapping, twirling, rocking) are commonly observed among individuals with ASD. In addition to these stereotyped patterns of movement, ASD is also accompanied by a

preservation of sameness that results in extreme resistance and/or distress to changes in routines or environments. As well, individuals with ASD might display a preoccupation with objects (e.g., flicking a straw, shredding paper, spinning wheels). Individuals who are higher functioning manifest preoccupations for letters, numbers, or specific topics of interest. These higher functioning verbal individuals tend to become so preoccupied with their chosen interests that they master the topic and then want to speak about it continually.

Conclusion on symptomatic features. Autism is not just a cognitive delay. Individuals with ASD present with a triad of symptoms that are beyond the presence of any intellectual impairment or MR. These overlapping triad symptoms affect both an individual's abilities as well as weaknesses. That is, impairment in one area can exacerbate strengths and weaknesses in another. Overall, individuals with autism are affected by an impaired ability to integrate social, communicative, emotional, and sensory information. Thus, the symptoms and characteristics of ASD are frequently understood as being associated to relative impairments in information processing.

Prevalence and sex ratio.

Autism occurs in approximately 2 to 5 per 10,000 individuals, with boys outnumbering girls about 4 to 1 (Ciaranello & Ciaranello, 1995). The disproportionate occurrence of autism in males appears to be greater in the case of those with an IQ in the moderate to normal range and least in those who are profoundly retarded. Females with autism are more likely to display lower levels of intellectual functioning and exhibit severe Mental Retardation.

The discrepancy in prevalence rates most likely reflects recent changes in the diagnostic criteria, wider recognition of the expression of autism in more capable individuals, and abilities of practitioners to provide better diagnoses. With continued research into the phenotypic diversity of autism, this estimate is predicted to change as a reflection of a broader phenotype of autism that includes milder forms.

Onset, course, and outcome.

The symptoms and behaviours associated with the presence of autism first tend to manifest in infancy. Specifically, parents tend to become seriously concerned about their child's development in the months leading up to the second birthday. This rising concern is based on the child's failure to progress in language development, imaginative play, and social relationships. The syndrome tends to be fully present by the child's fourth year.

With respect to prognosis, almost all individuals manifest severe symptomatology throughout their lives. Follow-up studies have found that an overall pattern of deficits in the three core areas of impairment continue into adult life (Bailey, 1996). The two strongest predictive factors for good outcome or adjustment in adolescence and adulthood include an IQ greater than 50 (Rutter, 1977) and useful speech by age 5 (Bailey, 1996).

Prognosis is also better with less severe behavioural disturbances in early childhood, the presence of some constructive play patterns, good schooling, harmonious family interactions, and normal EEGs (as cited in Sattler, 1992).

Etiology of autism.

Various explanations have been offered to account for the etiology of autism. These explanations attempt to identify biological, psychological, and environmental mechanisms operative in autism. When Kanner first identified autism in 1943 he described children with autism as having normal intelligence and for many years the syndrome was thought to be caused by emotional distress or pathological family relationships. In recent years, researchers have shown that there is a biological basis for the syndrome of autism, although they are still uncertain of the specific etiology. That is, researchers have offered a steady progression of explanation for psychological and developmental deficits related to autism; however, the causes of the associated neurobiological abnormalities of ASD are still unclear.

Biological factors. Research of the biological basis of autism focus on the possibility of both genetic and non-genetic causes. Investigations into possible genetic causes focus primarily on heredity factors and genetic conditions and transmission. Exploration of non-genetic causes of autism examines the presence of neurological and anatomical anomalies as well as physical-environmental factors, including perinatal and obstetric complications and/or infections.

Genetic causes. The genetic conditions associated with autism include chromosome abnormalities and familial transmission. These conditions are investigated with the use of twin and family studies. The strongest indicator that there is a genetic

link to the occurrence of autism is that concordance rates are much higher among family members, siblings, and twins than in the general population. More specifically, concordance rates for monozygotic twins range from 36 to 96 percent while the rate for same-sex dizygotic twins range from 0 to 24 percent. These findings suggest a genetic factor. However, the inconsistent rate among monozygotic twins suggests that other factors influence the occurrence of autism.

Other indications of familial transmission include findings that siblings of children with ASD have higher rates of abnormalities than siblings of mentally retarded children. This suggests that there may be a stronger genetic component for ASD than MR. As well, 2 to 7 percent of siblings themselves have autism, and 12 to 20 percent of siblings exhibit a lesser variant of autism. These findings suggest that a genetic liability may express itself in the occurrence of a full-blown disorder or a milder form of ASD.

In addition to an increased incidence of autism, family members are also predisposed to other mental conditions, such as a higher occurrence of affective disorders, Asperger's disorder, and increased incidences of schizoid personality disorder among parents. Furthermore, the onset of these disorders is found to take place prior to the birth of the child with autism. While family studies have found that neither mental retardation nor general cognitive impairments are evident among family members, some studies suggest that there is a genetic liability that applies to a range of social and cognitive abnormalities, even in family members of normal intelligence.

Non-genetic causes. The presence of neurological and anatomical anomalies, as well as perinatal and obstetric complications, including infections, has been investigated to determine non-genetic causes of autism. To date, much of the neurobiological

research has focused on more severely impaired individuals with autism who also have some degree of mental retardation (Bailey, 1993). Therefore, the occasional presence of brain abnormalities among individuals with autism in these studies is likely influenced by the inclusion of severely autistic children with mental retardation. That is, the presence of brain abnormalities among these children may be a result of neurobiological abnormalities associated with mental retardation rather than anomalies associated with autism.

Among the studies investigating the possibility of neurological anomalies among individuals with ASD, findings suggest that both the structure and function of the brain may be implicated. Structural brain anomalies include: abnormalities in the temporal lobe, brain stem, and cerebellum; smaller cerebellum with fewer Purkinje cells; increased brain volume with an increase in cerebral cortex; a shortening of the dendritic tree development of neurons in limbic structures; and, disordered neuronal organization.

With respect to abnormal functioning of the brain, the following indicators have been found: chronically over-excited cerebral cortex caused by a dysfunction of the reticular activating system in the brain stem, cognitive processing abnormalities in areas of the brain responsible for higher-order thinking, as well as motor and sensory processing; irregular EEG functioning in about 50% of cases; abnormal Event Related Potential (ERP) responses to information processing stimuli; and, increased levels of serotonin in about 25% of cases. This abnormal functioning and connections of the central nervous system (i.e., cerebellum and brain stem) could explain the manifestation of impaired comprehension and use of language, as well as, the strange sensorimotor behaviour observed in individuals with autism (e.g., spontaneous spinning and flicking of

objects, flapping of extremities, rocking of body). However, the cause of these abnormalities and consequential cognitive deficit remains unknown (Sattler, 1992) and could be explained by brain damage associated with accompanying MR. Likewise, there is no consistent and indisputable evidence supporting the likelihood that obstetric complications and infectious risks play a major role in the etiology of autism.

Psychosocial factors. Investigations into possible psychological and environmental causes of autism have taken place since autism was first identified in 1943. Earlier theorists focused on the presence of emotional distress and parental attention. For example, within the psychoanalytic tradition, clinicians theorized that the cause of autism was at least partly psychogenic. The individual's difficulties were regarded as being partly a result of parental, mainly maternal, rejection or mismanagement. The most well known proponent of this type of theory was Bruno Bettelheim who in the 1960s theorized that autism was caused entirely by a mother's rejection of her child. Like Kanner, Bettelheim, believed that autistic children were of normal intelligence. Bettelheim furthered this assumption with the belief that these children chose not to display or were unable to reveal their masked abilities because of the poor socioaffective reception that they received from their parents, particularly their mothers. Thus, he considered autistic children to be biologically intact but psychologically impaired. Based on his beliefs, the term 'refrigerator mother' was coined to describe the aloof mothers who created the autistic behaviours in their children. Thus, Bettelheim attempted to advance Kanner's original theory of the cause of autism by laying specific blame on primary caregivers who happened to be mothers. The belief that autism is caused by psychodynamic conflicts between mother and child is a modern

contribution to the erroneous theme that bad mothering results in emotionally stunted children (Frith, 1998). The myth of the 'refrigerator mother' also overlaps with the general issue of 'mother blaming' and suggests that the autistic child, who is unable to relate lovingly, is a fitting punishment for women who neglect to be full-time devoted wives and mothers (Frith, 1998).

Currently, psychosocial theories about the causes of autism have lost their credibility since the biological findings that abnormalities of the central nervous system are often present in autism. Psychogenic theories have also been refuted by findings that most individuals on the spectrum display some form of cognitive impairment. Current research now stresses that family dysfunction or parental rejection is not a probable leading factor to a condition as damaging and pervasive as ASD. Furthermore, studies have failed to show any association between autism and qualities of upbringing including parental neglect, rejection, or indifference, and/or the frequency of stress experiences. Thus, there is substantial evidence that autism is probably not related to the psychological characteristics of the children's parents (Koegel, Schreibman, O'Neill & Burke, 1983).

With the acceptance that pervasive dysfunctions present in autism are not significantly due to psychosocial factors, many researchers have focused their efforts on understanding autism with research into its specific developmental and social deficits. From these efforts, the field has benefited from hypotheses such as the 'theory of mind,' which attempts to explain how poor cognitive skills and social functioning may be related to information processing and meta-representational deficits.

Conclusion on etiology of autism. In conclusion, both genetic and non-genetic etiologies seem to result in damage to the brain that may contribute to the deficits

associated with ASD. Researchers, however, are unsure about which regions and functions of the brain are affected and whether neurological abnormalities are specific to autism or associated with the presence of MR. Currently, there is neither a consistent psychosocial nor biological explanation to the occurrence and varying manifestations of symptoms associated with ASD. Rather, researchers are unclear on the specific etiology and currently view autism as the final behaviour pathway for a variety of biological insults to the central nervous system (Konstantareas, 1990). Therefore, autism is not viewed as a well-defined syndrome with a single etiology, but rather as a spectrum of behaviours that characterize individuals with a variety of manifestations.

Overview of current treatment methods and ideologies.

Most treatment plans for individuals on the autistic spectrum include special education, behavioural interventions and occasionally pharmacotherapy. In all cases treatment of autism is highly individualized, as the presentation of symptoms for each individual varies so greatly. In addition, optimal treatment programs for individuals with ASD are typically multidimensional because several areas of functioning are affected by the disorder (Stahmer & Schreibman, 1998). Therefore, treatment plans tend to be tailored to the needs and level of functioning of each individual.

Symptoms that are typically targeted for treatment include ritualistic behavior (i.e., self-stimulatory behavior), language and communication impairments, and anxiety (e.g., Bregman & Gerdtz, 1997; Cohen & Volkmar, 1997; Prizant, Schuler, Wetherby & Rydell, 1997). In conjunction with treatment of these symptoms, treatment programs typically attempt to enhance a client's social skills, life skills, and problem solving abilities. Some treatment plans also involve teaching coping skills and acceptance of

disability (Siegel, 1997). The focus of treatment also varies according to the age of the individual and presenting symptoms. For example, young children on the spectrum might receive speech and language therapy and special education. Young children might also be prescribed psychoactive medications in an effort to treat certain target symptoms (e.g., self-injury). As children approach adolescence and enter adulthood, particularly those with relatively high IQs but poor social skills, they might be experiencing depression, anxiety or obsessive-compulsive symptoms that require psychotherapy, behaviour or cognitive therapy and/or treatment with an effective psychoactive agent. Therefore, the treatment program to be offered must consider a number of factors including the involvement of the family and community members.

While there are many overlapping treatments available for autism, only the current most widely used approaches will be reviewed. As well, these approaches will be categorized and discussed separately. At present the most consistently used treatments are behavioural and educational approaches, biological treatments, psychodynamic therapies, communication therapies, and occupational therapies.

Behavioural approach. The foundation of the behavioural approach can be traced to the Darwinian view that there is continuity between humans and lower animals so that “animal models” of behaviour as well as principles of animal learning research can be generalized to humans (Hawton, Salkovskis, Kirk & Clark, 1998). Later in the nineteenth century, Pavlov made his famous discovery that stimuli other than food would elicit salivation if the stimuli had been paired with food. This discovery prompted new investigations into human and animal learning that have led to important behavioural principles including operant and classical conditioning.

The basic tenant of the behavioural approach is that behaviours occur as a response to stimuli and that new behaviours can be learned. The clinical application of behavioural principles has brought about such treatment strategies as systematic desensitization, exposure, behaviour modification and token economies. Most comprehensive treatment programs for individuals with ASD include behaviour modification techniques and other operant conditioning based strategies.

These interventions have become the predominant treatment approach for enhancing the behavioural and social functioning of persons with autism (Bregman & Gerdtz, 1997). The most commonly applied behavioural approaches include reinforcement and contingency based programs that are used to increase and decrease behaviours. An advantage of behaviourally based treatment plans is that they tend to offer bounded programs of intervention. That is, they tend to offer step-by-step programs that span several years. Generally, these programs tend to work fairly well, especially in the early phases of the program. However, behavioural therapy can be a slow, step-by-step process (Cohen, 1998). As a result, difficulties in the use of behavioural strategies can occur when individuals cannot sustain their attention during training or may lack motivation to perform the behaviours being taught to them (Stahmer & Schreibman, 1998). Other problems can include poor generalization and maintenance effects of learned behaviours.

Discrete Trial Training (DTT) is a behavioural intervention that focuses on training specific individual target behaviours. Target behaviours might include learning to answer the question "What's your name?" Once the target behaviour is identified, the instruction is presented to the individual. Initially, prompts tend to be used to evoke a

correct response. The prompts can be faded away as the individual learns to provide the correct response independently. Throughout the training, the individual receives immediate reinforcement for the correct responses. The consequence of no reward is elicited when the individual provides an incorrect response. This type of training is most often used for the acquisition of new skills. A pitfall of DTT is that it does not always elicit generalization of newly learned skills to new environments or situations. Furthermore, individuals with autism do not seem to enjoy the repetition of training or the actual tasks involved (Stahmer & Schreibman, 1998).

In an effort to improve upon the drawbacks of DTT, researchers developed a treatment program called Pivotal Response Training (PRT) (Koegel, Schreibman, Good, Cerniglia, Murphy & Koegel, 1989). The focus of PRT is to increase pivotal components of responses, particularly motivation and responsiveness to multiple cues. By focusing on these components it is believed that generalization of behavioural change is more likely to occur. Techniques of PRT can be administered throughout the day and across many natural environments and allow the individual with autism to be in control of the learning situation by choosing activities. Other techniques include reinforcement of attempts, variation of tasks and stimuli, use of multiple examples, and interspersing 'maintenance tasks' that an individual has already mastered. This method is commonly used to target language and social skills.

Another behavioural approach is known as Applied Behavioural Analysis (ABA). This treatment method follows the basic principles of operant behaviour that were first outlined by B. F. Skinner in 1938, when he described the lever-pressing behaviour of rats for food or water reinforcement (Martin & Pear, 1992). Since Skinner's pioneering work,

the effects of contingencies of reinforcement on the behaviour of individuals with autism has largely been influenced by Lovaas (1993), who has come to be known as a behaviour modification expert in the field of autism. In the past Lovaas' reputation has been tarnished by his use of aversive techniques that included painful treatment of children with autism as a way to teach them what behaviours were undesirable (e.g., hand slapping). Recently, Lovaas has replaced the use of aversive teaching methods with the introduction of extinction-based practices such as ignoring problem behaviours, short time-outs, redirection, and firm "No's". Overall the behaviour modification programs devised by Lovaas have engendered relatively faster short-term effects than other interventions. What remains to be determined, is whether the Lovaas method will have any effect on the maintenance of the effects over the long-term.

Educational approach. The primary goal of effective educational interventions is to expose children with autism to special education or other psychosocial approaches that may facilitate learning and the acquisition of language and communication, and social skills.

Learning Experiences, an Alternative Program for Preschoolers and their Parents (LEAP) is a type of treatment that is based on the theoretical foundation that children should be taught in the least restrictive environment and that the learning opportunities available in a typical classroom can be beneficial to children with autism. Largely influenced by Harlow's discovery of social deficits among isolate-reared primates, LEAP is designed to meet the needs of both typical preschool children and those with autism within an integrated classroom setting (Strain, Kohler, & Goldstein, 1996). Thus, this approach emphasizes exposure to typical peer models and trains peers to engage children

with autism in communication. Teaching aides are also provided to assist and support a child's participation and functioning in the natural environment. In addition, parents of children with autism participate in a parent program with the aim of teaching parents more effective skills for interacting with their preschoolers in school, home, and community environments. These programs typically involve consultation services with speech and language pathologists, occupational therapists, physiotherapists, physicians, child development specialists, and mental health personnel. In general, these programs can bring about improved social and communicative interactions among children with autism in the short-term, however, the long-term generalization and reliability of success is still unknown (Strain, Kohler, & Goldstein, 1996).

Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) is a community-based program that relies on educational, behavioural, cognitive, and vocational strategies to help prepare people with autism to live and work more effectively in the community (Schopler, 1994). The overall aim is to assist individuals in improving their life skills and structuring their environment to accommodate specific deficits. This program emphasizes the development of communication, social, and coping skills with the use of behaviour modification programs. Impairments in fine and gross perceptual motor areas are also targeted in treatment through physical exercises and eye-hand integration activities. A variety of vocational models are also used to prepare clients to participate in employment. Unlike purely behavioural approaches, the educationally based TEACCH program does not target specific behaviours directly. Rather, TEACCH focuses on the underlying conditions that will foster learning experiences. Therefore, instead of directly treating

problem behaviours TEACCH emphasizes relief of the underlying reasons for the occurrence of the problem behaviour (e.g., anxiety, physical pain, unpredictable changes, boredom). Direct behaviour modification is reserved for those behaviours that endanger the person when the above strategy does not work. In general, TEACCH offers long-term individualized strategies for each client, which is adjusted over time according to the progress made in each domain of development.

Biological approach. The biological approach to autism emphasizes the effects that physiology and neurobiology have on an individual's ability to function and learn. These approaches include the use of medications, vitamins, and dietary supplements and restrictions. The most commonly supported biological strategy in the treatment of ASD is the use of medication. Up to now most research has focused on the efficacy of pharmacological treatments, while relatively little research has been designed to discover the effectiveness of dietary changes and vitamins in the treatment of autism.

Although a specific cause of autism is unknown, research has supported an association between elevated levels of serotonin and the cognitive and behavioural manifestations of autism (McDougle, 1997). Thus, pharmacotherapeutic strategies that interfere with serotonin activity are potentially valuable in the treatment of autism. The primary goal of effective psychopharmacological interventions is to render the individual with autism more amenable to special education or other psychosocial approaches that may facilitate learning. In addition to the triad symptoms of autism, neurobehavioural problems are also associated with ASD. For example, individuals on the spectrum might also experience seizure disorders, sleep disorders, movement abnormalities and behavioural disorders. These problems are treated with medications that are used to

reduce those behaviours that interfere with an individual's ability to attain her/his highest level of functioning.

Several classes of medications are used to control target symptoms of neurobehavioural problems. These include antipsychotic, anticholinergic and antidepressant medications, psychostimulant, anxiolytic, and anticonvulsant agents, as well as Lithium Carbonate (for a review see McDougle, 1997). The target symptoms that these drugs are used to control or alleviate may differ across ages, therefore close monitoring of medication use is required. Typical target symptoms present in early childhood that may be controlled with medication include hyperactivity, temper tantrums, irritability and withdrawal. Other childhood symptoms might include stereotypes, aggressiveness, and/or self-injurious behaviours. In adolescence and adulthood the development of depression and obsessive-compulsive behaviours may take place. In many cases medication is used to alleviate all these symptoms.

However, the sole use of medication as a treatment to autism is rare. Rather drug therapies are used to control and alleviate symptoms in order to enhance the effectiveness of other treatment approaches that focus on replacing problematic symptoms and building skills. And, it should be noted that the use of pharmacotherapy requires great care by considering potential side effects of medications, adjustments of dosages and individual responsiveness to medications.

Psychodynamic therapies. Psychodynamic treatments of autism stand apart from other treatment approaches in their emphasis on the developmental, emotional, and humanistic issues facing the individual. There is a strong emphasis on improving the social interactions of individuals with autism as well as improving the awareness of

others that the individual with ASD has unique motivations and behavioural intentions. "Talking therapies" such as cognitive therapies and psychotherapies have some applicability among individuals with ASD in terms of using specific techniques such as interpreting the underlying meaning of behavior and cognitive restructuring. However, the use of psychotherapeutic approaches can be limited when there is an expectation that the client be able to communicate verbally. Nonetheless, the use of psychodynamic principles can be modified for individuals with ASD.

One such treatment approach is Floor Time, which focuses on the social-emotional development of children with developmental disabilities (Greenspan, Weider & Simon, 1998). With the use of specific techniques that are individualized for each family, parents are encouraged to interact with their child by following his or her lead and interests and then gently and gradually challenging their child to take more and more initiative. Parents are also encouraged to attend to the emotional tone of their child in order to guide his or her state. As well, this program promotes the development of interactions that can alert children when they become disengaged and calm them when upset.

Parents are also encouraged to maintain and reinforce running dialogues with their child first with the use of gestures and later, words. The primary focus of this approach is to create opportunities for the child to learn the pleasures of engaging with others and the satisfaction of taking initiative, making wishes and needs known, and getting responses. Over time, it is felt that this will help a child build a link between emotion, behaviour, and communication. A major component of this approach is to utilize support services that will address other issues in a multi-system developmental

disorder. Therefore, early education, special education, occupational therapy, as well as speech and language therapy are considered important in a comprehensive treatment.

Communication therapies. The acquisition of language and communication skills occurs most often in a social context. Given that individuals with autism display social deficits, such as impaired social reciprocity, they often have a difficult time using language in meaningful and socially appropriate ways. Their ability to communicate needs, intents, or thoughts is often restricted, therefore, the primary goal of communication therapies is to facilitate the acquisition and use of language, as well as to increase the social-communicative functions of language.

In Developmental Social Pragmatic Interventions, individuals' internal motivations in typical environments are used to reduce language deficits. The focus is on developing a normal range of communicative intentions and in developing socially appropriate uses of communication signals. A major strategy in this intervention is the development and use of Joint Activity Routines (JARs). Joint Activity Routines are developed by following the child's lead so that teachers, peers, and family members can engage children in activities in which they are interested and thereby, facilitate the use of language (Snyder-McLean, McLean, Etter-Schroeder & Rogers, 1984). Over time, it is hoped that individuals with ASD will learn to communicate better.

Another communication therapy is the Picture Exchange Communication System (PECS). The driving principle behind this intervention is that all individuals should have the opportunity to communicate their intentions, even if oral language is not yet an option. Thus, this intervention focuses on encouraging vocalization and speech, as well as teaching individuals how to use signals for initiating or responding to interactions

(Charlop-Christy, Carpenter, Le, LeBlanc & Kellet, 2002). Development of alternative modalities takes place when speech is not an option. Thus, children without speech can be taught to use miniature objects, photographs, visual symbols, or printed words to express themselves.

Occupational Therapy. There is a paramount need to increase the ability to participate in everyday life activities like caring for yourself, working, playing, going to school, and living independently in individuals with long-term developmental disabilities like ASD. Therefore, Occupational Therapies (OT) are beneficial in treatment programs as they address the maintenance, improvement, or introduction of skills necessary for an individual to participate as independently as possible in meaningful life activities. Many of the strategies used in OT, including sensory integration, deep pressure, brushing, and intrinsically motivating activities, work to normalize sensory experiences.

Sensory integration therapies are based on sensory-information processing principles. This type of therapy is often beneficial among individuals with ASD whose neurological functioning required in organizing or “integrating” sensory information is compromised. The aim of these therapies is to normalize the individual’s sensory experiences so that sensory input is not so overwhelming or weak that it interferes with the perception of its meaning (Ayres, 1979). By normalizing sensory processes, it is believed that learning will be enhanced and that the stereotypical movements related to autism will decrease. In order to normalize sensory processing, different sensory issues are addressed in an individually designed treatment program known as a ‘sensory diet’. The sensory diet addresses information that is processed through all senses (i.e., auditory, visual, tactile, proprioceptive, vestibular, gustatory, olfactory).

Conclusion on treatment approaches. Overall the treatment of ASD is highly individualized and multidimensional in order to address the several areas of functioning affected by ASD (Stahmer & Schreibman, 1998). Therefore, treatment plans may include components of behavioural, educational, psychodynamic and pharmacological interventions.

In keeping with the multidimensional aspects of ASD, the training workshop developed by the author addressed the interdisciplinary approach to treatment. Techniques were designed and information was provided that could be used in conjunction with all available methods of treatment. These foci will be discussed below.

2.3 Adult Education and Adult Learning Theory

Inherent in the range of treatment forms currently utilized, is that fact that typically several adults are involved in caring for or working with an individual with ASD. Thus, the groundwork is usually laid for a multi-disciplinary treatment team. Although caregivers and social service professionals may come from varied backgrounds, the primary goals of treatment and symptom management are likely to be the same. However, the methodology to approach treatment goals may change with increased knowledge about the nature of autism. Therefore, as in any helping profession, continuing education is important. Thus, in setting out to provide successful intervention, parents, caregivers, staff, and professionals may require some degree of continuing education on the topic of ASD. Continuing adult education should provide new information and expose learners to new attitudes and methods (Kempfer, 1955). The provision and dissemination of information to these individuals, therefore, through professional development, is important and an ongoing aspect of work in the field. Adult

education is a “process...used by institutions of all kinds for the growth and development of their employees, members, and clients.” (Knowles, 1977, p. 52).

Adult education, or helping adults to learn, is also known as andragogy. The distinction between andragogy and pedagogy (i.e., the leading of children to learn) is based on the idea that there is a difference between the adult learner and the child learner. The differences between adults and children as learners seem to arise out of developmental changes over the lifespan. Knowles (1984) offers theories of learning that coincide with the stages of human development. According to Knowles (1984) there are three main learning theories: behavioural, cognitive, and humanistic. The behavioural learning theorists view the purpose of education as the opportunity to acquire behaviours that a teacher deems necessary to perform. This theory seems to be most observable in the education of children. In contrast, cognitive learning theorists view humans as being motivated to learn because of their capabilities for critical thinking and problem-solving. This ability to think critically begins to develop during adolescence and adulthood. Meanwhile, humanistic learning theorists believe that humans strive for the development of individual potential. This theory of learning can be observed and applied to those adults who are motivated to pursue professional development and continuing education. Thus, the stance of each of these three theories offers a framework for the developmental learning needs of individuals over the lifespan.

Adult learners have unique developmental needs related to learning, particularly as they advance through life stages and become more prepared to learn (Kempfer, 1955; Knowles, 1978). As such, adult learners can be guided to learn in ways that differ from the teaching practices used to educate children. More specifically, given that adult

learners want active involvement in a personal learning experience (Kempfer, 1955) adult education involves making learners active participants in the learning process rather than passive receptors of instructions (Dastoor, 1993). Due to their rich and varied experiences, adult learners are also likely to be receptive to instructions that bring them together to focus on a common goal or task while at the same time maximizing their heterogeneous experiences (Knowles, 1984). Having a preparedness to learn, adults are also stimulated by activities that are more self-directed and group oriented via discussion (Holden, 1972; Knowles, 1978).

Given this preparedness and openness for discussion, the function of adult education can be broad. Knowles (1977) describes adult education as a series of organized activities that can be used to achieve specific educational objectives. Knowles and Klevins (1972) identify the following purposes of adult education: (a) to help people to understand a rapidly changing world, (b) to guide realistic goal setting, (c) to help people understand their problems, (d) to discover the resources people have available to them, and (e) to find ways to solve their problems and to reach their goals under current circumstances. Knowles and Klevins expand upon these purposes with these aims of adult education: to expand communication skills, develop flexibility to change, improve human relations, facilitate participation, and assist personal growth. Adult education also serves to "extend the opportunities for adults to learn, and [advance] the general level of our cultures." (Knowles, 1977, p. 52). Furthermore, adult education provides the opportunity for individuals to upgrade their professional skills, competence, and knowledge (Doelker, 1977; Giasson, 1994; Gibelman & Humphreys, 1979). Finally, adult education also serves to meet the learning needs of a specific group relevant to the

performance of a particular job (Gibelman & Humphreys, 1979).

Given the developmental stage of adult learners, the opportunities for curriculum and workshop developers to maximize learning is noteworthy. As in any learning program, the first step in maximizing adult learning is to outline the learning objectives. Learning objectives serve instructors by indicating the needs of the learners, the targets of instruction and the assessment of gains made by the learner (Monroe & Quinn, 1972). In addition to adherence to learning objectives, learning can be enhanced by specific environmental and psychological conditions. As reviewed by Giasson (1994), Knowles (1984) and Reed (1993) have outlined the following physical and psychological characteristics of conducive learning environments: (a) *comfortable physical environment* (e.g., temperature, chairs, easy access to restrooms, breaks), (b) *mutual respect* through introductions that involve asking participants to talk about themselves and what they would like to get out of their learning experience, (c) *collaboration* through the sharing of experiences and knowledge, (d) *supportiveness* by accepting contributions as significant and worthwhile, (e) *mutual trust* by having the instructor take on a facilitator role rather than an authoritarian one, (f) *active inquiry* through volunteering of information or sharing of concerns, (g) *a relaxed environment* when appropriate and that includes time for participation and practice.

In some cases, social service organizations offer incentives to their staff members to participate in adult education programs (Koch & Brenner, 1976, as cited in Zimmerman, 1978; Giasson, 1994). In addition to professional development being a job requirement, Zimmerman (1978) found that social workers attend adult education programs for a number of reasons including improved competence, intellectual

stimulation, and pursuit of personal interests. Koch and Brenner (1976) also found that social services professionals show increased interest in continuing learning of skills that have practical application. Kempfer (1955) also notes that adults demand education with intrinsic merit that helps them to solve their problems. Furthermore, adult learners are anxious to learn skills that can be applied to tasks, problems and decisions that are in their immediate or foreseeable future (Kempfer, 1955; Kreitlow, 1972; Tough, 1981) and that they are interested in feedback and interchange (Kreitlow, 1972).

Designing adult learning programs.

The most important component of learning is change (Giasson, 1994; Wiggs, 1984; Walter & Marks, 1981) (e.g., change in awareness, confidence, thinking, competency). Change can occur both overtly and covertly and can be evoked through any number of activities in both informal and formal learning settings (Giasson, 1994). Informal learning may involve small groups with an emphasis on peer teaching whereby the learners share the responsibility of planning, leading and evaluating the educational program and activities (Holden, 1972; Miller & Verduin, 1979). The role of the leader in the informal learning program is that of trainer as opposed to subject matter specialist (Holden, 1972). Whereas, formal learning may be more structured with the content and presentation of the material being prepared prior to the onset of the program (Giasson, 1994). In addition to different styles of learning programs, there are also different design models from which learning activities are organized. Wiggs (1984) notes that there are two forms of design models, descriptive and prescriptive, each having advantages. The descriptive model is an open system and does not follow a series of steps (as cited in Giasson, 1994). The prescriptive model is a closed system and follows "step-by-step

procedures in implementing the learning program” (Giasson, 1994, p. 20).

In addition to the learning settings and design models mentioned above, the style of specific learning activities also requires attention. The style and concepts of experiential learning are especially effective when encouraging change and growth in individuals. Experiential learning can be defined as learning that is derived from experience and knowledge that is gained from what one observes or encounters. As these elements of design come together, the final design of the learning experience is formed such as seminar, lecture, or workshop.

In this paper, the focus of professional development will be on the workshop. This format uses a variety of experiential learning techniques in various sized groups, which mandates that the workshop designers and facilitators be knowledgeable about the dynamics and processes of group development.

Group development, process, and dynamics.

In developing any learning program it is important to consider how small groups develop and the specific processes that arise in the creation and maintenance of groups. The developmental sequence and group processes will vary according to the group being dealt with. Based on a review of 50 studies dealing with the developmental sequence in small groups, Tuckman (1965) identified the following classes of groups: therapy-groups, human relations training-groups, natural groups, and laboratory-task settings. These group classifications depend on the setting in which a group is found as well as the purpose of the group behaviour (i.e., task, social, or interpersonal) (Tuckman, 1965). Based on his findings, Tuckman has theorized a model of development for all types of groups. Within this model, Tuckman has identified stages of development related to the

group structure as well as the task-activity.

In terms of the overall group structure, four stages have been identified including: testing and independence, intragroup conflict, development of group cohesion, and functional role-relatedness (Tuckman, 1965). The testing and dependence stage of the group structure refers to the group members' attempts to discover what interpersonal behaviour are acceptable in the group, based on the reactions of the facilitator and other group members. Discovery of norms often involves testing of boundaries followed by the development of relationships to the facilitator, members, and structure in a dependent manner. Members come to rely on the norms and depend on other members to follow the established norms and protocol. In the second stage, intragroup conflict, members tend to lack unity and become hostile with one another as an expression of the individuality. The need for individuality can also be a form of resistance to the formation of group structure. The outstanding feature of the third stage, development of group cohesion, is harmony. In this stage the group becomes an entity based on its acceptance of one another, their desire to maintain, perpetuate and establish new group generated norms. The final stage of group structure, functional role-relatedness, occurs when the group members are united to become a problem-solving instrument. Once norms have been established and members have learned to relate as a group, their sense of security allows them to enhance the completion of task activities. Notably, the development of group structure and cohesion is an ongoing process.

As the group structure continually develops along a developmental continuum, the group's response to the task-activity also develops continually. Tuckman (1965) has theorized four stages of task-activity development among groups. These stages include:

orientation to the task, emotional response to task demands, open exchange of relevant interpretations, and emergence of solutions. In the first stage, orientation to the task, group members attempt to identify the ground rules of the task and how to accomplish the task. Orientation to the task requires members to orientate to both the interpersonal and task realms of the group. During the second stage, emotional response to task demands, members respond to the discrepancies between their personal orientation and that demanded by the task. This response is usually in the form of resistance. In the third stage, open exchange of relevant interpretations, information is acted upon so that alternative interpretations of the information can be arrived at in the form of discussion and sharing of opinions. In the final stage, emergence of solutions, constructive action is an attempt at successful task completion can be observed. It is at this stage that energy previously invested in the structural development of the group can now be devoted to the task. Once again, while the group's response to tasks develops along a continuum in an ongoing manner.

In addition to Tuckman's (1965) classification of groups, Bion (1959) has also identified the existence of basic assumptions that serve as the underlying force for three types of groups. The first group he describes is known as the dependency group in which the primary aim of group members is to attain security and have members protected by one individual (i.e., the leader). In the second type of group, fight-flight, action is essential and the individual may be abandoned for the sake of survival of the group. The final group, the pairing group, is a type of group where two people come together on behalf of the larger group to carry out the task of pairing and creation. Bion's assertion is that every human being has the capacity to combine with all types of groups.

meeting job requirements, building skills, and solving problems. Certain physical and psychological characteristics make learning more conducive among adults. For example, adults prefer active participation in self-directed activities and group discussions that allow collaboration and time to practice new techniques. Overall, activities that involve experiential learning are particularly effective when encouraging change and growth among adult learners. The design and delivery of adult learning programs also requires consideration of the ongoing development of group dynamics and cohesion. Furthermore, the group facilitator's ability to foster positive interactions is important to the group's ability to complete activities and experience growth.

In keeping with adult learning theory and group development, the training workshop developed by the author addressed the inter-disciplinary needs of professionals and caregivers working in the field of ASD. A training workshop was designed that allowed attendees to learn and work together in small groups. Maximizing group cohesion in order for group members to work together toward a common goal was considered important given the multi-disciplinary treatment approach to ASD.

2.4 Fundamental Ideologies for the Workshop

All parents, caregivers, clinicians, social service professionals, and researchers of individuals with ASD need the ability to communicate and interact effectively with their child or client. Using the ideologies of several renowned professionals, the author implemented a workshop to help those above to improve communications and interactions with individuals with ASD.

Influential theorists and professionals.

Over time there have been various movements and ideologies within the

psychotherapy field (e.g., family therapy movement, Solution-focused therapy). These movements have been brought forth by many important contributors such as Viktor Frankl, Milton Erickson, Virginia Satir, Gregory Bateson, Richard Bandler, John Grinder, Steve de Shazer, and the clinicians of the Mental Health Research Institute (MRI). Despite their different backgrounds and clinical orientations (Nichols & Schwartz, 1998) the contributions made by these individuals coalesce with treatments available for individuals with ASD. Furthermore, in understanding the ideologies of these contributors it is possible that a new perspective on autism treatment and management may be developed.

Collectively the works of these people and others seem to have the following common assumptions:

- (i) people can change and small changes will lead to greater changes,
- (ii) rapport is necessary for therapeutic gain,
- (iii) building on a strength or success is easier than stopping an undesirable behavior,
- (iv) clients should be allowed to define their own goals in collaboration with the therapist,
- (v) there are many ways to look at and interpret a situation,
- (vi) people experience and interpret the world in unique ways and the structure of those experiences is also unique,
- (vii) positive intent can be found in all behavior and communication,
- (viii) all behavior is communication,
- (ix) each experience, regardless of being positive or negative, provides feedback and a learning opportunity,

(x) people's behavior is a reflection of the best that their abilities allow at that time and in that circumstance, and,

(xi) every experience and every behavior is appropriate for that specific context.

The influence of Viktor Frankl's contribution is evident in the premise of his "logotherapy". Frankl's "logotherapy" is a meaning centered psychotherapy that is concerned with the individuals' search for meaning (Frankl, 1946). The premise of Frankl's therapy has influenced the assumption that the meanings that people attach to their lives and experiences of the world are unique. Frankl also noted that "existential frustration", or the search for meaning in one's life, is neither pathological nor pathogenic. Existential concerns, distress, frustration, and hopelessness are not mental diseases, rather they are normal and evident in most individuals (Frankl, 1946). According to Frankl, therapy should help clients to understand that they have a unique human potential to transform personal tragedy into triumph, and to turn a predicament into an achievement (Frankl, 1946). Frankl's ideas that finding one's specific meaning of life at a given moment has influenced the assumption that people do the best that they can in a particular time and circumstance. That is, there is no better way one could have handled a past situation apart from the context and people involved in that situation.

Another influential contributor to the aforementioned assumptions is that of Milton Erikson. Through his work Erikson demonstrated the value of a client and therapist working collaboratively to define the goals of treatment (Erickson & Rosen, 1982). Erickson's questioning of resistance influenced the development of this concept of co-operation (Erickson & Rossi, 1979; O'Hanlon & Wiener-Davis, 1989). According to Erikson's theory, clients' non-compliance allows the therapist to learn methods that

will work for them (Giasson, 1994). Thus, Erikson has also influenced the assumption that all experiences provide feedback and the opportunity to learn.

Bateson's contribution in the function of communication has been significant to the understanding of family and interpersonal dynamics (as cited in Nichols & Schwartz, 1998). Bateson theorized that communication has two functions: report and command (Bateson, 1951). Thus, every message provides content as well as a covert "metacommunication" related to the roles of the speaker and receiver. For example, "Brush your teeth, it's bedtime" contains content but also carries a message about who is in charge. Bateson further observed that metcommunications occur among animals and that nonverbal signals (e.g., gesture, tone, posture, facial expression, intonation) also transmit metamessages (Bateson, 1951; Nichols & Schwartz, 1998). Furthermore, Bateson theorized that two or more descriptions of the same process, pattern or sequence are essential in the development of ideas (Giasson, 1994). Thus, Bateson's theories lead to the aforementioned assumptions that all behavior is communication, that there are many ways to interpret a situation, and that individuals' interpretations of an experience are structured differently and are neither positive nor negative (deShazer, 1985).

Virginia Satir played an important contributing role as a pioneer in the evolution of family therapy, as well as experiential therapy (Nichols & Schwartz, 1998, p. 14). Her work has also influenced the acceptance of mutual respect, development of rapport and collaboration between client and therapist (Satir, 1972). "Satir concentrated on clarifying communication, expressing feelings, and fostering a climate of mutual acceptance and warmth....Her great strength was to connect with families...in terms of hopes and fears, yearnings and disappointments." (Nichols & Schwartz, 1998, p. 44).

Satir also influenced the assumption that change is possible (Satir, 1972). According to Satir people do not avoid change, rather, they often do not think that they can change. Satir was not interested in changing clients when she began work with them; rather, she was interested in "finding their rhythms, being able to join with them, and helping them go inside to those scary places" (Simon, 1989, pp. 38-39). Satir believed that caring and acceptance were essential in helping people overcome their difficulties and fears. To change, Satir believed that people need to feel accepted, appreciated, and respected. Thus, building rapport with clients was important to Satir, and she viewed rapport as necessary for creating cooperation and responsiveness among clients. In addition to accepting clients and finding their rhythms, Satir also built rapport by making subtle shifts in nonverbal elements such as her voice tone, tempo, and volume, and her facial and hand gestures (Nichols & Schwartz, 1998). Through this technique Satir demonstrated rapport building as well as the assumption that all behavior is communication and that clinicians are able to influence change with subtle and nonverbal communication. Satir also influenced the assumption that within people's behavior and communication there is positive intent.

Bandler & Grinder's (1982) work in the area of content reframing has built on several of the afore-mentioned assumptions. Overall, the concept of reframing has influenced the ideas that every experience and every behavior is appropriate to a specific context, and that each of us has unique interpretations of the world. Bandler and Grinder have also emphasized the importance of building and maintaining rapport with clients. In conjunction with the contributors mentioned previously, Bandler and Grinder have been influential in promoting new attitudes towards treatment, as well as new techniques.

Reframing, or redefining situations, is a technique that has been used in a variety of therapeutic contexts and by “therapists who understand that “problem behavior” only make sense when it is viewed in the context in which it occurs.” (Bandler & Grinder, 1982, p. 2). The idea behind reframing is that the response to a stimulus can be changed, not by changing the stimulus, but by changing the meaning of the stimulus. In essence, by changing the meaning of a stimulus we are likely to change our response to that stimulus (Bandler & Grinder, 1982). Attaching a new response to some experience leads to therapeutic gain. For example, one can react to being fired from a job with despair and depression, or with a simple reframe, can view it as an opportunity to spend more time with one’s family or pursue other endeavors. New meaning can often be given to a stimulus by accepting that there is nothing inherently bad about any stimulus or any change.

Bandler & Grinder (1982) have determined that people respond to situations and stimuli according to their own unique decision strategies. One way to alter our response to immediate problems is to engage in a different strategy that will bring about a more positive feeling. This may not result in a pervasive change, but small changes can serve as catalysts to future changes. Bandler and Grinder (1982) also point out that before any therapeutic gain can ever be made the therapist must develop rapport and gain access to a client’s context of any given situation or event. Also, a therapist should realize that much of a client’s context is internal, thereby challenging the therapist to uncover the thinking strategies being employed by the client. For example, if an adult suggests to a child with autism, “Would you like to go to the park?” and the child screams and proceeds to pull his hair, then it seems that the child is operating out of a unique internal context. An

exploration of events during the child's last outing may reveal that the child was hurt when he fell off a swing. Thus, the ability to establish and maintain rapport is the "ability to appreciate that what looks and sounds and feels [strange] and inappropriate to you, is simply a statement about your failure to appreciate the context from which that behavior is being generated." (Bandler & Grinder, 1982, p. 9-10).

In addition to the contributors mentioned above, the clinicians of Solution-focused therapy have also influenced the idea of exploring the nature of the presenting problem with the client in an interactional and joint manner. de Shazer's (1988) notion of deconstruction, whereby the therapist accepts the client's account of the problem and works with the client to find exceptions, lends to the idea that clients and therapists work together collaboratively. Likewise, members of the MRI also worked within the framework that therapy should focus on the client, the problem and the therapist; thus, fostering a mutual and collaborative treatment process. The views of the MRI on family therapy regarding systemic interactional patterns of family members have also contributed to the assumption that a small change in one person's behavior can make a profound difference in the behavior of all persons involved (deShazer, 1985, 1991, as cited in Giasson, 1994).

The common assumptions held by the professionals mentioned above have significantly contributed to the author's therapeutic techniques for enhancing positive interaction and communication with individuals who have autism. Furthermore, the contributions made by these individuals may be expanded upon further in the development of a new perspective and strategies for autism treatment and/or management.

Neuro-linguistic programming.

In developing therapeutic techniques for individuals with autism the author also drew from the principles of Neuro-Linguistic Programming (NLP), which is a model and communication process used to understand human behaviour and experience (Dilts, 1983a). Within this model there is a strong emphasis on the interaction between behaviour and environment (i.e., social and ecological). That is, NLP involves the examination of the behavioural and biological systems of feedback and response that occur in the interactions between: (a) a human being and him or herself, (b) a human being and other human beings, and (c) a human being and his or her environment (Dilts, 1983a, p. 5).

The founders of NLP include John Grinder and Richard Bandler. In their effort to formalize effective patterns of communication Grinder and Bandler developed the NLP model to analyze the observable patterns of human behaviour and the underlying neural activity governing this behaviour (Dilts, Grinder, Bandler & DeLozier, 1980, Dilts, 1983a). The fundamental goal in developing this model was to understand and utilize human processes of learning, memory, communication, choice, and motivation by understanding and utilizing the neuro-physiology of human behaviour (Dilts, 1983a). In developing the NLP model Grinder and Bandler examined the work of noted therapists Fritz Perls, Virginia Satir, and Milton H. Erickson. They examined the processes, techniques, and commonalities among these professionals in an effort to organize a set of operational procedures for fostering change, growth, and motivation in humans. Thus Grinder and Bandler set out to learn from those deemed experts in understanding behaviour and utilizing human process. By examining the work of these successful

professional Grinder and Bandler conducted a step by step analysis of their techniques in order to build a model that could be applied by others in varying fields. In building their model Grinder and Bandler also integrated their own skills from the disciplines of linguistics, computers, and Gestalt Psychology (Dilts, 1983b). Since it's inception, NLP has been utilized for therapeutic communication and is popular in many fields including business, law, and education (Dilts, 1983b). For example, principles of NLP have been used to design advertising campaigns, individualized education plans, and in selecting juries. The advantage of the NLP model is that it's principles and techniques are neutral in their approach and therefore can be applied to any form of human interaction. Given its cybernetic form, the NLP model can be applied to any system "...in which events at any position in the system may be expected to have effect at all positions on the system at later times." (Dilts, 1983a, p. 20).

While the model of NLP provides the foundation for improved communication and interaction, it is the application and process of NLP that provides the hands on experience and feedback necessary to grow, change, and motivate. The NLP process is based on sensory input and behavioural output. One individual's sensory experience will elicit a response in the form of internal processing and communication (verbal and non-verbal) that may in turn evoke another individual's sensory experience that will elicit a response. Thus, the effect of the environment on humans and human interaction is strongly emphasized in the NLP model. There are two fundamental goals of the NLP process (1) to train and expand one's own sensory awareness of other human beings, and (2) to utilize the information one gathers through these observations.

As stated by Dilts (1983a, p.6) the purposes of these two goals are as follows:

- (a) to observe and identify patterns of behaviour that are systematic, recurrent, and a part of all human sensory experience,
- (b) to note that one's own choice of behaviour elicits response in oneself and in other human beings (and vice versa),
- (c) to determine the sensory or representational distinctions that human beings can make about their internal and external experience, (i.e., ability to see/visualize and hear/verbalize),
- (d) to determine the patterns involving the combination and connections of neural networks underlying behavioural processes,
- (e) to determine how these distinctions and patterns affect the strategies that people use to organize, make sense of, and communicate about their sensory experience and internal maps, and,
- (f) to determine how these distinctions, patterns, and strategies may be utilized to understand and promote the processes of learning, communication, choice, and motivation in human beings within the individual and her/his social and ecological environments.

As mentioned above the principles of NLP can also be used to provide therapeutic communication to human beings in addition to serving as a model of human behaviour and experience. The NLP model of therapeutic communication involves a facilitator and a client who must mutually agree upon an outcome. Then, the facilitator will generate a communication (i.e., verbal or non-verbal) in an attempt to direct the client towards the desired outcome. The facilitator uses many techniques to help the client identify their specific desires, goals, and outcomes. These same techniques may also be used to direct

the client towards the outcomes. Throughout this process both the facilitator and client are presented with opportunities to learn about themselves and one another with the help of NLP techniques.

Grinder and Bandler believe that one's ability to be successful relies on one's ability to gather information and establish rapport. This belief is evident throughout the principles and techniques of NLP. To gather information and establish rapport the NLP model focuses on the common processes that all humans use for encoding, transferring, and modifying behaviour (Dilts, 1983b). Thus, the underlying principles of the NLP model are applicable and observable in all human beings.

While there have been applications of the NLP model in varying fields there are criticisms of the model. Much of the criticisms stem from the lack of standardization and scientifically rigorous investigation into the efficacy of NLP. For example, training in NLP is not standardized and there are no standardized practice guidelines for practitioners. As well, there is a lack of standardized assessment and outcome measures. Furthermore, NLP can be criticized for being overly reliant on self-reports rather than using concrete data in defense of its effectiveness. Also, the lack of peer-reviewed efficacy studies into the practice of NLP spurs opposition against its therapeutic application. Other criticisms of the NLP model are its association with high-pitched sales tactics and commercial approaches aimed at financial gain. While the practice of NLP needs more standardization and accountability checks, and while some people exploit the principles of NLP for financial or personal gain, there may be other issues affecting the greater acceptance of NLP.

While many of the criticisms are solid their proponents appear to be ignoring the positive and useful aspects of NLP. Rather, NLP may endure criticism because it challenges the scientific paradigm. The NLP model is based on the interplay between environment and complex human neurological processes and the delivery of such information is made in quite an accessible form to the general public. Thus, the NLP community may have matched or surpassed the scientific community's ability to breakdown and disseminate information regarding behavioural and biological systems. Additionally, a lack of efficacy studies does not prove ineffectiveness nor does it prove that all NLP practitioners lack training or professional responsibility. Finally, it can be argued that the basis of any therapeutic application is to maximize the potential of the client, regardless of whether the therapist benefits personally or in business dealings. Overall, despite its non-traditional approach, the NLP model shares in the goal of other therapeutic interventions that the desired outcome of therapy is to enhance the quality of life for clients. Thus, while not yet accepted into the scientific mainstream, the principles and techniques of NLP are continuing to be practiced in several fields including social work, psychology, psychiatry, education, law and commerce.

The NLP model was considered by the author to be an excellent application for enhancing communication and interaction with individuals with autism spectrum disorders because of its strong emphasis on the effects of environment, cognitive processing, and principles of operant learning. Furthermore, the author experienced that his own understanding and communications were enhanced with individuals on the spectrum after applying the NLP process to his interactions. Thus, in setting out to develop a workshop that would provide training to other professionals in the field, the

process of NLP further guided the author in developing the design and training materials of a workshop. As well, when gathering information for the workshop, the author relied upon the example set by Grinder and Bandler when they were developing their model. That is, the author interviewed professionals working in the field of autism spectrum disorders in an effort to determine the processes, techniques, and commonalities among these professionals.

2.5 *Summary*

The author considers professional development to be the pursuit of increased knowledge regarding areas relevant to the respective line of work. The development and implementation of the workshop to be outlined will attempt to meet the goal of enhancing the skills of parents, staff, and professionals in the area of effective interactions and communication with persons who have autism.

In designing the workshop, the author intended to consider the needs of individuals with autism as well as the needs of the workshop participants. These needs were to be determined prior to the development of the workshop. In creating the workshop, the needs of those involved were to be reviewed frequently. In delivery of the workshop, the concepts mentioned previously regarding conducive learning environments were to be incorporated. A satisfaction questionnaire was also to be distributed to participants following completion of the workshop.

CHAPTER III

THE WORKSHOP

3.1 Introduction

This chapter will focus on the development of the parent and professional development workshop. Through participation in the workshop, parents and professionals caring for individuals with autism were given the opportunity to enhance their personal and professional knowledge in the area of effective communication and interactions. Improving both quality of life and performance for workshop participants and people with ASD were the goals of workshop activities.

3.2 Description of the Workshop

There were two main phases: (1) development of the workshop through gathering of information and designing the workshop content, and (2) delivery of the workshop through dissemination of the information.

Phase I: Information gathering & workshop design.

This information-gathering phase served the author in three ways: specification of the learning objectives, design of the workshop, and assessment of the participants' needs. The main focus of this phase was on interviewing parents, caregivers, teachers, physicians, clinicians, and other support staff (e.g., teaching assistants, day workers). Information was also gathered from various resources dealing with adult education, experiential learning, group processes, and neuro-linguistic programming.

With the use of interviews the author gathered information from two groups: parents, caregivers, and professionals¹. The purpose of these interviews was to gather information from these two groups regarding the terminology they use and prefer in their

caring and advocating for, and working with individuals with ASD. The interviews also provided first hand information pertaining to effective strategies used when interacting with persons with autism. The author hypothesized that different themes, needs, experiences and knowledge would arise from the two groups mentioned above. The interviews allowed both groups an opportunity to share their personal experiences, concerns and knowledge in an effort to determine the relevant issues to be addressed in the workshop.

In gathering information from these two groups, the author hoped to develop a knowledge base and understanding of autism that is reflective of both parents' and professionals' perspectives and experiences. Thus, the author hoped that as a result of gathering information from these groups a synergism would result through the development of the workshop. The interviews also provided the author the opportunity to develop awareness of the specific needs and sensitivities of different interviewees. By which the author hoped to develop a suitable presentation style for workshops that would involve various types of participants.

The interviews were semi-structured and followed an interview guide (Appendix A). Questions on the interview guide were aimed at gathering information regarding what made caregivers and support persons more efficient resources in their interactions with individuals with autism.

Interviewees included staff and clinicians of the Interdivisional Program for Students with Autism (IPSA) as well as other Child Guidance Clinic (CGC) professionals. Using these selection criteria, the author hoped to maximize the ability to gather information regarding successful techniques employed when interacting with

individuals who have autism. Permission was sought from the IPSA Steering Committee to interview staff and clinicians prior to conducting the interviews. Permission was sought through an information package (Appendix B) that included an outline of the project and a consent form. Recruiting interviewees also involved the assistance of the IPSA Steering Committee. The Committee was asked to make initial contact with potential participants with a letter outlining the approval of the project, as well as an information package (Appendix B) to be provided by the researcher that included an information letter explaining the purpose of the interviews and a consent form. Upon approval from the University of Manitoba, Faculty of Social Work - Research Ethics Committee, interviewee selection began in December, 1999 and interviews were scheduled to begin in January, 2000.

In designing the workshop, one of the most important factors involved specifying the learning objectives for both the facilitator and group members. The author had several learning objectives in mind at the outset of this project. However, these objectives were expanded upon and enhanced following the gathering of information. An important milestone was reached once the specification of objectives was complete, because that served to organize the efforts of the author. It became clear that when developing learning objectives, it was essential to consider the size and needs of the target audience, as well as the needs and skills of the facilitator.

Based on the interviews and review of materials, the following objectives were identified for participants of the workshop:

- (1) to become acquainted with the theories and assumptions of influential theorists and professionals including Viktor Frankl, Milton Erickson, Gregory Bateson,

Virginia Satir, Richard Bandler, John Grinder, and the clinicians of the Mental Health Research Institute (MRI),

- (2) to become acquainted with the theories of autism and related disorders,
- (3) to develop a humanistic attitude towards individuals with autism,
- (4) to understand the techniques being presented,
- (5) to develop rapport building skills,
- (6) to grow in the awareness of verbal and non-verbal communication,
- (7) to develop initiative in improving the quality of interaction,
- (8) to perceive areas of difficulty and foresee outcomes,
- (9) to implement techniques that would enhance positive interaction and communication.

Based on the observations of the author, as well as reading of related resources in the topic, the following objectives were identified for the facilitator of the workshop:

- (1) to understand the dynamics of the small group,
- (2) to understand basic roles of members in a group,
- (3) to learn a system for planning and designing group experiences,
- (4) to learn the basic skills for conducting a workshop,
- (5) to develop an awareness of one's own leadership style,
- (6) to become acquainted with a variety of resources for planning and conducting small group workshops,
- (7) to increase self-awareness as a group facilitator and as a person,
- (8) to develop a personal style of teaching.

The first step in meeting these objectives was to gather information from interviews and resources and develop suitable exercises and materials. Interviewing individuals experienced in working with individuals with ASD provided insight into helpful strategies, anecdotal stories, and helped to identify some of the learning needs of individuals less experienced in the field. A qualitative analysis of the interview data was conducted that involved line-by-line examination of interview transcripts. This analysis allowed the researcher to search for those concepts, strategies, and insights that would be relevant for the workshop. The researcher assigned concept labels to interviewee's comments that appeared to be relevant to issues of interacting and communicating in the field of ASD. Concept labels were derived from three sources: vernacular used by interview participants, terminology found in the reviewed literature, and common terms encountered by the researcher within the mental health field. The following excerpt from an interview with a special education teacher exemplifies the assignment of labels (note that the concept labels are in bold print).

Interviewee #1: "[When working with someone with ASD I find it effective to] get the focus first, and then give the information when it's needed. [**joint attention** and **pacing**] But this could be different with different kids [**individualized treatment**]. Sometimes I will touch a kid on the arm, but some kids really hate that, [**calibrating for congruency** and **maintaining rapport**] so then I use a verbal cue like "Look at [teacher's name]." [**clear direction** and **non-threatening approach**] Whatever it takes to tune them in and then go. [**joint attention**]...Whatever they try to bring into the interaction, I try to build on [**joint attention** and **pacing**]. So every kid is a little different." [**individualized treatment**]

Oftentimes, different interview participants mentioned the same concepts in varying situations. For example, the concepts of "matching," "pacing," and "leading" were identified in three different interviews as follows:

Interviewee #1: “I generally let them lead more if they’re capable of it [matching]... until I can start to get a read, I don’t go in with my own agenda [pacing].”

Interviewee #3: “[Interactions need] to be straight forward because he does not understand hidden meanings or a joke [matching], but, after awhile you start to bring it in just so he will start to get used to it [pacing and leading]... It’s got to be all above board otherwise he becomes confused.”

Interviewee #9: “[When introducing change] you have to break it down...Introduce the topic of it. Introduce the thought of it [leading]. It’s a fairly respectful process [matching]...but sometimes it’s a fairly lengthy process where [they] don’t want to talk about the subject [pacing]...[I ask if it would be okay to ask again] in a couple of months. Then you ask in a couple months [pacing]...but the answer is the same...Then you ask in a couple months [pacing] and sometimes the person has just had enough space, you’ve been respectful [of] the fact that they are not going to be able to deal with this. Then all of a sudden [they agree] to go ahead [with the change.]” [leading]

Thus, the concepts and strategies identified in the interview data were incorporated into the development and presentation of workshop materials and strategies. For example, the concepts of “matching,” “pacing,” and “leading” were integrated together to outline information on, and strategies for, building and maintaining rapport.

In addition to conducting interviews, the author reviewed training manuals in the area of autism and related disorders. Based on the review of literature, the author felt that the information currently available regarding autism could be enhanced with the insertion of real-life examples. As well, the application of neuro-linguistic programming techniques that dealt with sensory awareness and rapport building would also be useful to learn given the sensory and social deficits related to ASD. Thus, the author set out to develop an overview of the basic features of autism that included observations from the author’s experiences as well as anecdotal stories told by interviewees. Developing the content of the workshop required several drafts. As the content was developing so also did its layout and design.

Designing and selecting suitable activities was also a major component of the planning phase. In addition to making decisions regarding the design of the learning experience the author began to prepare for the specific components of the experiences that were to be achieved. At this point it was necessary to examine issues related to group process and interpersonal dynamics. Given that workshop participants were expected to become members of a group and interact effectively with one another, it was crucial to develop an understanding of how people work and do not work well together. Other preparations for the workshop involved making overheads for the lecture components and activity workbooks for the hands-on components. Recruitment of workshop participants was also necessary as well as making arrangements for a location. Gathering back-up materials such as videos and additional readings was also allowed for in case of mishaps.

The final design of the workshop was intended for a small group of people who were to be brought together to explore the subject of ASD and to develop skills and strategies that would enhance their interactions with individuals on the spectrum. The concept of experiential learning was fundamental to the development of the workshop. In this case, experiential learning was to take place in the form of activities that were designed to generate participants' observations, feelings, and insights that would be useful to them when interacting and communicating with individuals with ASD. The use of experiential learning was believed to be important in bringing about change among participants by giving them opportunities to practice their developing skills within context.

Phase II: Dissemination of information.

The second phase involved the dissemination of information through conducting workshops. Although the purpose and format of successive workshops was the same, the later workshops benefited from the experiences, observations, and participant feedback gained from previous workshops. The main purpose of the workshops was to provide educational information and experiential learning to the participants.

3.3 Workshop Setting and Participants

The workshops were designed for professionals, school staff and clinicians, as well as foster parents and support workers. Although the workshops were designed for above participants, any interested individuals were eligible to participate in the workshops. A maximum number of 15 participants were allowed for each workshop, inclusion being based on a first come, first served policy. All potential participants were provided with a consent form (Appendices C and D) to be completed prior to the onset of the workshop. With the design of the workshop completed and ethical clearance attained, the author set out to secure appropriate workshop audiences and settings. Two social service agencies and one school-based autism program were contacted by phone with the idea of the workshop being conducted with employees as part of their staff and professional development opportunities. Each phone call was then followed up with a letter of introduction as well as an overview of the workshop. Once approval was obtained from the agencies and program via senior management and special education coordinator, the author was able to begin making arrangements for workshop locations and recruitment of participants.

Three workshops were conducted with clinicians and staff of two social service

agencies and one school-based program for students with autism. All three organizations provide direct and programming services to individuals with ASD. Each organization received a separate workshop that was attended by 10 to 15 participants. The delivery of the workshops took place at the respective locations of these organizations. With the exception of the school-based program, which received a one-day workshop, the participants from the other two organizations completed the two-day workshop. The three workshops took place in the Spring of 2000.

Workshop #1. The workshop participants in this group consisted of employees of an organization that provides direct care and programming to individuals on the autistic spectrum. The participants consisted of male and female support workers, assistant coordinators, and foster parents who had varying levels of education and experience in the area of ASD. The setting of this workshop was a multi-purpose meeting room located at the agency. This was a two-day workshop.

Workshop #2. The majority of participants in this group consisted of school clinicians that included Social Workers, Psychologists, Occupational Therapists, and Speech Language Pathologists. Two participants who attended this workshop were employed by a different social service agency. All of the members of this group were female and had varying levels of education and experience in the area of autism. The setting of this workshop was a meeting room located in the main office of the agency. This was a two-day workshop.

Workshop #3. The participants in this group consisted of male and female teaching assistants who worked in a secondary school-based program for students with ASD. The participants of this group had varying levels of experience and training in the

area of autism. The setting of this workshop was the main classroom for the program. This was a one-day workshop.

3.4 Content of the Workshop

It was the author's goal to develop a program that would encompass the techniques and ideologies used by those who have mastered effective interaction with others, particularly persons with autism. The workshop involved two days of presentations and activities, with the exception of one workshop that involved only one day of training. The content of the workshop consisted of information gathered from parents, caregivers, professionals, the author's own professional experience, and various resource materials. The overall content was developed to meet the needs of the participants. These needs were determined through the interviews of phase one, as well as the author's personal observations. As stated above, there were several learning objectives for both the workshop facilitator and participants that were addressed throughout the development and design of the workshop content.

In general, the two-day workshops included lectures and activities dealing with: (a) theories on autism, (b) the author's strategies and techniques for caring for and working with persons who have autism, (c) rapport building (e.g., matching the clients' language), and (d) how to engage persons with autism in a non-autistic world. Participants were all asked to explore concepts of neuro-linguistic programming as described by Bandler & Grinder (1982). The content of the workshop was organized within the following structure:

DAY 1

9:00-10:15 Introduction of facilitator and the participants.
A description of workshop content and goals from facilitator.
A description of each participants' goals from participants.
Brief overview of Autism Spectrum Disorder.

BREAK

10:30-12:00 Module 1: Exploring personal patterns of thinking.

LUNCH

1:00-2:30 Module 1(a): How people experience reality.

BREAK

2:45-4:00 Module 1(b): How people experience reality.
Discussion and Response to Questions

DAY 2

9:00-10:15 Check in and Review.
Module 2: Creating and maintaining rapport.

BREAK

10:30-12:00 Module 2: Creating and maintaining rapport.

LUNCH

1:00-2:30 Module 3: Communication.
Using language to communicate and influence

BREAK

2:45-4:00 Module 3: Communication
Further explorations
Discussion and Response to Questions
Satisfaction questionnaire

The aim of the author was to offer training information and therapeutic techniques within the workshop that participants could use in conjunction with other available

methods of treatment. Thus, the adaptability of the workshop content was intended to address the following issues: (a) the necessity of a multidimensional treatment approach, (b) appreciation for the systemic influences on treatment including those of the client, the family, and the community, and (c) recognition for individualized treatment based on the unique needs of the client. As well, the author set out to offer a training program that would focus on enhancing the strengths and insights already possessed by workshop participants. Finally, the author hoped to draw from the successes of established treatment methods and practitioners in order to provide a training workshop that would motivate workshop participants to develop abilities and skills that would assist them in becoming effective therapeutic practitioners.

3.5 Delivery of the Workshop

The workshop was carried out by the author who has provided direct service to individuals on the autistic spectrum for six years, and who has consulted on several cases involving the care of individuals with ASD who are considered to be in crisis situations. The workshop content was disseminated through lecture format and was practiced through various experiential learning techniques. These techniques included group discussions, hands-on based activities, small group exercises, and didactic teaching on the elements and application of the various writings of Richard Bandler and John Grinder (e.g., Bandler & Grinder, 1982). There was considerable discussion of the service context and application in which NLP might be used with an autistic spectrum population. The delivery of content was also enhanced with the use of audio-visual equipment (e.g., videos, overheads). Handouts were also provided to allow for future reference. Although the lecture components of the workshop were important in terms of

laying the theoretical background, the hands-on activities and exercises played an essential role in generating the desired learning experiences (see Appendix E for Exercise Booklet). It was believed that the use of active participation in exercises involving movement and discussion would enhance overall learning and memory for strategies.

In delivery of the workshop an open, flexible design was used to accommodate the varying needs and experience levels of the participants. Throughout the delivery of the workshop the learning objectives were referred to frequently and modifications to the workshop lectures and activities were made if necessary. The workshop incorporated both formal and informal learning structures. The overall format was formal in that presentations were prepared before commencement of the workshop. The workshop also incorporated informal structure with the use of peer teaching in small groups. Participants had the opportunity to share experiences and practice techniques with their peers. All participants were invited and encouraged to participate visibly and fully in the exercises. The author served as a facilitator in the delivery of the workshop to allow for mutual sharing between the author and participants (Giasson, 1994). Participant feedback was collected after the completion of each workshop.

In following the workshop content and design, a general outline for delivery of the workshop involved a general introduction of the entire workshop, followed by introductions of participants, activities, lectures, reviews, and an evaluation in the form of a satisfaction questionnaire.

Introductions. At the beginning of each workshop the facilitator introduced himself and provided participants with general comments regarding what they could expect over the course of the workshop. The facilitator took the opportunity at the outset

to begin creating the desired interactive learning climate by inviting participants to introduce themselves and provide relevant background information. Once introductions of participants were completed, the facilitator addressed some important themes regarding being open to the learning experience, risk-taking, and setting of group norms. Although the facilitator invited and encouraged participants to take an active role in the discussions and activities, he did state that participants could make their own choices regarding participation and that anyone could observe rather than perform an activity if they so chose.

Activities. Given the experiential design of the workshop, hands-on activities played an important function. Several neuro-linguistic programming exercises were formatted for application to individuals with ASD. These exercises were also designed to bring about greater self-awareness for participants.

Each activity was described and modeled to participants prior to their rehearsal. If necessary the facilitator would also clarify questions or participant responsibilities. In addition to providing instructions, these introductions also served to link the specific activities to the proposed objectives. The completion of activities was deemed pivotal to the workshop as it allowed the greatest opportunity for experiential learning. As such, each activity was designed to meet a specific objective. Overall, the facilitator was responsible for ensuring the participants had enough time to complete the task, engaging with the participants in an appropriate manner (i.e., not meddlesome yet not too distant), and attending to the needs of the participants. In each activity participants were responsible for taking risks, suspending judgment, concentrating, and being receptive to the activity. Following each completed activity a discussion took place so as to review

the specific details of the experience and to provide meaning to the experience as a way to enhance integration of that strategy into the participants' repertoire of skills.

Summary. At the close of each morning and afternoon session the participants were provided with a review and summary of the specific activities completed and the information covered in that session. At the end of the workshop, participants were also provided with a review of the workshop and they were invited to comment on the entire workshop experience in the group setting and in the satisfaction questionnaires.

3.6 Workshop Evaluation

Throughout the workshop the participants were asked to share and provide feedback regarding individual activities both during and after completion of the activity. This feedback was essential to the facilitator as a way to determine the effectiveness of a single activity in meeting the learning objective it was designed to meet. Thus, ongoing changes could be made during the workshop. In addition to evaluating the workshop based on participants' feedback, the facilitator also relied on his personal observations, informal conversations with participants, and casual comments between participants as a means to determine the effectiveness of the workshop.

Following delivery of each workshop, the author distributed a satisfaction questionnaire (Appendix F) to the participants. This questionnaire was administered to participants in the last 30 minutes on Day 2 of the workshop. To ensure anonymity of responses, participants were asked to refrain from writing their names on the questionnaire forms. Pencils were provided so that all participants had an opportunity to respond. The purpose of the satisfaction questionnaire was to assess whether the learning objectives were met and the degree to which satisfaction with the facilitator and the

workshop content occurred. Responses to these satisfaction questionnaires were helpful in allowing the facilitator to determine whether the learning objectives were achieved. This was important as it assisted in the modification of upcoming workshops.

CHAPTER IV

Analysis of the Workshop Experience

4.1 Achieving the Learning Objectives

At the outset of this project several objectives for the workshop facilitator and participants were specified. Based on the information gathering stage that involved review of materials and interviews, several learning objectives were identified for participants of the workshop. Participant feedback, as well as the facilitator's observations indicated that these objectives were met over the course of the workshop. Feedback from participants included comments that participants felt that they would be able to provide autistic clients improved services. Participants also stated that they would recommend the workshop for anyone working in the field of autism.

Based on the author's observations and readings on the topic area, several learning objectives were identified for the author as facilitator of the workshop. Experiences and observations made during facilitation of the workshop indicated that these objectives were met. A breakdown of the achievement of these objectives follows in the form of lessons learned throughout design and delivery of the workshop.

In developing an understanding of the dynamics of the small group the author made several observations about the social evolution of groups. Similar to any social gathering, the author found that participants had a tendency to gravitate towards like-minded people, particularly during the workshop activities that required peer sharing and coaching. In order to encourage group cohesion and enhance the applicability of strategies to a wider group of people, the facilitator would frequently encourage group members to choose different partners for activities. Although this encouragement was met with some

resistance at first, the group members did warm up to the idea of mingling with others. It is strongly felt that the kinesthetic nature of the activities played an important role in the ability for members to take risks when selecting their partners. That is, the constant shifts in physical proximity between members seemed to allow more contacts to be made and therefore people were more likely to form several relationships within the group. The author also determined that it was effective to allow time for the development of social relationships. For example, at the completion of an activity or exercise the author would be conscious of letting the pace slow down for approximately five minutes in order to allow partners more time getting to know one another.

In developing an understanding of the basic member roles in the workshop groups the following roles were identified: (a) 'believers' who tended to be dependent on the group facilitator and listened attentively, (b) 'middle grounders' who were sincerely interested and eager to learn and gain from what was being taught, and (c) 'skeptics' who tended to have firm beliefs about what they wanted. At times these individuals seemed to 'throw a wrench' in the works, perhaps to see how the facilitator would cope.

In learning a basic system for planning and designing group experiences, the author felt that four main principles had been learned. First, it was important to identify the needs of the group. This included visiting the workshop settings and meeting with participants and their employers. Second, it was important to develop the content so that it could be modified to the varying needs of a group. Thirdly, the author learned that it was crucial to build in opportunities that allowed himself to be 'flexibly rigid.' That is, it was important to stay grounded in what one wanted to accomplish while keeping in mind that the manner in which the outcome or goal was achieved may be ever changing and

evolving. This flexibility was particularly important as it allowed the facilitator to respond to the evolving needs of the group. Finally, the fourth principle learned was that the content, activities, and facilitator should maintain consistency. It is advantageous to have the exercises and facilitator embody the principles being instructed upon. Therefore, at the same time that one was instructing on the use of neuro-linguistic programming techniques it was essential to implement them in one's own mindset and presentation of the workshops. This was like a meta-process. One must live the principles so as to model them for others. For example, one of the pre-suppositions is "Choice is better than no choice." Therefore, the facilitator made an effort to provide the group choice within parameters. As the group followed the outline of the workshop the facilitator would put it to the group to decide whether a certain amount of material should be presented before or after a break.

Several guidelines were observed for conducting the workshops. First, observe, identify, and attend to the needs of the group as a whole while maintaining awareness of individual needs. For example, if the members are visibly becoming slower in their movements and interactions I would speed up a little bit in order to rejuvenate them and snap their attention back. As well, if I sensed that people were feeling overwhelmed with the information I would tone it back a touch. Second, while leaning towards the preferences and needs of the majority accommodate for the needs of individual members. Third, understand that a good facilitator is required to be the coach of a team (e.g., knowing when to push someone or give them more time to discover). Fourth, build trust with your audience by anticipating and meeting their needs. Fifth, as a facilitator you want to lead the group to the answer but you let them take the final leap and draw their

own conclusions and interpretations. And sixth, a facilitator is not infallible and should present himself/herself in a human manner. This was particularly true as it seemed to serve the facilitator's role better when participants were allowed to see the facilitator's vulnerabilities.

In terms of developing self-awareness as a group facilitator and as a person the author discovered a sense of confidence in knowing that he was able to achieve a goal by having an open mind about how to achieve that goal. The author also discovered that he was able to apply the NLP techniques when conducting the workshops so as to gauge the audience. Overall, the facilitator developed a greater sense of his leadership capacity. More specifically, the facilitator found that he could rely on his ability to access information quickly and verbalize or articulate information fairly well. The facilitator also observed that he was able to offer varying leadership styles according to the needs of the group.

4.2 Analysis of Workshop Settings and Participants

The different settings and participant groups had slightly different needs. This was important to identify early on as it would influence the depth with which certain subjects were covered. For example, the first workshop was conducted with participants with much experience working in the community with individuals with ASD. Thus, this workshop focussed more on community related issues. The second workshop was conducted with a group of school based professionals and provided a more systemic approach (e.g., how to work with families). This group was provided with the most handouts as the participants are often the first point of contact for resources from people in the community. It was believed that this group was the most eager, in particular due to

their need for information and comfort level. The third workshop with school teaching assistants required more focus on school related issues. This workshop was conducted in the participants' workspace, which may have allowed them an enhanced sense of comfort and security.

Overall, groups consisted of 10 to 15 participants. This was a manageable sized group that was not overwhelming for participants, given that they would be expected to spend much of their time relating interpersonally and allowed for the identification and response to individuals' needs. On a more practical note, the relatively small sized group also ensured that there would be ample space for completion of activities that required exploration and use of the physical environment.

Workshop #1. This group consisted of support workers and assistant coordinators of a social service agency. The support workers tended to respond very well to the workshop and this was attributed to their first hand experience in the community with individuals on the autistic spectrum. The support workers seemed to understand the application of the material with respect to the behaviours associated with autism. The assistant coordinators of this group tended to require more general theoretical background information, and they appreciated the various definitions and descriptions of autism and autistic behaviours. Explanation of the subtle nuances between the autistic spectrum disorders and the manifestation of symptoms was also appreciated.

The only problem area associated with this group involved the behaviour of two support workers who did not seem to take the workshop as seriously as the others and who were somewhat disruptive. This problem was addressed at the beginning of Day 2 when the facilitator asked the participants whether their needs could be addressed better.

Although the participants did not provide a response their behaviour did improve throughout the second day.

Workshop #2. This group was all females and included various school-based professionals. Overall, this group was the most responsive and appeared to enjoy the activities very much. Responses on the participant feedback forms suggested that they also very much enjoyed the open nature of the workshop. Participants also commented that they appreciated the flexibility and freedom to make choices. They also stated that they enjoyed acquiring knowledge alongside their coworkers, with whom they were infrequently able to connect despite working at the same agency. Given that the needs of this group were related to school and educational settings, much of the content focussed on the application of techniques for students with ASD, as well as parents, teachers, and principals. Participants seemed eager to have a good understanding of how to explain autism to others. Given that these professionals are a first contact for people looking for resources, I gave them many more reproducible hand-outs.

There seemed to be no problem areas associated with this group. One participant, however, seemed uneasy with some of the exercises that required visualizations. This was handled by reminding the group that anyone could sit out an exercise and that it was completely an individual's choice.

Workshop #3. This workshop group consisted of members with varying experience and training levels in the area of ASD. An early visit to this site determined that given the participants' previous training, the theoretical background of autism was not needed for this group; rather only a one-day workshop would be required. Thus, the content and activities were adjusted accordingly. Approximately half the members had at least 10

years of first hand experience, while the other half of the group had a maximum of five years. Clearly, two distinct groups of participants existed: those who easily understood the principals and techniques emphasized in the workshop; and, those that required more explanations. The author found that those participants with more experience responded very well to the workshop. It was felt that these well-experienced workers appreciated that the content and strategies were relevant to their experiences and was presented in a manner that was easily digestible. Many participants commented that they appreciated the exercises and conversations that were generated.

Problem areas associated with this group involved the varying levels of experience among participants. It seemed that the members did not interact with one another to form varying inter-relationships. Rather, participants tended to form partnerships with people with whom they were more familiar or spent more time at work. As well, one participant in particular seemed to affect the group negatively as he did not seem to want to be at the workshop. This individual left prior to the completion of the workshop, and the cohesion of the group seemed to improve as members came together. Participants commented that they would have preferred a more sequential order to the exercises in the workbook. It was explained that the layout of exercises was organized in a manner that would allow flexibility based on the needs of the group; therefore, it would not be appropriate to complete all exercises or complete them in a successive order. This explanation seemed to satisfy the participants.

4.3 Analysis of Activities

Activities were designed to generate understanding of the information presented in lectures, and handouts. Various activities including group discussions, didactic

teaching, role-playing and skill building exercises were used.

Group activities frequently involved discussion and completion of tasks among workshop participants. The group facilitator made an effort to ensure that all members received opportunities to engage in discussions and exercises. The likelihood that participants would join in group activities and discussions often seemed related to: (a) the degree of group cohesion, (b) security in role and responsibility, and (c) personality tendencies (e.g., introverted, extroverted). Furthermore, a lack of participation in an activity or discussions often seemed related to: (a) affinity to the task at hand, (b) role within group (i.e., 'believer' vs. 'skeptic'), and (c) the degree of importance they felt the task had. (see Holden, 1982).

Throughout the workshop, the facilitator used real life stories to tie theory to reality. This use of stories provided participants with a concrete demonstration of how to integrate the content of the workshop, while at the same time, lent credibility to the expertise of the facilitator. Overall, it was felt that the use of anecdotal stories was an important means to deliver the content at a level that was most accessible to participants.

The interplay between group cohesion, participation, and task completion seemed important on various levels. Not only did stronger groups appear more successful at completing tasks, but the development of group cohesion tended to depend on the opportunities for groups to relate interpersonally in the activities. As participants completed tasks with varying partners, group cohesion seemed to increase. Although cohesion among members was deemed important to the completion of a specific task, it was essential to ensure that members did not become so enmeshed in the process of interpersonal relating within an exercise that they failed to see how the exercise related

back to the content of the workshop. Thus, as a facilitator it was important to keep participants aware of how the task tied back to the topic of autism, thereby broadening their use of the strategies and exercises.

4.4 Evolution of the Workshop

Given that three workshops were conducted, it was believed that they would undergo an evolutionary refinement. That is, each successive workshop would improve as a result of experience and modifications based on participant feedback and facilitator observation. The greatest improvement seemed to occur after the completion of the first workshop. This can be explained by the fact that the workshop was a new experience and served as a 'pilot project' in that the facilitator did not know how participants would respond to the material. As well, the successful completion of the first workshop served to provide the facilitator with greater confidence and improved skills in the area of group management. Overall, the final workshop was felt to be the most well delivered and received by participants. This improvement may be attributed to the education level and willingness of participants, as well as the facilitator's experience in group management and instruction.

The three different workshop groups advanced through similar and observable stages of development as described by Tuckman (1965). The development of individual participants into a cohesive group seemed to be related to the ability of members to relate to one another, as well as the participants' responses to the workshop activities and discussions. A higher degree of group cohesion seemed to bring about more successful completion of an exercise or task. The successful completion of tasks was measured by the ability of group members to re-iterate the objectives of the tasks during the debriefing

sessions. The process of debriefing following each completed activity seemed beneficial to participants, as it allowed them the opportunity to share and provide feedback. As well, it allowed participants to experience other people's reactions to their feedback. Thus, the interactive component of the activities seemed to continue beyond the completion of the activity itself. Overall, it was felt that the groups congealed quickly, due to the interactive exercises. These exercises may have served as 'icebreakers', particularly the activities on rapport building that required group members to show their humor and vulnerability.

The needs and backgrounds of individual members were also significant to the development of group cohesion and social relationships. Those members who were open to the experience were more committed to the life of the group, whereas those members who seemed preoccupied with outside responsibilities seemed less committed to work towards building relationships and developing group cohesion. For example, group members who had more administrative duties and greater responsibility within their organization tended to prefer a more fixed design rather than an open and flexible design.

The earliest stage of development within the groups involved a reflection of the participants not knowing one another and being unsure of what to expect. In this initial stage participants listened attentively to the facilitator and appeared somewhat shy or reserved. This stage occurred during the first half of Day 1 of the workshop. As the first session progressed and participants became engaged together in the activities, a greater comfort level was observable among them as shown by their growing willingness to ask questions and share stories. This level of comfort was largely attributable to the shared experiences in which participants engaged. As participants became more comfortable

with the activities and one another they also seemed to become more secure with their role in the group. Thus, Day 1 of the workshops tended to run smoothly as participants became oriented to the group experience and workshop activities. Overall, groups seemed to come together by the morning's end on Day 1 of the workshop.

With growing comfort and group cohesion, Day 2 of the workshops brought about new developments within the group structure and responses to the activities. It was at this time that some participants became more challenging, disruptive, and rebellious. Thus the response of these individuals to the activities seemed to involve some degree of resistance or non-participation. The non-participatory behaviours tended not to have an effect on the collective groups experience; however, disruptive behaviours had a more noticeable effect on others. For example, two participants were late in rejoining the group following a scheduled break and as they arrived they continued their own conversation, thereby, interrupting the question-answer period of others. In the case of disruptive behaviours, which only occurred in the first workshop, the facilitator provided the individuals with an opportunity to express their needs in private and the disruptive behaviours were eliminated. These individuals completed the remainder of the workshop by being effective contributors to the group by offering valuable information and stories that were relevant to the material or task at hand.

The development of group cohesion could be observed clearly in Day 2 of the workshops as participants began to support one another. All members seemed to benefit as the cohesiveness allowed learning to take place. As participants explored different perspectives and different forms of communication, their abilities within the group became more settled and the common tasks were approached with greater stride. At the

closing of Day 2 it seemed that people were willing to support one another and encourage discovery. A high degree of participation in group discussions and activities was observable.

In conclusion, it was found that group cohesion developed similarly but at different paces for the three different workshop groups. In particular, the first workshop group seemed to come together on Day 2, which was somewhat delayed compared to other groups. This may have been related to the nature of participants' work environment as the participants tend to be more isolated and did not know one another well. Since the completion of the workshop, visits to this site have provided the opportunity to observe workshop participants relating to one another and it seems that relationships may have developed. The participants in the second workshop knew each other quite well given that they work together everyday from the same classroom. Relative to the other groups, this group contained definite cliques and had the least amount of cohesion. Despite their close contact these people did not mingle well. The third workshop group seemed to develop group cohesion the most quickly. This group came together by mid-morning on Day 1 and maintained their cohesion for the remainder of the workshop. The quick development of this group may have been related to the participants' frequent attendance at workshops.

4.5 Evaluation

A fundamental purpose of evaluation-based research is to make improvements through understanding (Pawson & Tilley, 1997). As such, the author aimed to use participant feedback to improve the quality of the workshop and the learning experience of participants. Upon completion of the workshop, a satisfaction questionnaire

(Appendix F) was distributed to all participants. Responses to these satisfaction questionnaires allowed the facilitator to determine whether the learning objectives were achieved and to make any necessary modifications of upcoming workshops. Using open- and closed-format questions, the evaluation focused on the participants' perceptions of the workshop using qualitative and quantitative measures.

Open-format questions allowed participants to provide qualitative feedback in their own words on the following topics: reasons for recommending the workshop to others, the best features of the course, ways to improve the course, and, general comments. Responses to these questions provided qualitative data and are summarized below.

Reason for recommending this course. Recommendations for the course were related to the workshop content, facilitator and teaching methods, and future target audiences. With respect to content, respondents felt that they received a practical, useful, and interesting overview of autism that "demystified the disorder" and provided an authentic portrayal of ASD. As well, respondents appreciated the broad perspective on treatment that was presented as it "tied into established interventions." The strategies for interacting with and teaching individuals with ASD were considered helpful. Overall, the content of the workshop was considered specific to the needs of the population and focused on application in everyday functioning. As well, the information and strategies discussed were also considered applicable to other populations.

Respondents also made recommendations based on the facilitator and teaching methods used throughout the workshop. In addition to perceiving the workshop facilitator as knowledgeable, respondents found the use of anecdotal narratives, current

information, and visual aids (e.g., overheads, exercise booklet) to be relevant, useful, and aided attention and concentration. Furthermore, one respondent felt that the facilitator offered reassurance that her approach in working with ASD was appropriate.

With respect to whom the workshop would be recommended for, respondents stated that while the workshop would aid those with a background in autism, it was also easily adaptable for any group. Overall, the workshop was deemed as “essential for anyone working with people on the autism spectrum” including teachers, teaching assistants, parents, and clinicians.

The best feature of this course. In providing feedback on the best feature of the workshop, respondents’ answers were related to applicability of content, resource materials, teaching methods, and the facilitator. Overall, the content of the workshop was considered thorough in its coverage of ASD and treatment approaches (e.g., “Covered all aspects of autism. Easy to understand. Very informative.”). Furthermore, over the course of the workshop a “clear description of life for individuals with ASD” was presented. As well, the techniques learned were deemed applicable to other populations. In addition, the use of current resource materials was considered a noteworthy feature as respondents remarked that the articles and exercise booklet in the handouts allowed for future personal reference and sharing with others (e.g., schools and parents).

Respondents also chose the teaching methods as major assets of the workshop. They described the experiential exercises and activities as stimulating tools that increased their understanding. The use of visual aides in coordination with the presentation was also considered instrumental. As well, one participant commented that the “timing for breaks, change of activity and topic” were well paced. Overall, respondents felt that

relying on several modalities and teaching methods from experiential learning activities and discussions to case examples, articles and overheads kept them interested and attentive.

Finally, some respondents stated that the facilitator was the best aspect of the workshop. His experience, knowledge, and sharing of personal anecdotes were highly regarded and for one respondent, “bridged the gap between [the] theoretical and the practical.” Overall, the facilitator’s clear speaking style, enthusiasm, genuine caring and respect for the autistic population were all considered favourable.

Improvements to this course. While several respondents stated that there was no need for improvement, some respondents provided suggestions for the workshop content, workshop design, and teaching methods. First, one respondent felt that the congruency exercises required better explanations; another respondent stated that some of the interventions seemed too contrived and might lead to a disrespectful approach. Second, improvements to the design of the workshop regarding length were suggested. One respondent felt that the workshop could be shorter, thereby indicating that two full days of material may be better presented in shorter sessions. In related comments, several respondents stated that the workshop could be offered over a longer period of time or as an annual presentation. It was also suggested that a follow-up session be conducted in which the facilitator and participants assess the application of the techniques in real life settings. Finally, suggestions for improved teaching methods included the use of videos to illustrate non-verbal interactions, and, an increase in real life stories to break up the large number of overheads.

General comments. In a section provided for general comments, participants

stated that overall the workshop was “very well done” and “excellent.” Participants also regarded the facilitator as sincere, outgoing, perceptive, and as having a genuine interest in the topic. Once again, participants commented that the workshop would be useful as an annual update, particularly at the beginning of a school year for school staff and clinicians.

In conclusion, the participant feedback from the open-format questionnaires suggested that the learning objectives outlined at the outset of this project were met. To corroborate these positive findings of the qualitative feedback, statistical analyses of quantitative ratings were conducted.

Participants responded to closed-format questions using a five-point Likert-scale (1 = poor; 2 = fair; 3 = good; 4 = very good; 5 = excellent) (see Appendix F). The questionnaire consisted of 11 scaled items categorized as follows: ‘Quality of Total Learning Experience’ (items 1, 2, 3); ‘Qualities or Characteristics of the Instructor’ (items 4, 5, 6); ‘Physical Aspects’ (items 7, 8); and, ‘Course Objectives’ (items 9, 10, 11). Descriptive statistics including mean and median ratings as well as standard deviations were calculated for participant satisfaction ratings (see Table 1 below).

Table 1
Descriptive Analyses for Satisfaction Ratings

Questionnaire Item	<i>N</i>	Min	Max	<i>Mdn</i>	<i>M</i>	<i>SD</i>
1. Instructor stimulates curiosity, independent thinking, and student participation in class.	25	3	5	5	4.72	0.54
2. Teaching strategies employed are appropriate for you in facilitating your learning.	25	5	5	5	4.60	0.50
3. To what extent did the course meet your needs and expectations?	25	3	5	5	4.68	0.56
4. Instructor possesses and effectively utilizes human relations skills in providing individual attention to students.	25	5	5	5	4.80	0.41
5. To the best of your ability, give your overall judgment of your instructor as an effective teacher.	25	3	5	5	4.52	0.65
6. Instructor appears to have a thorough and current knowledge of the subject matter.	25	5	5	5	4.96	0.20
7. Learning materials presented are appropriate and useful in facilitating your learning.	25	3	5	5	4.76	0.52
8. The physical characteristics of the learning environment (room, conditions, comfort, freedom for outside distractions) are conducive to learning.	25	2	5	4	4.24	0.83
9. The objectives of the course are clear.	24	3	5	5	4.53	0.72
10. The subject matter chosen for instruction is clearly related to course objectives.	24	4	5	5	4.83	0.38
11. To which extent were the course objectives obtained?	24	3	5	5	4.50	0.59
12. Would you recommend this course?	25	3	5	5	4.64	0.57

Note. *N* = total number in sample, Min = lowest score, Max = highest score.

As shown in Table 1, the lowest mean rating ($M = 4.24$, $SD = 0.84$) was given for the physical characteristics of the learning environment, whereas the highest mean rating ($M = 4.96$, $SD = 0.20$) was given for the instructor's thorough and current knowledge of the subject matter. As well, participants gave high ratings for the extent to which course objectives were obtained ($M = 4.50$, $SD = 0.59$) and whether they would recommend the workshop to others ($M = 4.64$, $SD = 0.57$).

Overall, the combined results of the written feedback and satisfaction ratings indicate that participants' workshop experiences were favourable. Furthermore, the variability in participants' ratings was less than one-point value on the scaled items even with the small sample size ($N = 25$). As well, aside from individual learning preferences, responses to the open-format questions were largely similar. It should be noted, however, that the analyses are based on self-reports of experiences and attitude and therefore biases due to omissions and distortions may have occurred. As well, the validity of the questionnaire had not been tested prior to distribution to participants' and therefore it is unknown whether questionnaire items did indeed measure what they were intended to measure. However, while these limitations exist, the determination of whether the results provided a good reflection of the workshop is subjective and based on the criteria for success as outlined in the learning objectives of the workshop. In general, the results of the satisfaction questionnaire indicate that the learning experiences provided in the workshop were positive and met the course objectives.

CHAPTER V

CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

5.1 Conclusions

A driving force in this practicum was the growing need for knowledge and understanding of ASD. Thus, the development and delivery of a training workshop was geared to enhance understanding and treatment. In essence, the practicum had three main objectives: (a) to further the professional development of workshop participants; (b) to enhance service delivery thereby improving the quality of life for individuals with ASD; and, (c) to further the educational and professional development of the author.

First, it was intended that workshop participants would find the workshop material useful and applicable in their respective work situations, allowing them to integrate the content into their interactions and communications with individuals with ASD. To determine whether this objective was met, participants were provided the opportunity to complete satisfaction ratings on their workshop experiences. Feedback from participants suggested that the workshop was educational and encouraged new insights into ASD. Participants further expressed that the material and strategies conveyed in the workshop would be applicable to all individuals that they interacted with. Many of the participants also commented positively on the provision of resource materials that would benefit future reference and sharing with others. Overall, the two-day workshop seemed to enhance participants' knowledge and perspectives on the material and strategies presented. Thus, it is felt that the workshop succeeded in offering useful and applicable information for the purpose of professional development in the field of ASD.

Secondly, it is conceivable that with enhanced awareness of ASD, that professionals and caregivers would be able to offer improved treatment to individuals with ASD. Enhanced service delivery may include, but is not limited to, increased rapport between therapist and client, attitudinal shifts and improved perspective taking regarding ASD among service providers, more precise treatment goals, and a broadening of therapeutic strategies. Overall, it is believed that the quality of life for individuals with ASD would be influenced positively as professionals strengthened their skills.

Finally, the practicum also intended to further the educational and professional development of the author. The learning objectives were set for the author: enhancement of knowledge and skills in supporting persons with ASD; development of abilities in planning and implementing group experiences; development of leadership skills and group facilitation; and improved understanding of group dynamics. The author's development in these areas was noticeable in his reflections, the participant feedback, and the analysis of the workshop experience. In addition, the author gained a broader information base to rely on after reviewing the literature on the nature and treatment of ASD. Also, new insights into treatment strategies were discovered by interviewing professionals and caregivers working in the field. For example, the author attained a pivotal concept regarding crisis management after interviewing a special education teacher. The interviews also served to validate the author's intuitive approach to ASD. Increased competence in developing and implementing workshop material was gained from the review of literature and interviews. For example, the author was better able to define workshop concepts and strategies after listening to interviewees' verbalizations of the same concepts. As well, careful planning and rehearsal of the workshop allowed the

author to refine material, improve his presentation style, and also strengthened his confidence. The author's observations, as well as participant feedback, further confirmed that the presentation style and content of the material were suitable for the audience. The informal sharing of insights and stories seemed particularly welcomed by all those participating in the workshops. As well, the author gained experience and confidence in leading group activities. A better understanding of the nature of groups and the role of individual members was also acquired.

In conclusion, completing the practicum afforded the author many opportunities to develop his personal and professional skills and confidence. For example, the author gained confidence in his ability to implement treatment and effectively support individuals with ASD. The practicum also served to reinforce the author's sense of responsibility for providing accurate and relevant information so that individuals with ASD would be affected positively by the application of workshop material. Therefore, the author believes that completing the practicum propelled him to participate in and contribute to continuing education and the professional growth both of himself and his colleagues.

5.2 Limitations

Although the general findings indicate support for the workshop package, limitations exist in both the design and delivery of the workshop.

Workshop content.

With respect to the design of the workshop, the author conducted interviews with parents and professionals working in the field of autism as the basis for developing the learning objectives and for extracting pertinent information regarding effective

techniques. Thus, the author served as interviewer, researcher, and group facilitator. Although functioning within these roles allowed the author to immerse himself in all aspects of the design and delivery of the workshop, it is possible that the workshop may have been improved by having an additional researcher review the interview data to ensure that relevant information was not overlooked.

Workshop setting and participants.

Although group cohesion and the evolution of groups have been found to be critical factors in group learning, the author was limited in his ability to control and manipulate variables that would have been conducive to enhancing the group experience (e.g., setting of workshop, composition of the group, duration of group life). In particular, the author was limited in systematic manipulation of the group compositions since educational backgrounds and areas of interest were unknown. Therefore, homogeneity of the group could not be ensured. As well, the short life of the groups may have imposed the requirement that problem-solving or task completion be reached too quickly (Tuckman, 1965). Thus, the short duration of the group life may have prevented maximal group cohesion and adversely influenced the amount and rate of development within each group.

Evaluation methods.

Evaluations are commonly based on the theory of causation and the basic experimental design consisting of two matched groups whereby one group receives treatment while the other does not. However, to ensure that the innumerable contextual variables that affect consumer satisfaction were not eliminated with experimental control (Pawson & Tilley, 1997), the evaluation methods used to measure participant satisfaction

with the workshop were not based on this experimental design. Rather than relying on experimental control to ensure causation, the efficacy of the workshop was measured with a self-administered questionnaire that allowed for the testing of real life satisfaction. Most evaluation models of consumer satisfaction are based on such cognitive comparison processes whereby consumers evaluate their experiences by comparing perceived performance with some standard (Wirtz & Lee, 2003). The most widely applied model of this cognitive comparison is known as the disconfirmation-of-expectations model, which uses expectation as the comparison standard (e.g., Churchill & Surprenant, 1982; Oliver, 1997; Swan & Trawick, 1981; Tse & Wilton, 1988; Wirtz & Lee, 2003). In addition to relying on cognitive processes, consumer satisfaction measures are also usually affective in content and are anchored in emotive words such as 'pleased,' and 'happy' (Hausknecht, 1990). Overall, consumer satisfaction measures tend to assess self-reports of affective and cognitive response. Furthermore, the quality and reliability of consumer satisfaction measures are more dependent on the psychometric properties of the measure than on the use of self-reports (Wirtz & Lee, 2003). Therefore, while the findings of the workshop evaluations are based on self-reports of experience that may have been biased due to omissions and distortions, the validity of the findings are more affected by the validity of the questionnaire. The questionnaire was not tested prior to distribution to participants' and therefore it is unknown whether questionnaire items did indeed measure what they intended to measure. Thus, limitations may exist in determining whether the results provide a good reflection of the workshop. Overall, the generality of the findings may be limited due to the subjective nature of evaluation data, untested psychometric properties of the assessment tool, and the small sample size.

5.3 Recommendations

In response to Pawson and Tilley's (1997) supposition that a fundamental purpose of evaluation is to make improvements through understanding, the author can offer recommendations for improvements in the areas of workshop design, delivery, and, evaluation.

Workshop design and delivery.

Future workshops might benefit from systematic observation of participant interaction during workshop activities by multiple observers or facilitators so that participants can receive one on one tutorials. As well, video recording for measures of participant interaction could assist the facilitator in improving the workshop from session to session. The delivery of the workshop might also be improved by allowing participants to observe a live session or via videotape, the implementation of the skills and strategies by the facilitator as he interacted with an individual with ASD. Observing the implementation of the skills could serve to strengthen the anecdotes used to convey information. Also, the opportunity to observe interactions would benefit participants who have limited contact with individuals with ASD. In addition to observational learning, the workshop might be improved by having an individual with ASD be a 'guest lecturer.' The design of the workshop might be improved by providing more sessions over a longer period of time. This could allow participants to reflect on the information and techniques presented and to test them in real life situations; this would permit the facilitator to make clarifications or offer additional strategies, and make modifications to future sessions to deal with discovered needs.

Evaluation.

The evaluation data provided from this pilot workshop might be used to improve the satisfaction questionnaire for future workshops. For example, a follow-up survey could be conducted to assess whether the application of workshop material continued beyond the immediate timing of the workshop. Thus, future evaluation methods could focus on showing why or how the learning experiences had an effect. As well, efforts could be taken to ensure that the satisfaction questionnaire is psychometrically valid. Additionally evaluative measures could also be collected regarding the efficacy of neuro-linguistic programming strategies as compared with other interventions (e.g., Individual Education Plan). For example, an experimental model could be used in which pre-intervention data could be collected for several weeks and compared to post-intervention data.

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Appendix A

Interview Guide

* The following is only meant as a guide. Modifications will be made as needed during the course of the interview to accommodate area of expertise of the interviewee as well as the discovery of information.

IDENTIFICATION OF INTERVIEWEE

Program: _____

Occupation: _____

PREAMBLE TO INTERVIEW

In completing my Master's degree in Social Work, I am interviewing parents, caregivers, and professionals who have direct experience with autism. Mostly I am interested in learning about your experiences and opinions regarding autism. The interview takes approximately an hour, and you may stop the interview at any time. If I ask any questions that you are not comfortable with, or do not want to answer, please do not answer them. As mentioned in the consent form, the interview will be taped for later transcription. Before we begin, would you like to ask me any questions?

GENERAL INTERVIEW QUESTIONS

1. When you are interacting with a person who has autism how do you act or behave? (both actions and verbal) * Note: clarify question if required.
2. If at all, how is this different from how you interact with a person who does not have autism?
3. Describe how you interact with a person who has Asperger's syndrome (both actions and verbal).
4. If at all how is this different from how you interact with a person who does not have Asperger's?
5. What are some things that you do that have been particularly effective when interacting with people who have autism or Asperger's syndrome?
6. What are some things that you do or have seen that have not been particularly effective when interacting with people who have autism or Asperger's syndrome?
7. Describe what you are like when you first meet somebody with autism or Asperger's syndrome.
8. If you were to train someone on how to speak to and interact with an individual with

autism or Asperger's what information would you provide?

PARENT- SPECIFIC INTERVIEW QUESTIONS

1. If you were to teach a professional or parent how to interact effectively or work with someone who has autism, what would be the things you would teach them?
2. When you first learned that your child had autism, what was the most helpful piece of information you received? from whom?
3. Since your child received her/his diagnosis of autism, what has been the most helpful information you received or discovered on your own?
4. If you were approached by a parent whose child was diagnosed with autism, what advice/information would you feel is important to pass onto them?
5. What information provided by professionals working in the field of autism has not been useful? What information do you think could have been provided that would have been more helpful for you, your child, and your family?
6. Which professionals have you found to be helpful? How so? Why do you think that is?
7. How do you know when professionals and support staff working with your child really understand your child and his or her specific needs and personality? understands autism? Why or Why not? How do you think they could become more in touch with your child?
8. As a parent what do you most want from relevant professionals?
9. If you were to receive training specifically targeted towards dealing with individuals with autism what topics would you want covered?
10. What techniques do you use to introduce changes to your child?
11. What characteristics of caregivers do you think are essential for interacting with individuals with autism?
12. At a time of need regarding your child, to whom would you turn for support?

13. What is the most gratifying aspect of raising a child with autism?

PROFESSIONAL-SPECIFIC INTERVIEW QUESTIONS

1. If you were to teach other professionals or parents how to interact effectively or work with someone who has autism, what things would you teach them?

2. When you first were learning about autism, what were the most helpful pieces of information you came across that provided some insight into how people with autism perceive the world?

3. If you were approached by a parent whose child was diagnosed with autism, what advice/information would you feel is important to pass onto them?

4. What information provided by other professionals working in the field of autism has not been useful or helpful? What information do you think could be provide that would be more helpful?

5. Do you feel that professionals and support staff working in the field understand the specific needs and personalities of the people they work with? do they understand autism? Why or Why not? How do you think they could become more in touch with the needs of their clients?

6. As a professional, what do you most want/need from parents? As a professional, what do you most want/need from other professionals?

7. If you were to receive training specifically targeted towards dealing with individuals with autism what topics would you want covered?

8. What techniques do you use to introduce changes to persons with autism?

9. What characteristics of professionals do you feel are essential for dealing with individuals with autism?

10. At times of crisis for your student/client, what resources do you access?

11. What is the most gratifying aspect of working with persons with autism.

Appendix B

Interview Participant Information and Consent Package *"Enhancing Effective Interactions with Individuals with Autism"*

In recent years the social services and resources available regarding the care, education, and treatment of persons with autism is growing. As a response to this growth, parents, caregivers, support staff, teachers, clinicians and social service professionals are seeking learning opportunities to assist them in their personal and professional lives. Continuing education is one means by which we can gain knowledge and skills to improve our performance.

Introduction

In completion of a Masters degree in Social Work I am requesting your participation in a project that is concerned with several issues regarding effective interactions with persons who have autism. I am interested in compiling information about what makes an individual a more efficient resource when caring for and working with a person with autism. I am also interested in understanding what individuals who have autism believe are better methods for enhancing positive interactions between themselves and others.

I hope to bring to light the importance of identifying and dealing with people who have autism in a manner which sees them first, as individuals, while also acknowledging that who they are, is largely influenced by circumstances associated with their autism. I also hope to demonstrate that despite problems and difficulties faced by individuals with autism, they do show great strength in their ability to cope effectively when provided with support from caring individuals.

Part of the theory behind this project is that an individual with autism has his or her own unique set of beliefs, values, and assumptions about the world. Furthermore, gaining knowledge and insight into an individual's unique perspective about the world will improve communication and interaction with that person. I believe that increased awareness of an individual's perspective can be achieved through implementation of specific techniques and strategies. These techniques and strategies are neutral in their approach thereby allowing for their implementation on their own, or in conjunction with the majority of treatment methods presently available to individuals with autism. The use of these methods may help to reduce the difficulties experienced by persons with autism, as well as their families, caregivers, teachers, and support workers.

I would like to interview a variety of people with personal and/or professional experience caring for or working with individuals with autism. The purpose of the interviews will be to gather information in order to strengthen the knowledge base with regards to effective methods of interacting with persons with autism.

Please note the following information carefully:

- Your participation in this project is purely voluntary.
- Participating in this project will have no effect on your position and/or the level of care or services provided to your child(ren).
- Only after consenting to participate will you be interviewed.
- You have the right to refrain from answering any question and to stop the interview at any time.
- All interviews will require a maximum of 60 minutes.
- All interviews will be audio-taped for later transcription.
- Confidentiality of interview responses will be ensured by keeping all audio-tapes and transcriptions safely stored in a locked cabinet.
- Audio-tapes of interviews will be destroyed upon completion of the project.
- Confidentiality of all participants will be maintained by coding the transcripts so that the source of the responses are undetectable.
- Prior to beginning an interview the researcher will review this document with you and ensure your understanding of its contents.

The precautions to ensure and maintain confidentiality are extremely important to the positive intent of this research project. Despite the efforts of this project to contribute to the community of individuals with autism it is important to keep in mind that the autism community is small one. Therefore, it is possible that persons may surmise the ownership of particular interview responses. Due to the integrity of this project, however, I will ensure that no participant's name or associated organizations will be mentioned in any written or oral reports regarding this project.

In case of unforeseen risks to participants, please be advised that there are several services available to provide support including the Autism Society of Manitoba, the Psych Services Centre, and the Elizabeth Hill Counselling Centre. These organizations provide free counsel and information.

Once again, the purpose of the interviews will be to gather information in order to strengthen the knowledge base with regards to effective methods of interacting with persons with autism. If you are interested in taking part in an interview to discuss the techniques you have found to be useful in your work and life please complete the attached consent form.

Consent Form

I, _____ agree to volunteer my participation in the interview outlined
(name)
above for the purpose of gathering information on effective methods of interacting with
persons with autism.

My consent to participate is based on the information outlined in the preceding
information letter and provided that the following conditions are adhered to:

- 1) Harris Teskey, the graduate student conducting this project, is working under the supervision of the University of Manitoba, Faculty of Social Work. If I have any questions or concerns at any time, I am free to contact his supervisor (Dr. Harvy Frankel 474-8378) as I wish at the University of Manitoba. Harris Teskey can also be reached at 488-1984.
- 2) Harris Teskey and his immediate supervisors will be the only individuals with access to the information collected, and all information will be kept strictly confidential. All research material will be stored in a locked cabinet and all names shall be replaced by codes so that participants cannot be identified.
- 3) My participation is voluntary and will not affect my position or provision of care or services to my child(ren).
- 4) I have the right to withdraw my participation at any time, and I have the right to refrain from answering any questions throughout the interview.
- 5) Upon completion of this project, all findings will be made public using only fictitious names or codes approximately one year from now, in the form of a Master's thesis project, through the University of Manitoba.

I understand that I have the right to discontinue my participation at any time.

I understand all of the above and all questions have been answered to my satisfaction at this time.

Signature _____

Date _____

Appendix C

IPSA Information and Consent Package

As a Masters of Social Work student with the University of Manitoba, and in association with Child Guidance Clinic of Winnipeg, I am developing a workshop and training package involving techniques used for interacting effectively with persons with autism.

I would be interested in meeting with teachers, clinicians, and support staff associated with IPSA, in order to gain further first hand information pertaining to effective strategies used when working with individuals with autism

To provide information regarding what this endeavor entails you will find an overview of the project following this letter. The time commitment for any potential participant/interviewee would be no greater than 60 minutes.

This project is being completed in conjunction with the University of Manitoba and is subject to the University's ethical approval. Furthermore, neither IPSA nor individual participant names will be identified in presentation or publication of materials.

If you have any questions, please contact myself, Harris Teskey, at 488-1984. Please leave your name and number and I will return your call as soon as possible.

Thank you very much for your time.

Sincerely,

Harris Teskey

PROJECT OVERVIEW

"Enhancing Effective Interactions with Individuals with Autism"

In completion of my Masters of Social Work degree at the University of Manitoba, I am conducting a project that is concerned with several issues surrounding effective interactions with persons autism. I am interested in determining and compiling information about what makes an individual a more efficient resource for persons with autism. I am also interested in understanding what individuals who have autism believe are better methods for enhancing positive interactions with them.

I hope to bring to light the importance of identifying and dealing with people who have autism in a manner which sees them first, as individuals, while also acknowledging that who they are, is largely influenced by circumstances associated with their autism. I also hope to demonstrate that despite problems and difficulties faced by individual with autism, they do show great strength in their ability to cope effectively, when provided with support from caring individuals.

Part of the theory behind this project is that an individual with autism has her/his own unique set of beliefs, values, and assumptions about the world. Furthermore, gaining knowledge and insight into an individual's unique perspective about the world will improve communication and interaction with that person. I believe that increased awareness of an individual's perspective can be achieved through implementation of specific techniques and strategies. These techniques and strategies are neutral in their approach thereby allowing for their implementation on their own, or in conjunction with the majority of treatment methods presently available to individuals with autism. The use of these methods may help to reduce the difficulties experienced by persons with autism, as well as their families/caregivers, teachers, and support workers.

I would like to interview a variety of people with personal and/or professional experience caring for or working with individuals with autism. Only after consenting her/his voluntary participation will an individual be interviewed. All interviewees will be made aware of the potential, minimal risks involved, their right to dissent (i.e., to end the interview at any time), and their right to refrain from answering any question(s). All parents approached for participation will also be made aware that their decision regarding participation will not affect the provision of services for their child. The interviews will be audio-taped for later transcription and will take no more than 60 minutes. The purpose of the interviews will be to gather information in order to strengthen the knowledge base with regards to effective methods of interacting with persons with autism. Confidentiality of interview responses will be ensured by keeping all audio-tapes and transcriptions safely stored in a locked cabinet. These audio-tapes will be destroyed upon completion of the project. Confidentiality of the participants will be maintained by coding the transcripts so that the source of the responses are undetectable.

IPSA CONSENT FORM

The Interdivisional Provincial Program for Students with Autism (IPSA) agree to participation and approve of initial contact of teachers, clinicians, and support staff associated with IPSA in the above stated project provided that the following conditions are adhered to:

- 1) Harris Teskey and his immediate supervisors will be the only individuals with access to the information collected, and that all information will be kept strictly confidential. To ensure confidentiality, all research materials including tapes and transcriptions, will be stored in a locked cabinet and destroyed upon project completion.
- 2) To maintain confidentiality of the participants all names shall be replaced by codes, such that participants cannot be identified.
- 3) Participation of all individuals associated with IPSA will be voluntary and will not affect their association with IPSA and associated services.
- 4) I have the right to withdraw my participation at any time, and I have the right to refrain from answering any questions throughout the interview.
- 5) Harris Teskey, the graduate student conducting this project, is working under the supervision of the University of Manitoba, Faculty of Social Work. If I have any questions or concerns at any time, I am free to contact his supervisor (Dr. Harvy Frankel 474-8378) as I wish at the University of Manitoba. Harris Teskey can also be reached at 488-1984.
- 6) Upon completion of this project, all findings will be made public using only fictitious names or codes approximately one year from now, in the form of a Master's thesis project, through the University of Manitoba.

I understand that I have the right to discontinue my participation at any time.

I understand all of the above and all questions have been answered to my satisfaction at this time.

Signature _____

Date _____

Appendix D

Workshop Participant Information & Consent Package

In recent years the social services and resources available regarding the care, education, and treatment of persons with autism is growing. As a response to this growth, parents, caregivers, support staff, teachers, clinicians, and social service professionals are seeking learning opportunities to assist them in their personal and professional lives. Continuing education is one means by which we can gain knowledge and skills to improve our performance.

In completion of a Masters degree in Social Work I am conducting a two day workshop that is concerned with several issues regarding effective interactions with persons who have autism. The workshop will include information about what makes an individual a more efficient resource when caring for and working with a person with autism. We will also be discussing methods for enhancing positive interactions with individuals with autism.

I hope to bring to light the importance of identifying and dealing with people who have autism in a manner which sees them first, as individuals, while also acknowledging that who they are, is largely influenced by circumstances associated with their autism. I also hope to demonstrate that despite problems and difficulties faced by individuals with autism, they do show great strength in their ability to cope effectively when provided with support from caring individuals.

If you are interested in participating in this two-day workshop please note the following:

- Your participation in this project is purely voluntary.
- Participating in this project will have no effect on your position and/or the level of care or services provided to your child(ren). [If applicable.]
- You will have the right to refrain from participating in any activities and withdraw your participation at any time.
- All workshops will be video-taped for later assessment of the facilitator.
- Confidentiality of workshop activities will be ensured by keeping all videotapes safely stored in a locked cabinet.
- Video-tapes of workshops will be destroyed upon completion of the project.
- Confidentiality and respect for participants' privacy will be expected from all those participating in the workshops. All participants will be expected to maintain confidentiality outside of the workshop setting.
- Prior to beginning the workshops, the facilitator will review this document with you and ensure your understanding of its contents.

If any participant should experience distress as a result of the workshop content and/or activities, please be advised that there are several services available to provide support including the Autism Society of Manitoba, the Psych Services Centre, and the Elizabeth Hill Counselling Centre. These organizations provide free counsel and/or information.

If you are interested in participating, please complete the attached consent form. Thank you for your interest.

Sincerely,

Harris Teskey

Consent Form

I, _____ agree to volunteer my participation in the workshop on effective
(name)
methods of interacting with persons with autism..

My consent to participate is based on the information outlined in the preceding information letter and provided that the following conditions are adhered to:

- 1) Harris Teskey, the graduate student conducting this project, is working under the supervision of the University of Manitoba, Faculty of Social Work. If I have any questions or concerns at any time, I am free to contact his supervisor (Dr. Harvy Frankel 474-8378) as I wish at the University of Manitoba. Harris Teskey can also be reached at 488-1984.
- 2) Harris Teskey and his immediate supervisors will be the only individuals with access to the information collected, and all information will be kept strictly confidential. All research material (e.g., videotapes) will be stored in a locked cabinet and all names shall be replaced by codes so that participants cannot be identified.
- 3) My participation is voluntary and will not affect my position and provision of care or services to my child(ren).
- 4) I have the right to withdraw my participation at any time, and I have the right to refrain from participating in any activities.
- 5) Upon completion of this project, all findings will be made public using only fictitious names or codes approximately one year from now, in the form of a Master's thesis project, through the University of Manitoba.

I understand that I have the right to discontinue my participation at any time.

I understand all of the above and all questions have been answered to my satisfaction at this time.

Signature _____

Date _____

Appendix E

Exercise Booklet

“Effective Interactions with Autism: A Training Program for Parents & Professionals”
Developed by: Harris Teskey, August 1999

EXERCISE BOOKLET

TERMINOLOGY

1st Attention

All that's in conscious thought (cognitive) at any time - i.e. Miller 7 + or - 2.

2nd Attention

Everything else in personal history. All those memories, those states of excellence, those times of personal satisfaction (resource states) not commonly in consciousness

Calibration

The ability to read non-verbal feedback (representational systems, facial and body changes) and to associate it with an individual's internal state.

Communication

The two-way process of relaying concepts and ideas to another individual, group, business and/or organization. The level on which to communicate starts with an awareness of the five representational systems.

Congruency

Times in your life when you were totally focused on an activity or an outcome in a relaxed and resourceful way.

1st Position

A fully associated position, where you are totally inside yourself. "I know what I want."

2nd Position

The perceptual position, of seeing through the eyes of someone else, hearing as they hear and feeling as they feel. In marcro behavior being able to replicate behavior of one or more persons. "I know what they want".

3rd Position

The director (fly on the wall) position, where you can look at your behavior in association with others. You are aware of the loop, you see how you feel; and see yourself in relation to one or more others.

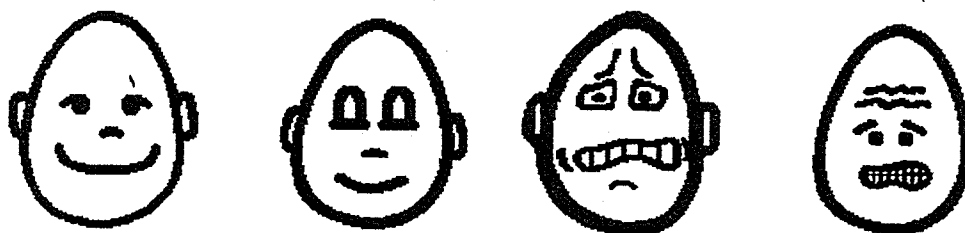
Perseveration

Excessive persistence at a task that prevents the individual from turning their attention to new situations.

Presuppositions

Presuppositions are statements/beliefs which are neither true or false. They are ways of organizing reality and may be judged as useful, cost effective, etc.

Circuitry Sensing Drills



This exercise is designed to make you aware of how the deep structure of words pulls up a physiological response. This deep-level response will determine our response more than a dictionary definition of the word.

Working in pairs, course participants re-experience a time when they were curious (for example) and notice how it affects their physiology. Some states that may be calibrated in this way include:

Congruency and Incongruency
 Curiosity and Detachment
 Understanding and Agreement
 Uncertainty and Insecurity
 Love and Lust

- (1) Participants take turns displaying the different word states that may be compared in this way, while the other calibrates and attempts to identify each state as it is displayed.
- (2) Person A considers a time when they have encountered the first state and thinks about it. Person B notices the appearance of the state.
- (3) Person A considers a time when they have encountered the second state and thinks about it. Person B notices the appearance of the state.
- (4) Person A chooses one of the experiences and thinks about it.
- (5) Person B attempts to identify the state using previous calibrations.
- (6) After three right identifications, they-switch roles.

Congruity Exercises



These series of exercises are designed to increase your knowledge and awareness of unconscious signals your body sends you, allowing you to know when you can fully support a decision.

In the first exercise, course participants observe the instructor working with one course participant. Course participants display and calibrate times when they felt totally congruent-- in a fully resourceful state, totally focused on their outcome or activity-- and when they felt incongruent.

Participants take turns mentally entering the situations and calibrating their physiological responses while the other coaches and calibrates externally.

Exercise One

- (1) A class member volunteers to join the trainer at the front of the room and picks a time when they felt totally congruent.
- (2) The trainer invites them to step into that experience-- to see, hear and feel (VAK) what it was like at that moment in time
- (3) The group observes.
- (4) The class member picks a time when they felt incongruent.
- (5) The trainer invites them to step into that experience-- to see, hear and feel (VAK) what it was like at that moment in time
- (6) The group observes.
- (7) The class member picks one of the times and steps into the experience.
- (8) The group guesses which experience they chose.

Exercise Two

- (1) Pick a time when you felt fully congruent, step into the experience and , remaining in the memory, do an inventory of your physiology.
- (2) Shake off the experience but remember your inventory.
- (3) Pick a time when you felt incongruent, step into the experience and, remaining in the memory, do an inventory of your physiology.
- (4) Shake off the experience but remember your inventory.
- (5) Recall your inventory of your congruent state and, without any soap opera, put your body in the physiology of congruency.
- (6) Recall your inventory of your incongruent state and, without any soap opera, put your body in the physiology of incongruency.
- (7) Put your body into the physiology of incongruency and then move it into the physiology of congruency.

Exercise Three

- (1) Inventory 5 times when you were congruent, say aloud what you notice and have your partner make a list of them for you.
- (2) Inventory 5 times when you were incongruent, say aloud what you notice and have your partner make a list of them for you.
- (3) Find a physiological signal from each of your inventory lists -- one that you cannot consciously manipulate -- that you can use in the future as a signal to whether or not you are congruent or incongruent.

1st Position Exercise

These exercises are designed to develop and enhance your experience of 1st Position. They also give you a clearer understanding of what it is to be in 1st Position.

- (1) Break into groups of 3 or 4 and decide where to go for lunch.
- (2) Each member is to decide independently where they would like the group to go for lunch.
- (3) You are to remain in first position, thereby trying to convince the rest of the group to agree with your idea. Because you are in first position, you are focused only on your needs. Do not acquiesce to others.



Exercise 2

The group plays "Musical Chairs" caring passionately that each time the music stops they find a chair.

[I love this one!]

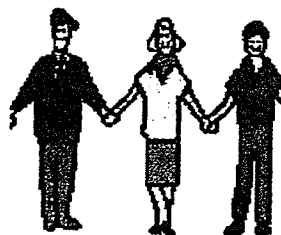
2nd Position Exercise

This exercise assists you to develop a position that respects your ecology, while it begins to verify the accuracy of your 2nd position shifts

The exercise is done in pairs with each person participating throughout.

- (1) With your partner begin a light conversation.
- (2) While conversing, A moves from a sitting to standing position either to the left or right of their original position- movement is at 1/3 normal speed.
- (3) B's task is to get a strong sense of which way A will turn. When B thinks they can predict A's behavior, they ask A to come to the point where they know which way they would turn- but not to do it
- (4) By not deciding in advance, A's task is to discover (circuitry sensing) where the decision to move either to the left or right is manifested in their own body. These sensations are intention movements, so A's task is to learn to recognize their own intention movements.
- (5) After several times, partners reverse roles.

The Sculptor Exercise



- (1) Divide into groups of 4 to 6 people.
- (2) Chose one person to be the sculptor (3rd position).
- (3) Arrange the bodies of the others into a tableau that symbolizes one of the previously agreed-upon themes.
- (4) Sculptor systematically moves to 3rd Position developing a 3rd Position marker (base between fourth and fifth finger), seeing the tableau as a whole and rearranging it to their desired objectives.
- (5) Call an outside person to view the tableau and guess its theme.
- (6) Repeat until each member of the group has had an opportunity to be the sculptor.

Adjusting The Volume

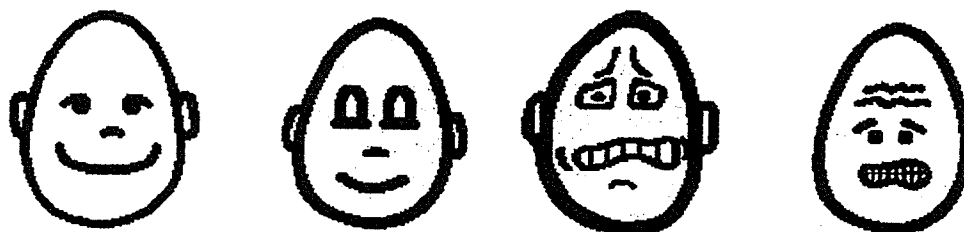


Negative Emotion/ Expression	Transforms Into
Stupid	Discovering
Angry	Disenchanted
Depressed	
Disappointed	
Embarrassed	
That stinks	
Failed	
Lost	
Terrible	

Voice Matching

- (1) Choose an unimportant Situation. Get a friend to do this exercise with you by sitting back to back. The effect of this exercise is most obvious if the other person does not initially know what you are going to do.
- (2) Try Matching. As you talk to the other person, notice the tempo and tone of his or her voice. As you talk to him, subtly adjust your voice until the tone and tempo of your voice are as close to the other person as possible. Notice the quality of the communication: is the follow of information smooth or difficult. Is there a feeling of rapport or not?
- (3) Try Mismatching. After a few minutes of smooth, flowing conversation, alter your voice to be very different from their other person's in terms of tone and tempo. Notice what impact this change has on the quality of the communication.
- (4) Now Go Back to Matching. Change back to matching the other person's voice quality and notice how you are able to regain the rapport that enables a smooth flow of communication.

Advanced Circuitry Sensing Drills



This exercise is designed to help enhance your ability to read people's states at any given time.

- (1) Divide into groups of 2 .
- (2) Person A thinks of a person that they really like, and fully experiences that memory; Person B calibrates for this state
- (3) Person A thinks of a person that they really dislike, and fully experiences that memory, Person B calibrates for this state.
- (4) Person A chooses one of the memories and enters that state, Person B must guess which person A is thinking of.
- (5) After three right identifications, switch roles.

Practice Exercises

- (1) While watching the news -- watch the interviewee's eyes.
- (2) Next time you're engaged in a boring conversation -- disregard the content and watch eye movements.
- (3) While listening to the radio or television -- listen to voice tone and tempo.
- (4) With a partner, start up a conversation and notice the presence of deletion, generalization, and distortion. Question these communications to further your understanding of how they experience reality.

Common Symptoms

- **Failure to discriminate cues or stimuli**
- **Limited ability to discern and interpret subtle signals provided**
- **Failure to generalize information**
- **Ability to shift attention from one stimulus to another occurs at a slower rate**
- **People with autism have trouble engaging and disengaging attention**
- **Perseverations**

Non-Verbal Cues

- **Eye movements**
- **Muscle changes around the eyes**
- **Whole body & repetitive movements**
- **Gestures & hand movements**
- **Lip movements**
- **Muscle changes around the mouth and jawline**
- **Noses and muscle changes around noses**

Components of Rapport

- **Body position, facial expression, physical movements**
- **Voice- speed, tone (pitch), tempo, volume**
- **Content of verbal communications**
- **Specific words used to relate content- particularly predicates**

Guidelines For Building Rapport

- **Calibrating**
- **Pacing and Leading**
- **Matching**

Effects of Rapport On Positive Interaction with Autistic Individuals

- **Increasing attention to a specific experience**
- **Increasing motivation to continue an activity at hand**
- **Increasing the desire to interact with the adult**
- **Increasing communication**
- **Increasing the desire to please the adult**
- **Increase imitation of the adult**

(Rogers & Lewis, 1989)

Why people Communicate

- **To Regulate Behavior of others (e.g., To request, to refuse, to protest)**
- **To establish joint attention for the purpose of sharing information or feeling about a joint focus.**
- **To engage in social interactions (e.g., greeting, drawing attention, requesting comfort or activity).**

(Bruner, 1981)

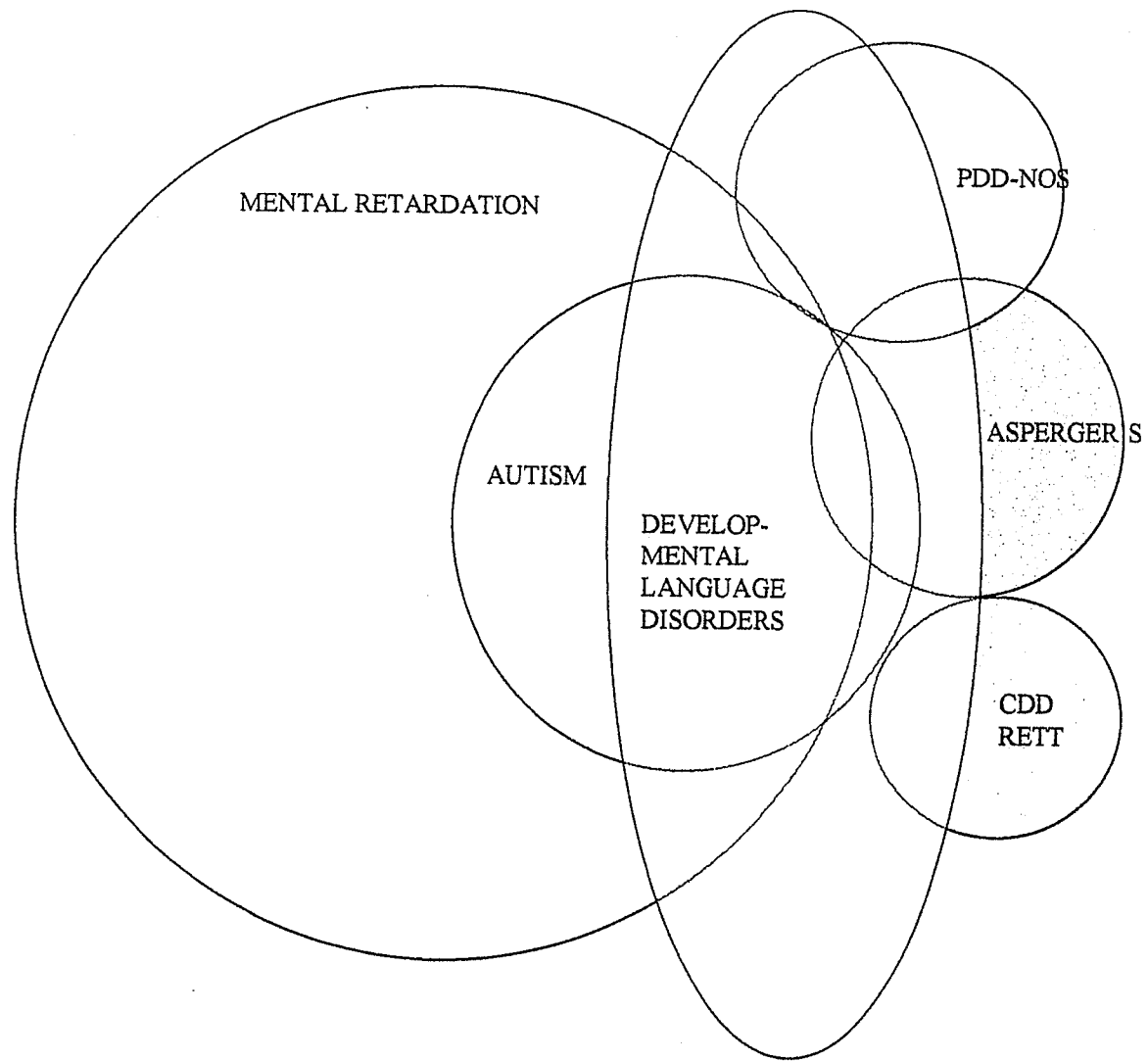
Observing communication patterns will allow you to:

- **Recognize their personality and motivational patterns**
- **Recognize which senses they rely on**
- **Respect the actual words and phrases used by individuals, as those words represent their experience of reality.**

Guidelines For Observing Communications :

- **Note gestures (e.g., shoulders up or down, head shaking, hands flapping)**
- **Note verbal content and structure**
 - What is said or verbalized**
 - How it is communicated (e.g., yell, whisper)**
- **Note actions (e.g., ran away from contact, moves closer, turns head to left)**
- **Note any environmental cues that may have provided the trigger for the interaction**

Appendix



Autism is something I cannot see. It stops me from finding and using my own words when I want to. Or makes me use all the words and silly things I do not want to say.

Autism makes me feel everything at once without knowing what I am feeling. Or it cuts me off from feeling anything at all.

Autism makes me hear other people's words but be unable to know what the words mean. Or autism lets me speak my own words without knowing what I am saying or even thinking.

Autism cuts me off from thoughts and curiosity, and so I believe I think nothing or am interested in nothing. Or autism makes my mind almost explode with the need to reach out and say what I think or show what I am interested in . . . but nothing comes out . . . not even on my face, in my eyes, or from my words.

Autism cuts me off from my own body, and so I feel nothing. Autism also can make me so aware of what I feel that it is painful.

Autism makes me feel sometimes that I have no self at all, and I feel so overwhelmed by the presence of other people that I cannot find myself. Autism can also make me so totally aware of myself that it is like the whole world around me becomes irrelevant and disappears.

Autism is like a seesaw. When it is up or down I cannot see a whole life. When it is passing through in the middle I get to see a glimpse of the life I would have if I were not autistic.

The most important thing I have learned is that
AUTISM IS NOT ME.

Autism is just an information-processing problem that controls who I appear to be. Autism tries to stop me from being free to be myself. Autism tries to rob me of a life, of friendship, of caring, of sharing, of showing interest, of using my intelligence, of being affected . . . it tries to bury me alive.

The second most important thing I have learned is
**I CAN FIGHT AUTISM . . . I WILL CONTROL IT . . .
IT WILL NOT CONTROL ME.**

DONNA WILLIAMS

PRESUPPOSITIONS

- 1) **Experience Has Structure**
The way I experience the world is unique to me. My experiences consist of sensory impressions, some internally generated and others coming from the outside world. Our thoughts and memories have a pattern to them. When we change that pattern or structure, our experience will automatically change. We can neutralize unpleasant memories and enrich memories that will serve us.
- 2) **People Are Like Map Makers**
People make representations of their experience. These maps consist of sensory information in the form of sights, sounds, feelings, smells, and tastes. We can recall past experiences and imagine or create new representations of the future by utilizing our senses.
- 3) **The Map is Not The Territory**
The map is our representation of reality and is a reflection of the moment's attention.
- 4) **People Respond to Their Maps of Reality, Not to reality Itself.**
Every internal representation that people make can be considered a map. Experiences (both internal and external), memories, fantasies, beliefs; all are maps.
- 5) **People's Maps Are Made up of "VAK-GO"**
People's representations of their experience are made up of pictures, sounds, feelings, smells and tastes. Visual, auditory, kinesthetic, olfactory and gustatory information makes up the sense languages (or sub-modalities) that our brains use to record experience.
- 6) **People Tell And Show us How They Think**
People are always telling and showing us how they think. The words people use in their communication represent whether their experiences are visual, auditory or kinesthetic.
- 7) **If You Change Someone's Map, Their Emotional State Will Change**
To the individual, the map is the experience. Maps are the source of emotion and belief. This is useful to us because we can modify how we support someone based on that person's map of the world. When a map is changed, the individual's reality will change, and the person will react accordingly.
- 8) **Underlying Every Behavior is a Positive Intention**
When you find the intention underlying the behavior, you find a universally shared need (love, safety, respect etc.). Every hurtful, harmful, and even thoughtless behavior has a positive purpose in its original situation. Rather than condoning or condemning these actions, we can separate them from the person's positive intent, so that new, updated, and more positive choices can be added that meet the same intent.

PRESUPPOSITIONS

9) Choice is Better Than no Choice

No Choice means slavery or robotic behavior. Having choices gives individuals the freedom to change and grow.

10) People Always Make The Best Choices Available to Them at The Time.

But, they would often be happier and more effective if they had more flexibility than they do.

11) If What You Are Doing Isn't Working, do Something Else—Anything Else!

If you always do what you've always done, you'll always get what you've always gotten. If you want something new, do something new, especially when there are so many alternatives.

12) If One Person Can do Something, Anyone Can Learn to do it

We can learn an achiever's mental map and make it our own. Too many people think certain things are impossible without ever going out and trying them. Pretend that everything is possible.

13) People Already Have All The Resources They Need

Mental images inner voices. Sensations and feelings are the basic building blocks of all our mental and physical resources. We can use them to build up any thought, feeling, and skill we want, and then place them in our lives where we want or need them most.

14) You Cannot NOT Communicate

We are always communicating, at least non-verbally, and words are often the least important part. Language is one form of communication. Communication is behavior and behaviors are communicative.

15) The Meaning of Your Communication is The Response You Get

It is the perception of the receiver that determines the effectiveness of the interaction, not the intention of the initiator. Others receive what we say and do through their mental maps of the world.

16) Communication is a Two-Way Process of Relaying Concepts And Ideas to Another Person.

The level on which to communicate starts with an awareness of the five senses. The five senses are how we perceive and code the world in our memories or present experiences.

PACING

- 1) **Matching phrasing/predicates-** Note and match in your own language the repeated phrase of the other person.
- 2) **Matching vocal qualities-** e.g., tonality, pitch, tempo, volume, intensity etc.
- 3) **Mirroring or matching body movements-** e.g., breathing, hand gestures, body posture, head position, movement of feet, spatial relationships, body movements through space
 - **Whole body matching-** adjust your body to appropriate the other person's stance
 - **Part body matching-** pacing any consistent or stylistic use of body. (e.g., eye blinks)
 - **Half body matching-** match the upper or lower portion of the other person's body
 - **Head/shoulders angle-** match characteristic poses that the person offers with their head and/or shoulders
 - **Facial expressions-** note the ways the person uses their face (e.g., wrinkles their nose, puckers their lips, raises their eyebrows, etc.)

Guidelines for Effective and Positive Interaction

- 1) **Analysis of Preferences and Strengths.** Take time to get to know the person as a unique individual. Similar to the early stages of dating, find out their likes. Woo them.
- 2) **Develop trust.** The person must first feel secure in his/her environment before attempting to engage with you. You can develop trust by anticipating their needs, this shows them that you've been paying attention and are able to support them. Enter their world and make your world autism friendly.
- 3) **Routine with Flexibility.** Having a consistent and reliable routine to follow provides structure and promotes overall security in an environment with which to grow and expand upon skills. Encourage the development of flexibility by planning for and introducing random deviations from routine.
- 4) **Clear expectations.** Providing specific directions and information promotes successful interaction.
- 5) **Work towards success.** Set up situations where the person can experience success and reinforce him/her appropriately.
- 6) **Communication.** Accept and encourage all forms of verbal and non-verbal communication as a starting ground for interaction.
- 7) **Encourage positive self-concept.** Teach them that they are valued for who they are. Respect his/her personal interests and abilities.
- 8) **Maximize motivation.** Individual preferences and interests need to be the basis of your interaction in order to provide pleasurable experiences within which the person can engage with you and learn new skills.

Social Behaviours that Persons with Autism Need Support For

1. **Waiting**- make it less abstract and more specific to the situation
2. **Negotiating**-many people with autism are not able to listen to another person's point of view and persist in expressing their own desires, expecting others to do as they wish.; present choices
3. **Changing Topics** (e.g., asking questions about what is going to happen)- investigate the reason behind the perseveration (e.g., anxiety, doesn't know what to talk about, wants more attention and needs a better strategy for getting it), rehearse ahead of time to help a person remember how to behave in times of stress
4. **Finishing** (e.g., dressing, a bath)-to be finished is an abstract, situation specific concept. People with autism learn to rely on some kind of environmental cues to tell them when something is finished. Define finish in specific, concrete ways and provide cues consistently.
5. **Initiating** (e.g., approaching others, asking for something, leaving the situation if upset)-teach situation specific strategies, provide a set of specific rules (e.g., visually or written) and teach the person to follow the rules
6. **Being Flexible** (e.g., TV shows are canceled, the swimming pool is closed tonight, the car won't start)- learning to accept last minute changes and being flexible causes an increase in anxiety for many people. People with autism tend not to employ past experience to problem solve for an alternative. They may become anxious and behave quite inappropriately when unexpected changes occur. May be easier to change a whole activity rather than a step within an activity. Don't dwell on the problems. Use authorities like newspaper listing of TV schedules to show changes. Whenever possible, explain the change ahead of time so the person has time to accept it and rehearse it with you. Keep in mind that sometimes knowing too far ahead creates more anxiety.
7. **Being Quiet** (e.g., while working, while others are talking or being quiet)-Many people with autism who are verbal rehearse or think aloud. Others may hum or make repetitive sounds as a monitoring or habitual behavior. they may become quite oblivious to others around them. Teach a specific, concrete way to "be quiet". This may start with raising the person's awareness level through audio or videotape; then reinforcing minutes of "being quiet". Provide and teach specific rules for specific situation. Practice and teach in context, through real activities.

People Show You 'How' They Think

V^C

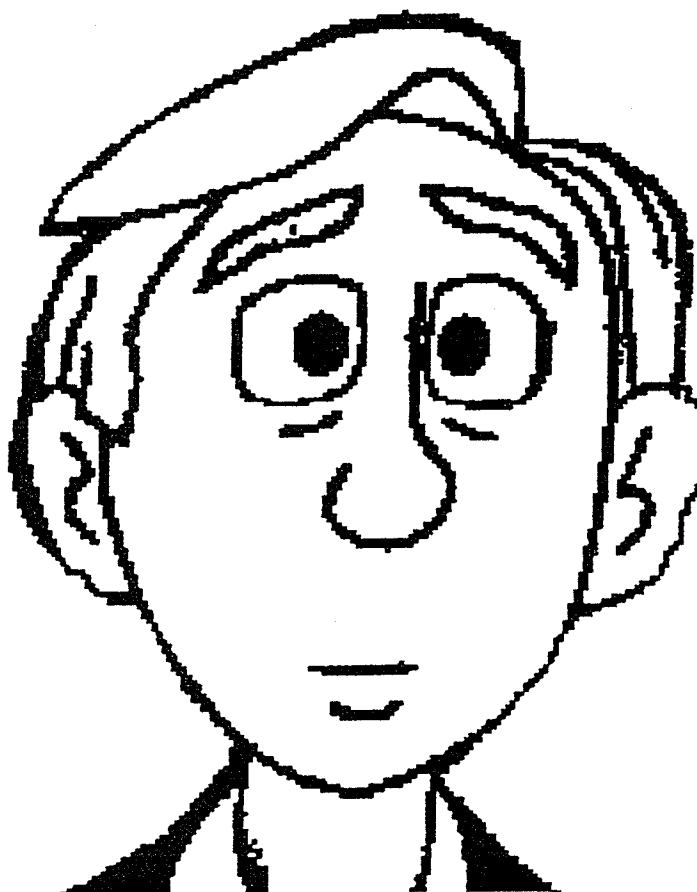
V^R

A^C

A^R

K

A^{ID}



When you are communicating with others, notice where they move their eyes. Up or defocused is to find pictures, down and to the right is for feelings and all other eye movements are for sounds or words. You can determine whether people are visual, auditory, or kinesthetic by noticing which eye movements they use more often. People must move their eyes to find stored memories and these eye movements reveal their preferred sense.

V^R

When we look up and to the left, we are accessing a visual remembered image. This means that whatever we are thinking about at that moment is taking the configuration of an image or picture from the past; that could mean our past of five minutes or forty years ago. For our purposes, time sequence is not important. We call this position the **Visual Remembered** position and designate it as **V^R**.



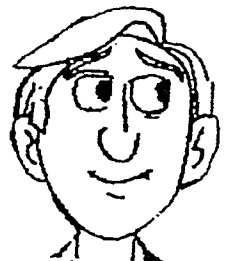
V^C

When we look up and to our right, we are accessing a visual constructed image. That's a visual picture of someone or something that has not taken place yet. It may be in the future, or it may simply be something that we are trying to imagine. In either case, the image is constructed, and one that we fabricate for ourselves at that moment. We refer to this eye accessing cue as the **Visual Constructed** cue and designate it as **V^C**.



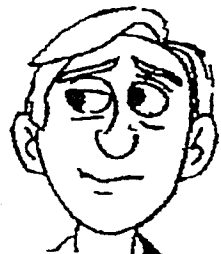
A^R

When we look to our level left, we are accessing an auditory remembered thought. That means we are thinking about something that is expressing its meaning as an auditory representation. This could mean the sound of someone's voice, the sound of a client's office, the sound of a computer or any auditory sound that's from the past. By looking level left, we're processing an experience with an auditory representation. We refer to this as the **Auditory Remembered** position and designate it as **A^R**.



A^C

When we look to the level right, we are thinking in a constructed auditory perception. That is to say, when we notice people glancing to their level right, they are trying to construct or imagine the sound of something they haven't heard before. It might be the sound of someone's voice or the way they would like to sound at next week's board meeting. We refer to this as an **Auditory Construction** and designate it as **A^C**.



A^{ID}

The auditory representational system has the distinction of possessing a third eye accessing cue. When we have an auditory internal dialogue, that is an internal conversation with ourselves, we glance to our lower left. You will notice this when someone you know is comparing two sides of a story. In sales, this is apparent when a prospective client is shopping for the best buy or product. This eye accessing cue is referred to as **Auditory Internal Dialogue** and is designated with the symbol **A^{ID}**.



K

The last eye accessing cue is the one that represents our feeling state. It has only one position. When we step into our sense of emotion, we usually glance to our lower right. The designation for this is **K**. The **K** stands for **Kinesthetic** which is Latin for 'feelings'.



Appendix F

Satisfaction Questionnaire

Satisfaction Questionnaire

Part A. QUALITY OF TOTAL LEARNING EXPERINECE

	<u>Excellent</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>
1. Instructor stimulates curiosity, independent thinking, and student participation in class.	5	4	3	2	1
2. Teaching strategies employed are appropriate for you in facilitating your learning.	5	4	3	2	1
3. To what extent did the course meet your needs and expectations?	5	4	3	2	1

Part B. QUALITIES OR CHARACTERISTICS OF THE INSTRUCTOR

4. Instructor possesses and effectively utilizes human relations skills in providing individual attention to students.	5	4	3	2	1
5. To the best of your ability, give your overall judgment of your instructor as an effective teacher.	5	4	3	2	1
6. Instructor appears to have a thorough and current knowledge of the subject matter.	5	4	3	2	1

Part C. PHYSICAL ASPECTS

	<u>Excellent</u>	<u>Very Good</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>
7. Learning materials presented are appropriate and useful in facilitatating your learning.	5	4	3	2	1
8. The physical characteristics of the learning environment (room, conditions, comfort, freedom from outside distractions) are conducive to learning.	5	4	3	2	1

Part D. COURSE OBJECTIVES

9. The objectives of the course are clear.	5	4	3	2	1
10. The subject matter chosen for instruction is clearly related to course objectives.	5	4	3	2	1
11. To which extent were the course objectives obtained.	5	4	3	2	1

Part E.

12. Would you recommend this course?

Yes

No

Explain:

13. What was the best
feature of this course?
Explain:

14. How could this course be
improved?
Explain:

Part: F. COMMENTS

Footnote

1. A professional will refer to any individual working in the capacity of teacher, teaching assistant, physician, social worker, speech and language therapist, psychologist, psychiatrist, or occupational therapist with individuals who have ASD.