The Horse as Co-Therapist in Facilitating Adolescent Attachments

by

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Abstract

This thesis integrates knowledge from four theoretical strands, classical attachment theory, the attachment disorder and treatment literature, neurological research, and animal assisted therapy. Explored first is how understandings of classical attachment theory have shaped treatment interventions for attachment disorders, particularly as these may apply to young children because it is suggested that these understandings of classical attachment theory may have restricted the search for effective helping strategies for young people experiencing problems in establishing relationships with others, and that recent neurological findings challenge previous beliefs that center around a notion that successful treatment for attachment disorders must occur in early childhood. The literature on animal assisted therapy is reviewed with respect to possible treatment options for some young people experiencing attachment problems, and this literature indicates that the horse may be the therapeutic animal of first choice for some young persons experiencing relationship difficulties. A treatment plan is developed utilizing the horse as co-therapist, which is aimed at helping young people more fully experience the meaning, and role of, trust in relationship.
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I owe a debt of gratitude to many persons who have contributed to my learning as I have struggled with this text, and who have assisted with the writing. To my life partner Joyce who maintained an attitude of cheerful optimism and encouragement, I am deeply grateful. I owe much to my committee who never gave up their belief in my ability to eventually reach an acceptable level of academic writing. I was fortunate to have met Colin Sanders who helped with the editing, the presentation of some of the Narrative ideas, and who always seemed to know what I needed to read next. To Nancy Duesner in the Yukon, who encouraged the development of the link between neurology and attachment, I am grateful. But perhaps I owe the biggest debt to the young people with whom I have worked and played, and from whom I have learned the most.

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DEDICATION

This thesis is dedicated to Mary and Tara, and to Old Smoke.
CHAPTER I

AN ENQUIRY BEGINS

This thesis grew out of my own experiences with horses and several young people in my care for whom attachment disorders were considered significant enough to warrant file recording suggesting the possibility of this disorder. While some may have met the Diagnostic and Services Manual fourth edition-1994 (American Psychiatric Association, 1994) criterion for Reactive Attachment Disorder, this diagnosis was not made by an assessing psychiatrist. Reactive Attachment Disorder is defined by the DSM-IV (1994), as “characterized by a markedly disturbed and developmentally inappropriate social relatedness in most contexts, beginning before age 5 years” (p. 116, as cited in Hanson & Spratt, 2000). In the case of several of the young people in my care, the presenting problems were severe enough to warrant file recordings suggesting that attachment problems underpinned their acting out behavior. In two cases, a consulting psychiatrist did suggest that an attachment disorder was the major issue requiring treatment. One of these young persons was later diagnosed with Borderline Personality Disorder.

My work as a therapeutic foster parent caused me to re-evaluate my previous theoretical frameworks and interventions. This previous knowledge had been acquired through experiences as both a teacher and a street based youth worker. Interventions, previously successful with other young people, did not appear to be useful for certain young clients. In one case, the file suggested Reactive Attachment Disorder as a possible diagnosis, but my wife and I could not believe that this could be the case, as what follows will demonstrate.
M.S. had been placed with my wife and I at fifteen, and had a history of multiple unsuccessful placements. We couldn’t understand this as she was intelligent, demonstrated conventional social skills, was athletic, musical, and was initially popular with her peers. For three months we wondered why we were being paid to have this delightful young person be part of our life. And then the problems began. Despite academic ability she was unsuccessful in school. Peer relationships were not maintained over time. School attendance became problematic, and drug use started. Attempts at limit setting were met first by manipulation disguised as negotiation, and then when that failed to get the desired results, with outbursts of rage and emotionally abusive behavior. Soon after this phase, she started running away.

Fortunately, during this time, I had the opportunity to attend an attachment workshop sponsored by the British Columbia Federation of Foster Parents. Gradually, throughout the day, I began to acquire both a possible understanding and a feeling for, the experience of this young person. I was moved to tears as I came to an appreciation of how profoundly this child’s early experience of care had shaped her. Finally I thought I could understand, and have empathy for, her current behaviors. The placement was to last for about a year before she decided she could not accept limits on her behavior, and she moved on. However, she continues to maintain contact, and, despite the problems she continues to experience in her life, seems to value the connection with us.

During the years between the ending of the placement and the present, each time she returned for a visit the first thing she wanted to do was rush to the barn to see Smoke, her horse. I began to wonder about the strength of this connection. Although now
pleasant and co-operative with us and our Border Collie dogs, the primary connection initially seemed to be with her horse. At present however, as a young adult she increasingly seems to value her relationship with us. Could this horse somehow initially, in a way that I could not understand, have facilitated an emotional experience that was different and more meaningful for her than her experience of us or our dogs? Could her horse have acted as an emotional bridge to us? I remembered the many hours she had spent acquiring horse savvy, and the many tactile experiences she had seemed to enjoy; grooming Smoke, giving her a bath, time spent just hanging out in the barn braiding her horse’s mane and tail. One of the times she had run away I found her curled up in her horse’s manger in the blackness of the barn-night.

I also had experienced my favorite thoroughbred this way. Despite the rats that scuttled in the darkness, it was a wonderful experience; the smells of the horses, their gentle snuffling and chewing noises as they ate their hay, the gentle contact of my horse’s nose as she periodically checked me out in the process of eating her hay, all contributed to an emotional experience that can best be described as calming and centering. Could this young person, who seemed not connected to us, be experiencing perhaps for the first time, an emotional sense of connection to another living thing in a way that was beyond words? Was this where treatment for attachment disorder had to start, in emotional experiences outside of language; experiences that had to do with the senses, touch, smell, eye contact, and sounds? What was happening in the brain of this young person as she encountered these experiences?
I wondered about patterns of connection in our relationships with all our foster youth. Two had remained with us for periods greater than a year and continue to have contact. Two had moved on. The young people who had established a relationship with us were the same youth who had also pursued a relationship with their horse. Could old Smoke somehow have acted as an emotional bridge to us, the human caregivers? Could this horse have acted in the role of co-therapist?

In a recent position as Program Co-ordinator for Residential Youth Services with the Yukon Territorial Government, I also attempted to utilize the horse in developing day programs for young clients. Three young people, all of whom were suspected of having attachment disturbances participated in a horsemanship program for periods of up to two months. All were adolescent females. This, in combination with the fact that previous work with horses and young people has all been with females, and the fact that most of my personal riding partners have been women, made me wonder if there could be a unique attraction between horses and women. These women have also wondered aloud about this, and have developed their own theories about this phenomenon. However, since a majority of the horse trainers in the literature are male, gender does not seem to preclude men developing relationships with horses. While this gendered aspect is interesting, this thesis does not investigate this possibility other than to note the need for further research.

The urban residential nature of the Yukon work meant that it was more difficult to maintain interest and a sense of connection to the horse, and these young people did not seem to develop the same sense of relationship to the horse as young people in the fostering experiences. However, even these limited interactions between horse and young
people, seemed to suggest that these animals have something unique to offer some young people.

One of these young persons, while grooming the horse, developed a fascination for her horse’s eyes. Taking her horse’s head in her hands on one occasion, she exclaimed, “I can see all of me reflected in her eyes”! I almost dropped my grooming brush in excitement, as I remembered reading the work of Schore (2000, 2001, 2002), and others who have described the importance of eye contact in developing the attachment bond in early mother/child relationships, and the effect these experiences have in stimulating new brain development.

In another instance I was working with a young person diagnosed with Schizoaffective Disorder, and the same horse. This young person had extreme difficulty recognizing and controlling her own affective states. In the residence, while in an agitated state, she had assaulted me. Now she was in the saddle and couldn’t get her horse to move. Prompted by my knowledge of Natural Horsemanship (Parelli, 1993) which is all about communicating emotional states, I asked her to recall the day she had assaulted me, and to try and bring back that same feeling. My idea in the moment was threefold. This young woman needed to be able to recognize her own internal emotional landscape before she would be able to control it. She also needed to recognize that emotional intensity could be a valuable resource which she could utilize, if she could figure out how to direct this energy in acceptable ways. She now looked at me with astonishment. “This time though, you are going to be in charge of that feeling”, I advised.
My intention here was to prompt her in the direction of controlling and focusing her emotional state.

I watched her posture change as she sat up in the saddle. Her calves automatically came together, her hands communicated direction on the reins, her head pointed in the direction she wanted to go, and her eyes took on a determined look. Her horse instantly moved off in a brisk walk in the direction she had wanted. Now, she and I were able to experience affect synchrony as we celebrated what she had just accomplished. Affect synchrony as defined by Schore (2000) in an infant/caregiver context, is a complex process whereby the infant and primary caregiver within the attachment relationship are able to synchronize the intensity of their affective behavior. In an adolescent context such as the one described, I am arguing that when the therapist is able to utilize experiences such that the young person and adult are able to synchronize their affective states and behavior, attachment therapy may result.

**Purpose**

The purpose of this thesis is to develop a theoretical rationale for an hypothesis that a Natural Horsemanship program (Parelli, 1993) may be therapeutic for some young persons who are experiencing attachment disorders. Natural Horsemanship (Parelli, 1993) emphasizes establishing a relationship of trust and respect with the horse before beginning to ride. In other words, Parelli understands the importance of the attachment bond between horse and rider. Bowlby (1969) first described the attachment bond that begins to form between an infant and his/her primary caregiver in the first few months of life. He theorized that the infant’s need for proximity with a caregiver had survival value.
for both the infant and the species. Bowlby proposed that this primary drive for proximity had, over evolutionary time, become biologically encoded in human genetic structure, and gave rise to an attachment behavioral system on the part of the infant. Bowlby further suggested that these biologically encoded signaling behaviors “expected” an appropriate caregiver response. In cases where an appropriate caregiving response to attachment behavior was not forthcoming, Bowlby argued that the infant modified his/her attachment behavior to suit the caregiving response. This usually meant either amplifying or minimizing attachment behavior.

Ainsworth (1978) described how this universal pattern of attachment behavior could be modified, in reaction to inappropriate caregiver responses to infant attachment behavior. She developed a tripartite classification system based on these infant/caregiver behaviors. She proposed that a secure attachment resulted when the caregiver could meet the infant attachment need in a sensitive and timely way, and an insecure attachment resulted when this need was not sensitively met. This insecure attachment style could be further subdivided into two categories, which corresponded to infant/caregiver behaviors, insecure resistant, and insecure avoidant.

Classical attachment theory suggests that infant behavioral expressions of attachment need, in the face of an inappropriately responsive caregiver, reveal the underlying emotional state of the infant. Over time these emotional states become incorporated into cognitive working models which shape identity and future relationships. These cognitive models, acquired through early experiences of care, can be
problematic in that they may interfere with the developing child's relationships, and as such can be thought of as disorders of attachment.

Bowlby's (1969) and Ainsworth's (1978) initial work in proposing an attachment theory challenged fundamental assumptions in the field of psychiatry. The accepted view at the time was that the need for attachment was a secondary drive, and that attachment arose from having primary drives such as hunger, met by the parent. In the next thirty years the psychological and psychiatric literature was to expand enormously as researchers, clinicians, and theorists developed attachment theory, attempted to classify attachment disorders, and proposed treatment approaches. This literature is the subject of the first two sections of the thesis. In more recent times, Borderline Personality Disorder, Conduct Disorder, Agoraphobia, Eating Disorders, some forms of Psychosis, Depression, Addictions, School Phobias, Underachievement, Aggression, Narcissism, Antisocial Behavior, Attention Deficit Disorder, and Neurodermatitis all have been linked to Attachment Disorders (Brisch, 2002; Guidano, 1983; Fonagy, 1997; Mate, 1999).

Traditionally, the attachment disorder treatment literature focuses on younger children. However, empirical evaluations of treatment interventions for attachment disorders is largely missing in the literature, at least until very recently. The majority opinion proposes that children with serious attachment disorders have learned that they cannot trust adults to respond appropriately to their needs. Attachment disordered children have therefore learned that the only way these needs will be met is if they control the relationship with the adult. Control is achieved in a variety of ways. Lying,
stealing, outbursts of rage, seductive behavior, and manipulation, are all recognized as controlling behaviors associated with attachment disorders.

Traditional treatment focuses on breaking down the child’s need to control his/her relationship with a primary care giver, and having the child learn to trust that the adult can meet his/her needs. This literature recognizes that this process takes a very long time, is very difficult to achieve, and requires an extensive support system for the primary care giver (Fahlberg, 1990, 1991; James, 1994; Hughes, 1999; Hanson & Spratt, 2000; Thomas, 2000). All too often, the stress involved in dealing with attachment disordered children and the inability of these children to engage in emotional reciprocity with their adult care givers, results in burn out for the adult and multiple placements for the child, further exacerbating the attachment difficulty (Fahlberg, 1990, 1991; James, 1994). New approaches to treatment are needed that promise to facilitate the child’s transition from control to connection in a manner that positions the adults on the side of the child instead of in opposition to him/her. I propose here that a therapeutic horsemanship program is one such approach.

Method

In order to provide a working context for the development of the hypothesis presented here, I provide reviews of four rather separate literatures. These literature reviews bring together thinking from the fields of classical attachment theory, attachment disorders and their treatment, neurological research, and animal assisted therapy. I have chosen to synthesize these four bodies of knowledge for a number of reasons. Firstly, classical attachment theory’s understanding of normative development has lead to the
idea of “disorders of attachment”, and an understanding of the kinds of interventions that constitute effective treatment. However, these understandings of normative development may need to be expanded in light of current interpretations of recent neurological research. Attachment theorists in the last decade have utilized recent neurological research to develop new understandings of early attachment processes. Understanding how early dyadic relationships between the child and primary caregiver facilitate emotional development, as well as the physical development of the brain itself, are now fundamental to understanding attachment (Schore, 2001, 2002; Siegel, 1999). For children who have not had this early experience of care, recent neurological literature also suggests that adolescence may provide a second chance, in that the brain undergoes another growth spurt similar to that of early childhood.

The animal assisted therapy literature suggests that dogs, horses, and cats, may have a key role to play in facilitating the kind of emotional learning necessary to attachment, in that these animals are naturally adept at attuning to the emotional state of humans (McCormick & McCormick, 1997; Colin & Walsh, 1994; Conner, 2001; Johnson, 1997).

Horses may be the animal of first choice for some young persons experiencing attachment problems. This may have to do with the horse’s psychological orientation as a prey animal which in some respects seems similar to some young people suffering from severe attachment disturbances. Prey animal psychological orientation is quite different from the orientation of predators, who according to Parelli (1993) are oriented to the future. Prey animals’ motivational systems orient them to the present and to safety
I argue that similar psychological orientations may provide a sense of connection, and may also make horses extremely resistant to the kinds of manipulation techniques that many young people experiencing attachment problems have learned. Furthermore, acquiring horsemanship skills requires the individual to pay attention to nonverbal communication. This is the language of horses for which Monte Roberts (1997) has coined the term Equus, and the process of its acquisition is remarkably similar to the early dyadic interactions between infant and caregiver described in the attachment and brain research literature. I argue that providing young people with a second chance to experience these interactions at a time when the adolescent brain experiences a growth spurt, may facilitate new emotional learning.

An approach to horse training called Parelli Natural Horsemanship (Parelli, 1993) is investigated in this thesis for its possible utility as a therapeutic intervention for some young people suffering from severe attachment disturbances. Possible links between each of these areas of knowledge are investigated, and a theory is developed that seeks to explain why horses utilized in this manner may prove to be the best therapeutic animals for some young people experiencing attachment problems.

For purposes of this thesis, attachment problems will be considered in a broad context to include young people experiencing problems with forming appropriate peer relationships, trusting relationships with adults, as well as those young people who experience the more severe symptoms defined in the DSM-IV as Reactive Attachment Disorder. The DSM-IV classifies Reactive Attachment Disorder as the most severe form
of clinically significant attachment disorder. In order to qualify for this diagnosis there
must be evidence of:

1. an inability to form normal relationships with others
2. sociopathic behaviors in early childhood
3. pathogenic care in early childhood

However, the DSM IV diagnosis has been criticized on a number of fronts: many
people experience attachment problems, which, while not qualifying for this diagnosis,
still impact on healthy happy functioning. These kinds of attachment problems are
thought to be related to other disorders both clinical and sub clinical.

Organization of the Thesis

Chapter Two discusses attachment theory as it was developed from the work of
1991; Main, 1985). Belsky refers to attachment theory which has evolved primarily from
the work of these three authors, as “classical attachment theory” (J. Belsky, personal
communication, April 18, 2002), and differentiates this from other theoretical branches
which portend to take attachment theory down somewhat different paths. This section
traces the development of classical attachment theory in an historical context.

Attachment classification systems are discussed and analyzed with respect to usefulness.
The implications of classical attachment theory for development throughout the life span
are briefly considered, as well as the assumptions and interpretations upon which these
implications are based. The chapter then reviews classification systems for differing
attachment strategies, and considers the idea of “disorders” of attachment.
Chapter Three discusses treatment approaches with respect to how different theories about knowledge and the human condition have shaped treatment interventions. Although there is not a large literature on the subject, Chapter Four contends that contributions from neuroscience have shaped understandings of attachment theory and attachment disorders. Differing interpretations of this work are discussed. The effect these interpretations have had in shaping treatment interventions for attachment disorders is considered, as well as the potential that new knowledge and interpretation bring to developing treatment options.

Chapter Five reviews the literature on animal assisted therapies. Links are established with classical attachment theory, disorders of attachment, and neuroscience, in terms of developing an animal assisted treatment theory. The particular niche the horse may occupy in this therapeutic approach is discussed. Chapter Six examines the principles of Natural Horsemanship in relation to an animal assisted theory for attachment therapy, and outlines a theoretical proposition and treatment plan that describes how the horse might be utilized in facilitating positive attachments for young people. Hypotheses from neuroscience and the animal assisted literature are used to develop this theory. This theory proposes that the equine communication system which is non verbal and based on body language, is remarkably similar to the early dyadic emotional communication system between infant and primary caregiver. In acquiring these horsemanship skills, it is suggested that young people experiencing attachment problems may also experience new emotional learning.
The concluding chapter discusses recent empirical outcome research with respect to differing theoretical orientations to psychotherapy. Natural Horsemanship as a Child and Youth Care therapeutic intervention is considered in light of this outcome research. Principles of effective psychotherapy are discussed, and in light of this empirical work, recommendations are made with respect to the utilization of Natural Horsemanship as a therapeutic Child and Youth Care intervention.
CHAPTER II
CLASSICAL ATTACHMENT THEORY

Historical Context

John Bowlby (1969) is considered to be the father of attachment theory in that he integrated thinking from the sciences of ethology, control theory, developmental psychology, and psychoanalysis, in combination with his own clinical research, to develop a theory of attachment which continues to maintain acceptance in the field of psychology. Attachment theory, as explicated by Bowlby (1969/1982), represented a paradigm shift from previous psychoanalytic theories, which also attempted to explain the attachment of child to mother (Ainsworth, 1978; Holmes, 1995). These previous theories explained infant attachment as resulting from the infant having basic food needs met by the parent. The nature of the paradigm shift lay in Bowlby’s claim that attachment was itself a basic need.

Since Bowlby’s initial theoretical formulations, hundreds of authors have contributed to an extensive literature on the subject of attachment. This chapter discusses classical attachment theory as espoused by Bowlby, Ainsworth, and Main (Bowlby, 1944, 1969/1982, 1979; Ainsworth, 1978, 1989, 1991; Main, 1985). As stated earlier, Bowlby, Ainsworth and Main may be regarded as having contributed the basic tenets of classical attachment theory (Belsky, 1999; J. Belsky, personal communication, April 25, 2003). Over time a number of influences have been brought to bear on this theory. A modern evolutionary perspective which emphasizes survival of the gene rather
than the individual, augments a classical understanding of attachment theory (Belsky, 1999; J. Belsky, personal communication, April 25, 2003).

Classical attachment theory has also been interpreted as being anti-feminist in that mothers are blamed for children's attachment problems (Singer, 1998). As well, attachment theory has been criticized by clinicians for being excessively deterministic and reductionist (Slade, 1998). These criticisms spring from (a) attachment theory's assertions that the theory applies universally across cultures (Bowlby 1969/1982), thereby reducing all humanity to the same developmental trajectory, and (b) from Main's (1985) demonstrations that attachment patterns are transmitted across generations, thereby suggesting that once attachment patterns are formed they have the potential to determine not only the child's future relationship patterns, but future generations' behavior as well. Given the evolution of attachment theory over time, I try to remain clear about the ideas and the assumptions of classical attachment theory, and make every effort to refer directly to the work of Bowlby (1969/1982), Ainsworth (1978), and Main (1985).

Although it can be argued that the assumptions, interpretations, and applications of classical attachment theory have a direct impact on all areas of Child and Youth Care practice, it is attachment theory's understanding of the therapeutic relationship that is crucial to Child and Youth Care practice. It is therefore important that Child and Youth Care professionals understand classical attachment theory and how it has developed in historical context, as they attempt to define therapeutic relationships, establish these relationships with their clients, and make daily judgments with respect to practice interventions.
This knowledge is especially important because it is in the area of the treatment of problems with forming and keeping positive relationships with others ("attachment disorders") that classical attachment theory has been most influential. Hughes (1999) argues that the development of traditional therapeutic relationships that are based on cognition and language are virtually completely ineffective with Reactive Attachment Disordered children. Thus other means for treatment and intervention with children and youth who struggle with issues of attachment must be found.

Classical attachment theory combines theories from four broad subject areas, evolutionary biology and ethology, control systems theory, cognitive and developmental psychology, and psychoanalysis. Implicit in Bowlby's (1969) first articulation of attachment processes was the idea of normative development (Marvin & Britner, 1999). Bowlby and his colleagues were convinced that only by studying attachment in terms of normal attachment formation and functioning would they eventually be able to understand its malfunctioning (Bowlby, 1979). This approach marked a distinct break from the traditions of psychiatric research at the time, which started with a more or less defined clinical syndrome and then attempted to work backwards to delineate the underlying pathology (Bowlby, 1979). For Bowlby in the 1950s and '60s, as well as for current Child and Youth Care practice, concepts of "normal" include a primary caregiver who is reasonably sensitive and responsive to the needs of the child. Thus Bowlby concludes in a report to the World Health Organization that: "What is believed to be essential for mental health is that the infant and young child should experience a warm,
intimate and continuous relationship with his mother (or permanent mother-substitute) in which both find satisfaction and enjoyment” (Bowlby, 1969/1982, p.xi).

Bowlby’s attachment theory (1969/1982) began as an enquiry into the essential nature of the human condition, aspects of which, in his view, other prominent theories at the time did not adequately address. One avenue of questioning dealt with the nature of guilt, its origins, and its regulation in the developing healthy child. Bowlby (1979) stated that he agreed with Winnecott who suggested that the capacity to experience guilt was a necessary human attribute that implied an ability to tolerate ambivalence, as well as an acceptance of both love and hate, possibly for the same person. Bowlby’s (1979) principle concern was with methods of child care that facilitated in the developing child, an ability to regulate this conflict in a constructive manner.

A second line of inquiry interesting to Bowlby was the role of instinct in mediating human relationships. This was controversial at the time, with opinion polarizing into one of two camps, psychoanalysis, and learning theory. Those adhering to psychoanalytic theories were busy trying to define instinct, most unsatisfactorily, according to Bowlby (1979). These definitions were apt to “degenerate into the allegorical” (p.26). According to Bowlby (1979), psychoanalytic theories did not rely on experimental method to develop theory, and furthermore hypotheses were formulated in ways that did not make them susceptible to scientific test, a fatal flaw according to Bowlby (1979). However despite the lack of definition, psychoanalytic theory did recognize instinct as a driving force in shaping human behavior, in creating conditions of conflict when competing instincts collide, and in shaping defense mechanisms that dealt
with these conflicts when they did arise. Bowlby (1979) as a clinician, recognized these psychoanalytic constructs as more useful contributions to understanding human behavior, than learning theory on its own.

Those adhering to learning theory, according to Bowlby (1979), ignored instinct as a driving force in shaping human behavior. As a clinician, Bowlby (1979) felt that learning theorists consistently ignored the role of human feelings and irrational motivations springing from the unconscious, in shaping human behavior. In Bowlby’s (1979) words: “To the clinician the learning theorist seems to be struggling to cram a gallon of obstreperous human nature into a pint pot of prim theory” (p.26).

While on holiday in Scotland a friend introduced him to the work and ethological ideas of Konrad Lorenz. Bowlby recognized in this new science, which was busy developing explanations for conflict resolution in animals explaining the connection between animal instinct and behavior, the framework he had been looking for, in which to recast psychoanalytic thought in a scientific idiom (Holmes, 1995). When Bowlby discovered this science of ethology he immediately recognized a way to integrate these two bodies of knowledge. Bowlby (1979) recalls his excitement:

I was at once excited. Here was a body of biologists studying the behavior of wild animals who were not only using concepts, such as instinct, conflict and defense mechanism, extraordinarily like those which are used in one’s day-to-day clinical work, but who made beautifully detailed descriptions of behavior and had devised an experimental technique to subject their hypotheses to test. Today I remain as impressed as I was then. (p.27)
A third line of questioning that intrigued Bowlby, had to do with the origins of psychopathology. Although it was generally conceded at the time that a patient’s life history and experiences were the source of psychiatric illness, there was sharp controversy about the role of early childhood experiences, and which, if any of these, were contributing factors.

Over a period of about twenty years, from 1956 to 1976, in an attempt to generate satisfactory answers to these questions, Bowlby delivered a series of lectures and contributions to symposia, which represent the underpinning of attachment theory as laid out in the three volumes *Attachment and Loss* (Bowlby, 1969/1982, as cited in Bowlby, 1979). Central points from these works are discussed below.

Bowlby’s interest in the effects of family experience on child development mediated his work on attachment, separation, and loss, and goes back to 1926 when he first worked in a school for maladjusted children. This interest in child and youth development continued after his psychiatric and psychoanalytic training when he worked for three years in the London Child Guidance Clinic. Bowlby’s research and experiences left him convinced that the separation of young children from primary caregivers, such as happened when children were removed to a residential school or hospital, could have serious ill-effects on a child’s personality development and mental health. Bowlby decided to focus his life’s work on trying to understand child behaviors exhibited when children were separated from parents. Bowlby’s experiences and research lead to the World Health Organization commissioning him to advise on the mental health of homeless children. His report was delivered in 1951 and concluded that children’s mental
health was contingent upon a satisfactory attachment relationship with a primary
caregiver.

The completion of the World Health Organization (WHO) report left a vacuum
for Bowlby, and saw him looking for another project (Holmes, 1995). Given that the
theoretical rationale for Bowlby’s ideas was still missing, Bowlby turned his mind to
developing a theory of child development that was inclusive of the ethological ideas
discussed earlier. Classical attachment theory was born, and was immediately rejected by
Bowlby’s peers in the field of psychiatry (Fonagy, 1999; Slade, 1999). While classical
attachment theory currently is generally accepted in the psychiatric community, remnants
of this early schism remain (Fonagy, 2000).

The basis for rejection lay in attachment theory’s fundamental assertion that
there was a biologically encoded primary drive on the part of the infant to seek proximity
to his/her caregiver. This challenged both learning theory and psychoanalytic thinking at
the time, which saw a child’s attachment to his/her mother forming as a secondary drive,
and something the child learned as a result of having his/her primary drive for food
satisfied by the mother. Primary drives were thought to be restricted to the need for food,
liquid, warmth, and sex. All other drives were thought to be secondary, and a result of
learning. Attachment, prior to Bowlby, was therefore viewed as a secondary drive, and
something the child learned by having other primary drives met by the mother (Bowlby,
1969/1982).

Bowlby challenged this notion. He accused psychoanalytic theorists as well as
learning theorists who were proposing a secondary drive theory of attachment, of basing
their theories on an unproven assumption, namely that primary drives were restricted to
the need for food, water, warmth, and sex, which had never been questioned or
established empirically. Bowlby (1969/1982) states:

The first thing to note about this type of theory is that it arises from an
assumption and not from observation or experiment. Both types of theory-
learning theory and psychoanalysis—were then elaborated in the belief that the
basic assumption was justified and without further discussion of it. (p. 211)

Bowlby, having issued the challenge to existing theories of attachment, then
proceeded to lay out the evidence for a primary drive theory of attachment. Bowlby's
argument was based in ethological studies which indicated that attachment in many
animals as well as humans was unrelated to the provision of food. Bowlby then integrated
ideas from evolutionary biology and control systems theory that explained how such
attachments could develop.

The Ethological Evidence

Bowlby (1969/1982) in making the case for attachment behavior being a primary
drive and separate from the need for food, warmth, or sex, advanced arguments based in
animal studies as well as in observations of human behavior. Bowlby's interpretation of
the ethological evidence was that attachment behavior (imprinting) in birds, guinea-pigs,
puppies, and monkeys, developed independently of the mother's ability to provide
nourishment. Although Bowlby acknowledged that this evidence still left the case of
human attachment formation inconclusive, he advanced a number of arguments from
human studies suggesting that human attachment formation was not greatly different from other mammals.

Bowlby (1969/1982) noted that there was clear evidence of infant connection to adults that was unrelated to the provision of food, and seemed to be correlated to adult attention. He saw a baby’s capacity for clinging as evidence for a primary drive for attachment (Bowlby, 1969/1982). Bowlby interpreted the work of Freud and Dann (as cited in Bowlby, 1969/1982) which indicated that children in concentration camps developed attachments for each other that were unrelated to the provision of food, as further evidence for a primary drive theory of attachment (Bowlby, 1969/1982).

Similarly, Bowlby utilized Schaffer and Emerson’s 1964 work (as cited in Bowlby, 1969/1982) which demonstrated that some Scottish children developed attachments to adults who had nothing to do with the provision of their physical care, to further substantiate the claim that attachment was unrelated to the provision of nourishment. Bowlby (1969/1982) concluded that this evidence supported his theory that attachment behavior was a primary drive, and stated:

That an infant can become attached to others of the same age, or only a little older, makes it plain that attachment behavior can develop and be directed towards a figure who has done nothing to meet the infant’s physiological needs. The same is true even when the attachment-figure is a grown-up. (p.217)

The distinction between a primary as opposed to a secondary drive for attachment, had major implications for how child development was perceived and interpreted in the 1950's and 1960's. Children’s separation anxiety as witnessed by
professionals in hospital settings in the 1950s, was dismissed as unrealistic and immature. Kobak (1999) posits that existing secondary drive theory suggested that such separations and the resultant distress should be relatively short lived with no long lasting consequences, since once the child learned that his physical needs would be met by an adult, no lasting psychological consequences should ensue. However, Robertson and Bowlby documented on paper and film (Bowlby, 1973), the intense distress of children separated from parents in such settings, as well as the long term effects after these children were reunited with their primary caregivers. Bowlby and Robertson concluded such separations were capable of generating psychopathology which in some instances persisted into adulthood. Bowlby (1973) noted that:

Reflecting on these observations we concluded that loss of mother figure, either by itself or in combination with other variables yet to be identified, is capable of generating responses and processes that are of the greatest interest to psychopathology. (p. xii)

Contributions of Evolutionary Biology and Control Systems Theory

In 1982, due to advances in evolutionary biology and a better understanding of genetics, Bowlby found it necessary to make some revisions to his earlier theories. Bowlby’s earlier (1969) writing had focused on survival of the individual as the chief evolutionary advantage that attachment provided, rather than survival of the gene. However, Simpson (1999) reports that as early as 1964, Hamilton (Hamilton, 1964, as cited in Simpson, 1999) was able to solve a paradox that Darwin was never able to unravel, namely in the struggle for reproductive fitness, why do some organisms engage
in self sacrificial behavior? Hamilton was able to show that when the evolutionary 
benefits from a genetic point of view outweigh the evolutionary costs, organisms tend to 
engage in self sacrificial behavior. For example, a parent dying to protect one child 
would only preserve 50% of his/her genes. Dying to protect two children is a break even 
proposition since on average this represents 100% of the parental genetic material, 
whereas dying to protect three children is a clear genetic evolutionary advantage since 
three children represent 150% of the parent genetic material.

Although according to Simpson (1999), Bowlby never referred to the work of 
Hamilton (1964), he did recognize the need for revising his ideas around the biological 
unit that was being adapted, and some of the implications this might have for attachment 
theory, and Bowlby (1980/1982) states:

All of these[previous] ideas are now discredited however. ...The basic concept of 
the genetical theory of natural selection is that the unit central to the process is the 
individual gene and that all evolutionary change is due to the fact that certain 
genes increase in number over time whereas alternative genes decrease or die out. 
(p.55)

Bowlby (1982) then went on to recognize that one implication of this genetic 
theory of evolution is that survival of the individual is not the only mechanism whereby 
individual genes become concentrated in a population and noted that: “An additional, or 
alternative, method is through promoting the survival of any kin likely to be carrying the 
same genes” (p.56).
Bowlby’s (1982) revisions also took the opportunity to clarify the difference between “attachment” and “attachment behavior”. He defined attachment as the disposition of a child to seek proximity to a specific figure particularly in times of stress. Attachment behavior on the other hand, referred to various behaviors of the child designed to attain or maintain proximity to the specific figure. These behaviors may be absent or present depending on the context of the situation at the time (Bowlby, 1982). Attachments develop slowly and may change over time, whereas the attachment behavioral system was seen by Bowlby to be genetically encoded and originating in evolutionary biology.

Bowlby (1969) proposed that attachment behaviors facilitating proximity of an infant to its mother greatly increased the infant’s chance of survival. Protection from predators was seen as the primary benefit of increased proximity, although other benefits included feeding, learning about the environment and social interaction. Since increased proximity resulted in increased survival rates, Bowlby proposed that individuals possessing these behaviors survived in greater numbers than those not possessing them. The genes responsible for modulating these attachment behaviors were therefore passed on to progeny, and over time became part of the human genome.

Bowlby’s (1982) revisions also included a more extensive consideration of other behavioral systems such as the fear system, the exploratory system, the sociable system, and the care-giving system. Behaviors relating to each of these systems were also seen to be biologically encoded, and part of human genetics.
Bowlby (1969/1982) not only proposed that behavioral systems had their origins in evolutionary biology and were genetically encoded, but he also saw these behaviors as affected by environmental stimuli which the organism was constantly receiving, decoding, and acting upon. Bowlby (1969/1982), integrating ideas from control systems theory, postulated that these behavioral systems operated as control systems. As such, behavioral systems required activation and deactivation by external stimuli, were goal corrected, and operated in homeostatic balance with each other. Bowlby (1980) outlined his argument as follows:

Attachment behavior, like other forms of instinctive behavior, is mediated by behavioral systems which early in development become goal-corrected. Homeostatic systems of this type are so structured that, by means of feedback, continuous account is taken of any discrepancies there may be between initial instruction and current performance so that behavior becomes modified accordingly (p.39).

In describing how such a behavioral system could operate Bowlby (1969/1982) utilized the metaphor of an anti-aircraft tracking and firing at aircraft. Such a control system was capable of interpreting feedback from other systems such as radar, extrapolating this data and predicting, as it constantly adjusted its own settings. Bowlby claimed that similar systems operated to control behavior in living organisms.

Bowlby (1969/1982) proposed that the set goal of the attachment behavioral system was to maintain proximity to a primary caregiver within certain set limits, which could be expanded or contracted in response to environmental stimulation. The set goal
of the exploratory system was to learn about the environment. Both behavioral systems had survival value and so were complementary. The attachment system tended to keep children close to a caregiver who could protect them from predators. The exploratory system on the other hand, encouraged children to learn about their immediate environment, how to obtain food, use tools, negotiate physical obstacles, build structures, and therefore tended to promote increased distance from a caregiver (Bowlby, 1969/1982). These two behavioral systems were seen to be intricately related in that stimuli that tended to activate the attachment behavioral system tended to also deactivate the exploratory system. These two systems were seen to be intimately interactive.

In addition to these behavioral systems, Bowlby (1973) also gave extensive consideration to the alarm or fear system. The alarm system as proposed by Bowlby, was thought to be biologically adaptive in that a healthy fear of certain stimuli promoted survival. While these stimuli; darkness, loud noises, aloneness, sudden looming movements, were not inherently dangerous, they were associated with increased dangers such as predator attack or natural disasters. Children finding these stimuli frightening were thought to be more likely to seek protection, and therefore more likely to survive and pass on their genes to future generations.

Bowlby (1973) postulated that activation of the fear system resulted in a simultaneous activation of the attachment system and deactivation of the exploratory system. An example would be a loud noise causing a child engaged in exploratory play, to stop this activity and run to a parent. For this reason the relationship between the exploratory and
attachment behavioral systems was thought to be particularly intricate in that as well as being complementary both are mutually inhibiting.

Bowlby (1969/1982) regarded the degree of proximity required by each child and parent dyad to be unique, and homeostatic in nature, and a product of the interplay of four separate classes of behavioral systems. Two of these, the attachment behavioral system and the exploratory system, belonged to the child and two, the caregiving system, and behavior antithetical to care, belonged to the parent. Bowlby (1969/1982) concluded that the interplay of all these behavioral systems resulted in a kind of “steady-state” proximity which was unique to each child-parent dyad, and concluded: “Thus there is a dynamic equilibrium between the mother-child pair. Despite much irrelevant behavior by each, and some competing and some incompatible or contrary behavior, distance between them is as a rule maintained within certain stable limits” (p.236).

From Bowlby’s (1969/1982) perspective, critics of attachment theory often confuse the sociable system with the attachment system. For example Singer (1998) argues that day care children may use other children as a source of security rather than primary caregivers. However, Bowlby (1969/1982) defined the attachment system as distinct from the sociable system in terms of what activates and terminates behavior. According to Bowlby (1969/1982) the sociable system is activated when the child feels secure, in good spirits, and confident of the whereabouts of his attachment-figure. Bowlby (1969/1982) writes:

A child seeks his attachment-figure when he is tired, ill, or alarmed and also when he is uncertain of that figure’s whereabouts; when the attachment-figure is found
he wants to remain in proximity to him or her and may also want to be held or
cuddled. By contrast a child seeks a playmate when he is in good spirits and
confident of the whereabouts of his attachment-figure; when the playmate is
found, moreover, the child wants to engage in playful interaction with him or her.
If this analysis is right, the roles of attachment-figure and playmate are distinct.
(p.307)

Ainsworth (1989) takes a position on the sociable system that seems to be
somewhere between Bowlby (1969/1982) and Singer (1998), in that she acknowledges
that it is reasonable to believe that a sociable behavioral system has evolved in social
species, that would lead an individual to seek to maintain proximity to conspecifics, even
to those to whom they are not attached, and in spite of the wariness of strangers that is
likely to be evoked. This position seems to indicate that the sociable system may be
activated in a somewhat compensatory fashion for the attachment system when a suitable
attachment figure is not available.

Bowlby in his 1969/1982 descriptions of attachment theory did not write
extensively about the care giving system from a biological perspective, although later in
1984 he described this behavior as “like attachment behavior, ... in some degree
preprogrammed” (p.271, as cited in Cassidy, 1999). George and Solomon (1999) have
written about the care-giving system from a biological perspective, and describe this as a
biologically encoded set of parental behaviors that tend to promote proximity and
comfort for the child when the parent perceives that the child is in real or potential
danger. George and Solomon propose that the care-giving behavioral system evolved
historically, in conjunction with the attachment, and other behavioral systems, and that this behavioral system interacts with and competes with these other behavioral systems. Developmentally, however, George and Solomon (1999) propose that this behavioral system matures later in life, and is preceded by fragmented care acts that are associated with play. They state:

The care-giving system appears to be first expressed by isolated, immature, nonfunctional forms of care and affection-elements of which are observable at early ages in primates, including humans... Throughout childhood and adolescence, human children typically express the desire to provide care and the behavior associated with providing care when they are near babies, animals (especially baby animals), or playing with dolls. (p.657)

George and Solomon (1999) also note that juvenile care-giving behavior is cued not only by the presence of an infant, but by the child’s own experience of care.

**Contributions of Cognitive and Developmental Psychology**

Bowlby (1969/1982) proposed that attachments grew out of the child having his/her attachment behavior met with the appropriate response of a caring and responsive adult. Bowlby (1969/1982) articulated an attachment cycle which he divided into four phases occurring in the first few years of life:

- **Signaling Phase:** In this initial phase the infant exhibits limited discrimination of the attachment figure. Crying induces proximity of care givers. Other behaviors such as grasping prolong the proximity.
Discrimination Phase: Infant directs signaling behavior towards a preferred caregiver.

Pursuit Phase: Infant actively utilizes locomotion to maintain proximity to a preferred caregiver, and responds to a primary caregiver in an increasingly discriminatory and sophisticated manner.

Goal-Corrected Partnership: The infant begins to utilize a cognitive map. In the beginning phases of this stage, Bowlby (1969) proposed that this map was primitive, but rapidly acquired sophistication. The infant in the initial phases of this stage was thought to be able to distinguish the caregiver as an independent object, but unable to understand how his/her own behavior was affecting, or not affecting, caregiver behavior. As this stage progressed however, Bowlby proposed that infants acquire insight into their caregivers' behavior, feelings, and motives. From this point on, the child's picture of the world becomes far more sophisticated and the child's own behavior more flexible.

Bowlby (1973) proposed that these stage four behaviors revealed the developing internal cognitive organization, or working model of the child, with respect to self and the primary caregiver. In Bowlby's (1973) view, an unresponsive caregiver allowed for the child's construction from these experiences of not being responded to, of an internal working model of being "unwanted" or "unloved", and therefore lacking in value; whereas a responsive caregiver facilitated the construction of a model of self as wanted, loved, and therefore valued.
Although Bowlby did not explicitly link a working model of self as valued, with a model of self as competent, this link is implicit in his writing especially in his discussions of Ainsworth's (1978) work. A model of infant self as competent is thought to be contingent not only on an available and responsive attachment figure, but also on an attachment figure who is not overly intrusive in the child's exploratory activities. Bretherton and Munholland (1999) have explicated this link. They state:

A working model of self as valued and competent, according to this view, is constructed in the context of a working model of parents as emotionally available, but also as supportive of exploratory activities. Conversely, a working model of self as devalued and incompetent is the counterpart of a working model of parents as rejecting or ignoring of attachment behavior and/or interfering with exploration. (p.91)

Thus Bretherton and Munholland complete the association between attachment behavior of children, and the accompanying parental response to this behavior, and the cognitive organization of the developing child.

**Empirical Confirmation of Attachment Theory**

Ainsworth, while contributing to the development of attachment theory in the 1960's and early 1970's (Cassidy, 1999), is perhaps best recognized for her role in the creation of the concept of the "strange situation protocol" (Ainsworth, Blehar, Walters & Wall, 1978). While originally designed to measure the relationship between attachment and exploratory behavior in infants, and caregiving behavior in mothers, the Strange Situation protocol evolved into a procedure which measured differences in infant
attachment behavior (Ainsworth et al. 1978). Correlations began to emerge between
infant attachment behavior and caregiver behavior. Ainsworth et al. (1978) was the first
to assign qualitative differences to individual attachments, to demonstrate that these
differences could be broadly classified into a tripartite system, and were correlated to
caregiver behavior. The Strange Situation has since come to be seen by classical
attachment theorists as a way of measuring individual differences in attachment quality
(Cassidy, 1999).

In fact, the majority of Ainsworth’s original hypotheses were confirmed by the
data. Ainsworth (1978) described the interplay between the attachment behavioral system
and the exploratory system by referring to the mother as the “secure base” which the
infant utilized to engage in exploratory activities. In general, exploratory activity was
enhanced by the presence of the mother and diminished in her absence.

However, as the data was being analyzed, infants seemed to fall into several
behavioral groupings or classifications depending on the type and strength of their
behaviors as indicated in each of the episodes of the Strange Situation. Ainsworth and her
colleagues Blehar, Waters and Wall (1978) comment: “Indeed classification was the first
procedure that we used to help us make sense of the enormously complex variety of
behaviors manifested by 1-year-olds in interaction with their mothers in the strange
situation” (p. 55). Some infants indicated attachment behavior, but in combination with
behavior antithetical to attachment. These behaviors Ainsworth termed “resistant” or
“avoidant” behaviors. Such babies might cry to be picked up upon reunion with their
mothers, and then turn their heads or avoid their mothers, or angrily resist being
comforted when the mothers attempted to do so. Ainsworth discovered that together with babies who did not demonstrate this avoidant or ambivalent behavior, the majority of infants fell into one of three behavioral classification groupings to which she assigned descriptive headings suggestive of her interpretation of the behavior.

**Securely Attached Type B**

Ainsworth (1978) described these infants as having a more positive and harmonious relationship with their mothers than the other two categories of infants. They generally cried less, explored more, and were less upset at separations from their mothers. Upon the mother’s return they were more easily comforted, did not resist bodily contact, and re-engaged more quickly in exploratory play. Ainsworth (1978) interpreted these behaviors to mean that these infants were less anxious about their relationships to their mothers and were therefore more securely attached to them. Ainsworth (1978) concluded that these children had developed the ability to use their mother as a secure base from which exploratory activity could proceed. She states: “The typical Group- B infant uses his mother as a secure base from which to explore an unfamiliar environment, just as at home he spends a large amount of time in exploratory play” (p.311). With this statement Ainsworth appears to define normative development with respect to attachment, i.e these babies’ attachments were seen as healthy and other categories as less healthy.

**Insecure/Avoidant: Type A**

These children responded to strangers in the same way that they would to the primary caregiver- with indifference- sometimes actually preferring contact with
strangers. Upon reunion with the primary caregiver the infant typically did not seek proximity, and moved past, turned away, and did not approach the caregiver. If picked up the infant made no effort to maintain contact. Ainsworth (1978) struggled to arrive at an adequate explanation for Group-A babies’ behaviors which she described as paradoxical. She writes: “Furthermore, it was long a puzzle to us that Group-A babies in the strange situation were so different from Group C- babies” (p.316). The paradox lay in the fact these babies at home showed similar insecure attachment behavior to Group-C babies, that is, they cried more and showed more separation anxiety. However, in the strange situation which evoked distress in even securely attached babies, these Group-A babies cried little, or not at all, and actively avoided close bodily contact with their mothers upon reunification. Ainsworth credits the work of Main (Main, 1973, 1977a; Blehar, Ainsworth, & Main, 1978, as cited in Ainsworth,1978) as providing what she regarded as an adequate explanation. Main together with her colleagues Kaplan and Cassidy, (1985) commenting on the development of an understanding of Group-A babies behavior, noted that the explanation lies in observing the differences in parental response to these babies’ attachment behavior. Consistently these babies’ parents were rejecting of their infants attachment behavior as well as being insensitive to these attachment signals.

Ainsworth (1978) also noted that the key to understanding and interpreting Group-A babies behaviors lay in observing their mothers’ behaviors. These mothers tended to be rejecting of their babies, were more easily irritated by them, and themselves avoided close bodily contact with their babies. While these babies might have welcomed
close bodily contact with the stranger in the strange situation, they actively avoided it with their mothers, leaving Ainsworth (1978) to conclude that:

We assume that they, like other human infants, wanted contact with their mother when the attachment-behavioral system was activated at high intensity. ... On the other hand, their unhappy experiences with their mothers in the context of close bodily contact set the stage for the approach-avoidance conflict over close contact with their mothers that seems characteristic of A babies. (p.317)

Thus Ainsworth describes less than ideal mothering as being responsible for a less desirable attachment relationship.

Insecure/Resistant/Anxious-Ambivalent: Group C

Ainsworth (1978) described this group as less numerous than either group-B or Group-A, however Ainsworth was clear about certain aspects of their experience. These infants were less able than secure babies, to use primary caregivers as a secure base from which to explore their environment. They sometimes sought proximity and closeness even before the separation phase. They were wary of the stranger. Upon reunion with the caregiver they sought proximity but resisted being comforted, maintaining high states of distress and arousal. Some infants displayed passivity, continued to cry, but failed to seek contact actively. The hallmark of this category was to seek contact, but once it was achieved, resist angrily, displaying an obvious ambivalence to the contact. Ainsworth (1978) notes that the mothers of these infants unlike the mothers of Group-A infants were not rejecting or avoiding of physical contact. However, these mothers seemed to be inconsistent in their responses to their infants and tended to lack a “fine sense of timing
that is characteristic of Group-B mothers” (p.315). Ainsworth (1978) goes on to conclude that these babies couldn’t be confident of their mother’s appropriate response to their needs. Ainsworth (1978) states:

Nevertheless there is every reason to believe that Group-C infants are anxious in their attachment to the mother. Both at home and in the strange situation, they cry more than Group-B babies. They manifest more separation anxiety. They do not seem to have confident expectations of the mother’s accessibility and responsiveness. Consequently they are unable to use the mother as a secure base from which to explore an unfamiliar situation— at least not as well as infants in Group-B. (p.314)

Ainsworth’s (1978) ground breaking work was the first solid empirical evidence supporting Bowlby’s (1969) earlier attachment theory. Her work was also suggestive of a linkage between attachment styles and psychopathology. For the first time it was now appeared empirically that there was a qualitative aspect to attachment. An infant could have a desirable kind of attachment— secure, and a less desirable kind— insecure. Ainsworth (1978) was clear that she regarded her data as confirmation of attachment theory in general, and specifically, of attachment theory’s potential to offer increased understanding of human development across the life-span. In her (1978) words:

for it is these data that constitute our main case for claiming that our attachment construct can contribute substantially to an understanding of how qualitative differences in attachments arise, how they manifest themselves in behavior, and how they influence subsequent development. (p. 310)
The trajectory for future research seemed to be set. How did insecure types of attachment affect future development? Particularly interesting to this thesis is the question of how these attachment styles affect adolescent development? Could attachment styles affect other kinds of affectional bonds, i.e. romantic relationships, peer relations? How did these infant attachment styles change over time as the child matured? What kinds of attachment differences were important? Could various forms of future psychopathology be related to these differing attachment styles?

Atypical Patterns of Attachment Behavior: Type D

Once Ainsworth's (1978) tripartite classification system was established and recognized, there was a tendency to make all cases fit within the scheme, even when some cases only fit approximately and other exceptions were completely ignored (Vondra & Barnett, 1999). It was not known which differences were important for future normative development? As Barnett and Vondra's (1999) note:

Since the late 1970's researchers have identified infants thought to have insecure attachments, but whose patterns of attachment did not fit within Ainsworth's tripartite classification system (Crittenden, 1985; Egeland & Stroufe, 1981b; Lyons-Ruth, Connell, Zoll, & Stahl, 1987; Main & Solomon, 1986; Main & Weston, 1981; Stroufe and Waters, 1977). Uncertainty persists however, about how many different varieties of attachment patterns there are, and which, reflect meaningful variation in functioning and development. (p.3)

Ainsworth’s (1978) original three types of attachment behavioral strategies, Type A, Insecure Avoidant, Type C, Insecure Anxious/Ambivalent, and Secure Type B only
accounted for 85% to 90% of children from low risk populations (Vondra & Barnett, 1999). Low risk in this context refers to populations of children where risk for later developmental problems from such sources as neurological abnormalities, child maltreatment, or family ecological risk, was not immediately evident. The remaining 10% to 15% of children from these low risk populations displayed patterns of behavior that appeared to be disorganized and confused. These seemingly confused attachment behaviors did not fit easily into either a Secure Type B category, an Insecure Type A category, or an Insecure Type C category. That is to say these children’s behaviors did not indicate a felt security by the child, but nor was attachment need minimized or amplified as was the case for Type A and Type C attachment categories. In order to explain these 10% to 15% of children’s behaviors, Main and Solomon proposed a fourth category, Disorganized, Type D (as cited in Vondra & Barnett, 1999).

The hallmark of Disorganized Attachment is the child’s fear of the attachment figure (Lyons-Ruth & Jacobvitz, 1999). Both the child’s fear behavioral system and his/her attachment behavioral system are simultaneously activated. Children with attachment strategies classified as Type D are faced with the cognitive challenge of reconciling the irreconcilable. This occurs when the fear system is activated by the attachment figure. The result is bizarre attachment behaviors such as backing towards an attachment figure, or interrupted attachment behaviors where the child appears to be dissociated.

While it would appear that there exist broad categories of attachment patterns that reveal the coping strategies of infants seeking to satisfy attachment needs, confusion
remains around the Type D classification, and the meanings which should be associated with a bewildering array of Type D attachment behaviors. Lyons-Ruth and Jacobvitz (1999) proposed a tripartite sub-grouping of Type D classified children which paralleled Ainsworth’s (1978) descriptions. In addition to some evidence of disorganized behavior, children were also assigned a secondary best-fitting, organized attachment classification of either secure, avoidant, or ambivalent. Lyons-Ruth and Jacobvitz (1999) explain:

In the disorganized/secure subgroup, the infant seeks contact with the caregiver without avoidance or ambivalence and is soothed by his or her presence but shows other unusual signs of hesitation, confusion, apprehension, dysphoria, or conflict in relation to the caregiver. Disorganized/avoidant and disorganized/ambivalent infants often display unexpected combinations of distress, contact seeking, avoidance, resistance, or other apprehensive or conflict behaviors. (p.527)

Vondra and Barnett (1999), in classifying atypical attachments, agree with a Type D category in which fear of the attachment figure drives the behavior. However, Vondra and Barnett (1999) propose that this attachment behavior is not always disorganized, and in fact may sometimes be highly organized. They propose a three sub-type classification:

**Type D- Disorganized/Disoriented**

This subtype exhibits true disorganization in attachment behavior. Behaviors include; sequential and/or simultaneous displays of contradictory behavior, interrupted movements and expressions, freezing, stilling, and slowed movements.

**Type A/C- Avoidant/Ambivalent**

Fear may sometimes drive the child to combine both resistance and avoidance
behavioral strategies in developing specific attachment strategies. Avoidance and resistance tend to be inversely related to one another (Thompson & Lamb, 1984, as cited in Vondra & Barnett, 1999). Avoidance tends to imply a reduction of attachment behavioral signaling, and a dampening of related emotional responses, whereas resistance is associated with an amplification of attachment behavior and a heightening of emotional responses. Therefore according to Vondra & Barnett (1999) combinations of these two behavioral strategies indicate an appropriate Type D classification. However, Vondra & Barnett (1999) disagree that this behavior indicates a disorganization of attachment strategy, and suggest that the reverse is true. In their (1999) words:

Their (type A/C children) expectations, however, may reflect the fact that they cannot predict their caregiver’s mood and reactions. As a result the internal models of infants with A/C attachments direct them to be alert and vigilant to their caregiver’s signals of mood, availability, and actions, and to be prepared moment by moment, to adjust their behavioral strategy accordingly. In this manner children who exhibit Type A/C attachments may be viewed as quite organized in their attachment strategies. (p.13)

Thus there appears to be some controversy regarding the appropriate meaning to be assigned to an apparent disorganized behavioral attachment strategy.

**Type U/A Unstable-Avoidant**

This category was first reported by Lyons-Ruth, Zoll, Connell, & Grunebaum (1986) as cited in Vondra & Barnett (1999). The differentiating factor here is a marked reduction of avoidance behaviors between the first and second separations in the Strange
situation, and a seeking of proximity often combined with resistance in the second separation.

Questions For Further Research

It appears all of these categories may reflect specific behavioral sub-groupings of some children classified as Type D. However, Vondra and Barnett’s (1999) opinion is that controversy remains around the degree of specificity, and what the categories actually represent. They state: “These categories are not necessarily mutually exclusive or independent of one another, the amount of overlap, and/or redundancy across these patterns of atypical attachment is unknown but likely to be substantial” (p.15). Further research is necessary into Type D attachment styles. Also needed is continued attachment theory development that will offer explanations for these findings.

Vondra and Barnett (1999) point out that attachment researchers are confronted with a problem of data reliability. The behaviors of Type D classified children are hard to observe in that they often appear out of context, last for seconds, and by definition, lack coherence (Lyons-Ruth, Jacobvitz, 1999). Different researchers trying to code the same children’s behaviors have sometimes not only put these children in different Type D subgroupings, but have also placed children previously classified as Secure Type B into a Type D classification. Vondra and Barnett explain this anomaly by suggesting that these children’s behaviors may defy classification with current measuring tools which are too imprecise to accurately measure and adequately ascertain the meaning of small differences in attachment behavior. In their words: “these attachments may represent one class of relationships that lie on the coding boundary of disorganization and may therefore be coded differently in different laboratories, or by different coders in the same
laboratory" (p. 17).

I have gone into considerable detail in describing the Type D attachment style and the considerable controversy which continues to surround this classification type because the Type D classification is associated with more abusive parenting, is more often associated with later developing psychopathology (Greenberg, 1999; Dosier, Stovall, & Albus, 1999), and my own experience has indicated that many young people referred to treatment programs for one sort of disorder or another appear to fall into this attachment category. While I recognize that this is a hypothesis that requires testing, support for this supposition comes from Bowlby's (1944) description of forty-four juvenile thieves. Of the forty-four thieves in residential care, Bowlby (1944) described eighteen as either "affectionless or schizophrenic", and notes that "there were no Affectionless Characters among the controls", and that "the Affectionless children are significantly more delinquent than the other thieves. All but one were serious offenders, the majority truanting as well as stealing. They constitute more than half of the more serious and chronic offenders" (p. 126). Long before he formulated the basic tenants of classical attachment theory, Bowlby (1944) notes that the one characteristic common to all "affectionless characters" was the "distorting influence of bad early environment" (p. 39).

While the Type D classification seems to be associated with an increased risk for later developing psychopathology, I have found it helpful in my Child and Youth Care practice, to keep an open mind with respect to diagnoses, to resist categorizing young people, and to maintain an attitude of curiosity, keeping in mind that more research and theory development is needed.

**A New Level of Representation in Attachment Theory**

Hesse, (1999) posits that with the publication of *Security in infancy, childhood*
and adulthood: A move to the level of representation (Main, Kaplan, & Cassidy, 1985) attachment theory development entered a new level. Unlike the work of Ainsworth whose primary focus had been analyzing and interpreting nonverbal behavior, the emphasis now shifted to understanding what this behavior meant in terms of developing cognition, and the influence these cognitive models had in further shaping future generations’ behaviors. This major shift represented a move to the level of “representation in attachment research” (p. 395).

Main and Solomon’s work began in 1982 with a six-year follow-up study of mothers, fathers, and their children, who had been in the Strange Situation when the children were twelve (mothers) and eighteen (fathers) months of age. From an initial diverse group of research aims, an Adult Attachment Interview Protocol gradually evolved which reflected the parents’ current state of mind with respect to his/her own childhood attachment experiences. This hour-long interview was able to demonstrate a correlation between early experiences, and adult representations of those experiences, as expressed in patterns of thought, memory, and affect, inherent in their narratives. Further, these adult representations of their own childhood experience predicted the attachment classification of their own children. As with Ainsworth’s (1978) work, patterns or categories emerged in adult attachments (Slade, 1998). The state of mind of parents with respect to their own childhood attachment experiences was a powerful predictor of their children’s attachment category: “sixty-eight percent of the time, the organization of maternal attachment narratives predicted the quality of infant attachment” (p. 1153).

George, Kaplan, & Main (1985, as cited in Hesse, 1999) discovered that parents’ attachment representations with respect to their own childhood experiences could be classified into one of a four-group system, secure-autonomous, dismissing, preoccupied,
and disorganized. The parent’s classification was predictive of their own child’s attachment classification grouping. Parents classified as Secure/Autonomous tended to have children who were classified Secure Type B. Parents who were dismissing of attachments tended to produce children who were classified as Insecure/Avoidant. Those parents who were preoccupied with their own childhood attachment relationships tended to produce children classified as Insecure/Anxious/Ambivalent. Parents who had, in their own attachment history, experienced unresolved loss, or whose own previous attachment relationships appeared to be disorganized, also produced children who were classified as Disorganized/Disoriented/Type D.

While this research could be interpreted as supporting a theory of infant determinism with respect to development, caution is in order with respect to such a conclusion. Although early childhood experiences of care were found to be generally predictive of future mental representations, and were transmissible to future generations, significant numbers of exceptions existed to warrant the consideration of a separate category of adult attachment referred to as “earned secure” (p. 425).

These adults, while producing narratives of childhood attachment experiences that should have produced a classification of Dismissing, or Preoccupied, nevertheless recalled their experiences coherently, and collaboratively, in a manner consistent with an adult classification of Secure/Autonomous. Their children were also classified as Secure Type B. Hesse (1999) comments:

It is indeed an intriguing question how certain individuals whose early experiences appear to have been highly difficult produce coherent and collaborative AAI narratives, and have secure infants, without undertaking psychotherapy or having had any other obvious form of potentially helpful intervention. (p. 425)
Hesse (1999) offers a number of possible explanations for the Earned Secure classification, but recognizes that an adequately researched explanation for this apparent anomaly is still currently lacking. Recent outcome research which suggests that 40% of client psychotherapeutic change occurs in the lives of clients outside of talk therapy, and that therefore human psychosocial development may be highly buffered and self righting, may also offer an explanation for this phenomenon (Bachelor & Horvath, 1999). These ideas are considered in a concluding chapter to the thesis.

**Attachment in Adolescence and Adulthood**

A theoretical analysis of secure adolescent attachment from a developmental perspective suggests that attachment bonds to parents appear to diminish during this period as adolescents strive to meet the developmental challenge of autonomy (Allen, Hauser, Bell, & O’Conner, 1994). This research also suggests that adolescent autonomy is established not at the expense of secure relationships with parents, but because of these secure parental relationships which are likely to endure beyond adolescence.

However, most parents of adolescents would agree that their adolescent’s behavior towards them, during this period, does change. Allen and Land (1999) propose that interpreting this behavior within the context of transformations which are occurring in the adolescent’s representations of attachment relationships is essential. They characterize these transformations as occurring in three broad developmental areas, cognitive and emotional, parental relations, and peer relations.

**Cognitive and Emotional**

The development of formal operational thinking which begins in early adolescence, appears to allow for the construction of increasingly sophisticated analyses of experience. This allows the adolescent to construct generalized abstractions of
attachment experiences as opposed to the multiple models of attachment held in infancy and early childhood. The term “multiple model” used by Allen and Land (1999) should not be confused with attachment styles which were discussed earlier. Rather, Allan and Land (1999) posit that children within all attachment styles are may not be developmentally at a stage which allows for generalization of experience to the same extent as adolescents. The ability to think in the abstract and to consider opposite possibilities as being part of a whole, may allow the adolescent to compare and contrast attachment relationships, and to construct increasingly complex attachment models. Allen & Land (1999) in noting this difference between a child’s representation of an attachment experience as opposed to an adolescent’s comment:

For example, a child may represent multiple divergent attachment experiences without considering how they relate to one another, holding views such as “My mother always helps me feel better” and “My father ignores me when I’m upset”. The adolescent, in contrast, can entertain more integrative propositions, such as “I can get help from some people, but not from everyone, so I have to be careful in deciding which people to get close to. (p. 320)

This evaluative ability ideally allows the adolescent to accept parental deficits, choose other attachment relationships more likely to meet current attachment needs, and be more objective and flexible in re-evaluating past attachment experiences, - all characteristics that mark the presence of the secure autonomous adult attachment organization. In addition, the increasing differentiation of self occurring in adolescence, may allow for a view of self in relationship that is more internally based and less centered on specific individual relationships.
Parental Relationships

The hallmark of this transformation appears to be the adolescent’s increased ability to manage goal-corrected partnerships with each parent. Allen & Land (1999) explain:

For example an adolescent who wants to stay out late past an agreed-on curfew considers not only the desire to stay out late, but also the over-arching set goal of maintaining trust and warmth in relation to parents. A secure adolescent who has never broken curfew before may expect only minimal disruption to the relationship from a first transgression and give it a try, whereas a secure adolescent who has just had a serious breach in parental trust (e.g., an arrest for minor vandalism) may be more attentive to reestablishing this trust and maintaining a positive relationship with parents. (p.320)

The concept of goal corrected partnerships allows for a more complex understanding of the balance between autonomy and relatedness in adolescents. An adolescent’s move to less dependence on parents is not interpreted to mean that parental relationships are becoming less important. Rather the opposite appears to be true: secure parental attachment relationships facilitate the adolescent’s drive for autonomy by providing the secure base in the form of mental representations, that allow for increased exploratory behavior of the adolescent social world necessary for the increased autonomy of adulthood.

Allen & Land’s (1999) opinion is that Bowlby’s (1973) theories of the interaction between the attachment system and the exploratory system accommodates this view. Adolescent autonomy-seeking behavior viewed as part of the exploratory system, may
minimize the strength of the attachment system in order for developmentally appropriate exploratory goals to be met. Adolescent attachment dynamics appear to differ from childhood in terms of the relationship between the exploratory system and the attachment system. Secure children tend to turn to their primary attachment figure in times of stress, whereas secure adolescents may actually avoid relying on their parents, particularly when stressed. From a developmental perspective, and the increased drive for autonomy in adolescence, this behavior is reflective of secure rather than insecure attachments.

Adolescent behavior sometimes requires different interpretations when developmental tasks are considered. For example if one considers one of these tasks to be a drive for increased autonomy, then it is easier for securely attached adolescents to experiment with living independently when they know they can turn to parents in cases of real need. This idea is consistent with research which indicates a high correlation between autonomy-seeking behavior and underlying positive relationships with parents (Allen & Land, 1999).

Increasing independence from parents also is thought to be associated with increased cognitive and emotional freedom. Main and Goldwyn (in press, as cited in Allen and Land, 1999) refer to this as “epistemic space” (p. 322) and posit that this allows for a more objective evaluation of parents as attachment figures. It is doubtful whether an objective evaluation of the relationship could occur in an atmosphere of dependence. This critical distance is thought to be essential to the adolescent resolving attachment difficulties with parents in a way that will allow for the formation of other secure relationships with peers and romantic partners.

Peer Relationships

Peer relationships play a key role in the transformation of adolescent attachment
representations. Ainsworth (1989) delineates four characteristics that distinguish attachment relationships from other social relationships. While it is easy to differentiate these behaviors in children as they may characterize attachment relationships, it becomes increasingly difficult to differentiate attachment relationships from other kinds of relationships in adolescents. The four behaviors indicative of an attachment relationship in children, proximity seeking; secure base behavior (freer exploratory behavior in the presence of the attachment figure); safe-haven behavior (retreat to the attachment figure in the face of a perceived threat); separation protest when separations are involuntary, may all be considered as part of teenage peer-related behavior. In the words of Buhrmester (1992, as cited in Allen and Land 1999): “By late adolescence long-term relationships can be formed in which peers (as romantic partners or as very close friends) indeed serve as attachment figures in every sense of the term” (p.323).

Transferring of attachment relationships from parents to peers, and later to romantic partners, also involves transformation from hierarchical relationships (support received from a primary caregiver) to multilateral (care both given and received from more than one relationship). Seen in this context adolescent sensitivity to peer pressure can be viewed as learning, as adolescent attachment relationships gradually make the transition from parent to peers, to romantic partners. This transition continues to be facilitated by the transformations in cognition, emotions, and parental relationships previously described, which are also simultaneously taking place. Allen and Land also posit that developing sexuality, and the sexual/reproductive system may enhance these adolescent attachment transformations. They state: “The sexual component of these relationships may also help advance the attachment component by providing consistent motivation for interaction; experience with intense, intimate affect; and a history of
shared unique experience" (Allen & Land 1999, p.323).

While the foregoing represents a theoretical description of secure childhood attachment transformations during adolescence, it does not offer an explanation for the kinds of transformations which might occur given an insecure childhood attachment classification. Since recent research indicates a high concordance between the attachment organization of children and their parents, Allen and Land (1999) also suggest that it may make better sense to talk about secure or insecure dyads.

While the attachment transformational tasks of adolescence may seem complex for secure adolescent/families, they are infinitely more complex for insecure adolescent/parent dyads. If the developmental task of adolescence from an attachment perspective, is the realization of a balance between autonomy and relatedness, then it is difficult to imagine how insecure dyads could achieve this easily, given that each small step in this direction might be interpreted by adolescent and parent as an assault on the relationship. The predictable result of disagreements in insecure adolescent/parent dyads, would be a reliance on the attachment strategies associated with insecurity, either avoidance in the Type A category, or immediate escalation of affect in Type C. The immediate effect of such behavioral strategies would be to undermine the move to autonomy, since autonomy in these cases would be interpreted as a challenge to the attachment relationship. In Allen & Land’s words:

... in the task of learning to resolve differences of opinion between parents and adolescents, teens with secure attachment strategies tend to engage in productive, problem solving discussions that balance autonomy strivings with efforts to preserve the current relationship with parents (Allen & Hauser, 1996; Becker-Stroll & Fremmer-Brombik, 1997; Kobak, Cole, Ferenz-Gilles, Fleming, &
Gamble, 1993). These discussions may be heated or intense at times, but nevertheless maintain a focus on solving the disagreement at hand. In contrast, insecure teen-parent dyads are more likely to be characterized by higher levels of disengagement, dysfunctional anger, and use of pressuring tactics that tend to undermine autonomy (Becker-Stroll & Fremmer-Brombik, 1997; Kobak et al., 1993). (Allen & Land, 1999, p.324)

Given the homeostatic nature of the forces that tend to oppose the move to greater autonomy by the insecure adolescent/family and to preserve these dyads as the relationships they are, it is small wonder that the path to greater autonomy is much rockier than with secure dyads. As Allen and Land state: “for families with insecure adolescents they( the paths to autonomy) may be filled with twists, detours, dead ends, and difficulties” (1999, p.324).

Assumptions, Interpretations, and Implications of Classical Attachment Theory

Classical attachment theory is in essence a psychodynamic theory in the sense that its fundamental premise is that children are born with a genetic species specific make-up that drives them to become attached to a primary caregiver, and that disruptions of this attachment drive can lead to lifelong feelings of insecurity, and distortions in their capacity to form and keep meaningful relationships (Slade, 1998). While this psychodynamic view of the human condition is open to challenge from a postmodern perspective (Smith, 1997; Thomas, 2002), and I briefly outline the basis for this challenge later in this text, it is not the primary purpose of this thesis to engage in this debate.

It is however, important to note the underlying assumptions of classical attachment theory insofar as these shape interpretations of behavior, and have implications for Child and Youth Care interventions. Slade (1998) outlines four basic
assumptions of classical attachment theory to which she brings her own interpretation, and traces the implications of these for clinical practice.

Slade’s (1998) first posited assumption of classical attachment theory is that infants are motivated by a primary survival drive to seek attachment relationships with their caregiver. To this she could also add that children are genetically programmed to expect a timely and sensitive response to this need. The implication of these assumptions is that in the event that the infant attachment drive does not meet with the appropriate caregiver response, the infant will distort his/her expectations and adjust his state of mind to that of his/her caregiver. From the infant’s point of view, distorted attachments are better than no attachment.

The second assumption follows from the first, namely that disruptions in primary attachments, and insecure attachments themselves, can create vulnerability in the infant’s sense of himself and others. Classical attachment theory unlike other psychodynamic theories, emphasizes the specifiable and observable relationship between actual lived experience, and the infant’s developing structures for thinking, feeling, remembering, and knowing. In other words the infant’s developing mind, sense of reality and self, as well as capacity to regulate emotions, are actualized and given shape by his/her real attachment relationships. Slade (1998) comments:

To understand the fundamental organization of the child’s mind and his sense of wholeness, security, and reality, it is imperative to understand how affects are regulated within the child’s primary relationships, and how experiences are made real, known, and mentalized within the relationship and within the child himself. In a multitude of explicit, empirically derived investigations, attachment theorists have emphasized in terms that are complementary to the work of Stern (1985,
A third assumption of classical attachment theory is that patterns of behavior and affect, which reflect the child’s internal state of mind with respect to himself and his/her caregiver, as well as the caregiver’s state of mind with respect to his/her own attachment experiences, remain relatively stable. These attachment patterns of behavior and affect over time, themselves become internal representations that determine access to thoughts, feelings, and memories relevant to attachment (Main, Kaplan, & Cassidy, 1985). Schore (2000; 2001; 2002) posits that these representations become neurologically based structures, a “hard wiring” of the right brain, that then becomes a blueprint for constructing future attachment relationships through the modulation of feelings, thoughts, and language. Slade (1998) as well as Allen and Land (1999) recognize the importance of the mother/child dyad in the construction of such structures. Slade (1998) comments:

In essence the structure and function of the child’s mind is determined by the types of feelings that are recognized, and allowed expression within the dyad. Attachment classification is essentially the empirical codification and description of such patterns, both in infant behavior and in adult speech. (p.1151)

The fourth assumption of classical attachment theory that springs from the work of Main (1985), is that these attachment patterns are transmissible inter-generationally, although the mechanism of their transmission is still open to question. Slade (1998) formulates a psychodynamic explanation to the question of how the structure of narrative
in the mother relate to the infant's capacity to seek comfort and proximity.

The capacity to acknowledge, access, and evaluate openly and coherently her own affects in relation to attachment allows a mother to respond to her child's attachment needs in a sensitive and nurturing way, because they evoke feelings within her that are familiar, known, and therefore unthreatening. Because she can acknowledge these experiences in relation to her own attachment figures, she does not need to deny, distort, or obliterate them in her child. ...By contrast, the mother who has distorted, forgotten, repressed, or remained overwhelmed by the affects inherent in her own early childhood attachment experiences will find her child's needs and feelings intolerable and painful, and will turn away from these feelings as she turned away from her own. (p.1154)

Thus Slade (1998) links emotions and feelings related to attachment experiences existing outside of consciousness in the mother, to her caregiving behavior, and suggests that these likely account for the inter-generational transmission of attachment patterns.

Summary

This section has traced the evolution of classical attachment theory. The chapter contends that three authors, Bowlby, Ainsworth, and Main, have contributed the central tenants of the theory. Although developing a more complete explanation for the origins of psychopathology had been one of Bowlby's (1969/1982) initial aims, it was not until the work of Ainsworth (1978) that empirical evidence began to emerge connecting the quality of an infant's attachment experiences to the possibility of later developmental problems. Secure attachments were deemed desirable and a precursor to healthy child development. Insecure attachments were thought of as less desirable and linked to problematic child
behaviors, and less than optimal future development.

Main (1985) was able empirically to demonstrate that these attachment patterns were transmissible to future generations by being incorporated into a developing child’s cognitive structure, and shaping that future adult’s response to the next generation’s attachment needs. Ainsworth’s (1978) and Main’s (1985) work then, lay the groundwork for a consideration of “disorders” of attachment. What happens, according to attachment theory, when attachment processes do not follow what attachment theorists define as “normative development” (Marvin & Britner, 1999, p.44), that is to say, a child’s attachment needs are not met with a timely, appropriate, and sensitive response? This topic, as well as treatment options for such disorders are now given consideration.
CHAPTER III
ATTACHMENT DISORDERS AND TREATMENT

With Ainsworth's (1978) work empirically demonstrating that attachments could be classified based on an interpretation of their quality, the ground seemed to be laid to fulfill one of Bowlby's (1969/1982) earlier aims, to understand the origins of psychopathology through understanding how insecure attachment relationships might contribute developmentally to later psychological problems. Bowlby's (1944) initial interest in the relationship between childhood experience and the development of later psychological problems, began when he first graduated from Cambridge and worked in a home for delinquent male youth. Bowlby noted that the majority of these acting out young men had come from homes where relationships with primary caregivers had been problematic. Cassidy (1999) notes that two of these young men, who had suffered disruptions in their relationships with their mothers, made a particular impression upon Bowlby. Bowlby (1944) was later to provide a more systematic examination of these experiences when he published *Forty-four juvenile thieves: Their characters and home life*. Although many theories continue to abound that attempt to explain the relationship between attachment disturbances and the later development of psychopathology (Brisch, 2002; Guidano, 1983; Holland, Moretti, Verlaan, & Peterson, 1993; Levy, 1999; Fonagy, 1998, 2000), sixty years after Bowlby's (1944) work, an empirically established causal link remains elusive. This section summarizes what is currently understood about the relationship between attachment styles and psychological problems, and attempts to demonstrate how these understandings have shaped treatment approaches, both for
attachment disorders, as well as for later psychopathological conditions which are thought to be related to attachment experiences.

**Attachment Styles in Relation to Psychopathology**

Numerous studies have linked insecure attachments to later developmental problems; maladaptive psychosocial functioning in preschool and middle childhood (Cassidy, 1988), interactive home disturbances with mothers (Solomon, George, & De Jong, 1995), less social competence with peers (Troy & Sroufe, 1987), and more problematic relationships with teachers (Sroufe, 1983). However, an insecure attachment alone is not considered to be an attachment disorder, but rather, one of many risk factors which may adversely affect a child’s later development. Insecure attachments, Type A and C, are thought to exist on a spectrum of severity with the most severe cases approaching what may be considered a “disorder”. Zeanah (1996) refers to this level of disturbance as “caseness”, i.e., the level of disturbance is at a level warranting clinical intervention and states that, “Attachment problems become psychiatric disturbances when emotions and behaviors displayed in attachment relationships are so disturbed as to indicate, or substantially increase the risk of, persistent distress or disability in the infant” (p.47).

Solomon, George, and De Jong (1995) were able to demonstrate that children classified as controlling had disorganized attachment strategies at the level of representation, i.e. their cognitive models of self in relation to other lacked coherence. These children demonstrated greater levels of hostility and aggression than children classified as secure, avoidant, or ambivalent, and many of these type D children’s
behaviors were considered clinically significant. There were no significant differences with respect to hostility and aggression between secure as opposed to insecure children in this study (Solomon, George, & De Jong, 1995). Zeanah (1996) posits that a Type D classification of disorganized-disoriented, most approaches psychopathology on its own, although even in the Type D category 20% of infants classified as Type D do not exhibit clinically significant behaviors.

Attachment Disturbances as a Disorder

The DSM-IV (1994), categorizes Reactive Attachment Disorder (RAD) as the most severe form of clinically significant deviation from a healthy attachment style. The DSM-IV (1994) describes two sub types of RAD: a) Disinhibited, characterized by social promiscuity and the inability to discriminate attachment behaviors, and b) Inhibited, characterized by a resistance to comfort along with a mixed pattern of approach and avoidant behaviors. However, these descriptions and criteria have been criticized on a number of fronts. Zeanah (1996) considers the term “pathogenic” too vague to be useful since it is focused on the social history of the child rather than on the specifics of the attachment relationship. This focus on social history has meant that the full spectrum of attachment disturbances has been missed. Zeanah (1996) proposes a classification system that pays more attention to the behaviors of the child and less to the social history leading to the disturbance. Zeanah (1996) suggests that a more accurate and inclusive classification system for attachment disorders that incorporates the volume of recent developmental research on attachment problems would include three categories:

- Non attached, includes the DSM-IV (1994) sub types of children over the age of
ten months who show no preferred attachment to anyone.

- Disordered, includes three sub types: (a) inhibited- children who are excessively clingy, (b) children who self endanger (c) role reversal- children who excessively worry about the state of the care giver

- Disrupted, refers to a grief response over loss of an attachment figure during a particularly vulnerable developmental stage (during the first three years of life).

Secondly, many clinicians reject the notion of “disorders” as these are described in the DSM-IV (1994). Criticism originates primarily from three sources; postmodern ideas and a lack of a truly empirical process supporting the classification of DSM-IV diagnoses (Neimeyer & Raskin, 2000; Thomas, 2002), and some feminist theory (Brown, 2000; Singer, 2000). Since diagnoses are democratically voted into the DSM manual, this process detracts from any empirical evidence which may indicate that the establishment of a disorder is warranted. In the field of microbiology, the analogous situation would be a number of scientists getting together and deciding to abandon Koch’s postulates for establishing pathogenicity, to instead vote on whether or not an organism is a pathogen.

The basis for a postmodern rejection of the DSM-IV (1994) lies in ideas of poststructuralism (Thomas, 2002), which rejects the concept of disorders as being an unhealthy deviations from a norm. This perspective sees problems that people experience in their lives, as cultural constructions and therefore not universal. From a poststructuralist viewpoint, the DSM-IV (1994) cannot represent an objective cross cultural, and universal view of the human condition. Thomas’s (2002) view of the human
condition would see such labeling as occurs in the DSM-IV (1994) as further impediments to peoples' ability to construct useful meanings in their lives.

Thirdly, some feminist theoreticians reject attachment theory as “mother blaming”, and reject its claims to universality (Singer, 1993). However, despite criticism of the DSM-IV (1994), the notion that insecure attachments, particularly of the Type D variety, can lead to psychopathology, continues to gain broad acceptance in the fields of psychology and psychiatry.

**Attachment Styles as a Risk or Protective Factor**

Notwithstanding the fact that many individual attachment styles within the Type D (disorganized/disoriented) category meet Zeanah’s (1996) criteria for a disorder, many other insecure attachment styles are thought to give rise to problematic behaviors existing on a continuum below the level considered necessary to warrant the label “disordered”, and are associated with a wide variety of other psychological problems. Secure attachments are thought to be one protective factor against the development of later occurring psychological disorders. Insecure attachments in combination with other risk factors, are thought to contribute to the development of other psychological problems (Greenberg, 1999).

Numerous theories exist that attempt to explain the developmental pathways that are associated with differing insecure attachment styles and the later development of psychopathology. Bowlby (1973) links anxious attachment to the development of various childhood phobias, e.g. school phobia, and to the development of agoraphobia later on in life. Guidano (1983) posits that insecure attachments contribute to a variety of later
occurring disorders, depression, agoraphobia and related phobias, obsessive-compulsive patterns, and eating disorders. Brisch (2002) links insecure attachments to school phobias, underachievement, and aggressiveness in school age children; to addictions, antisocial behavior, and delinquency in adolescents; and to panic, agoraphobia, depression, narcissism, borderline symptoms, and psychoses in adults.

Fonagy (2002) links insecure attachments to school phobias, underachievement, and aggressiveness in school age children; to addictions, antisocial behavior, and delinquency in adolescents; and to panic, agoraphobia, depression, narcissism, borderline symptoms, and psychoses in adults.

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Fonagy (1998) posits that secure attachments allow the child to learn about the states of mind of his/her caregiver, and eventually to be able to reflect on his/her own mental states, a process Fonagy defines as “mentalizing” (p. 1131). He suggests that insecure attachments particularly of the Type D category do not allow for the development of this reflective capacity in children (Fonagy, 1998). This deficit is linked to Borderline Personality Disorder and to male perpetrators of violence against women (Fonagy, 2000).

Levy (1999) links severe attachment disorder to antisocial personality, psychopathy, and children who kill, and states: “In essence children with severe attachment disorders are violent psychopaths in training” (p.23). Holland (1992) argues that Conduct Disorder is linked to insecure attachments where harsh, abusive and punitive parenting styles have been utilized.

Attachment Disorders and Treatment

The treatment literature focuses on the early years (James, 1994; Committee On Early Childhood, Adoption, and Dependant Care, 2000; Osmond, 2001). Hughes (1999) suggests that children with serious attachment disturbances are unaware of what is missing in their relationships with parents, and lack the capacity to trust. Therefore
treatment utilizing “talk therapy” as a means for establishing a therapeutic relationship is likely to fail. Hughes claims that severely attachment disordered children, even if they were aware of the missing elements in their parental relationship, would be unlikely to seek to establish trust, as they have replaced trust with manipulation and or avoidance as an operational tool. Hughes therefore argues that traditional therapies which rely on the establishment of a therapeutic alliance are unlikely to be successful. Instead therapy is conceptualized as replicating the developmental steps that lead to attachment.

A precursor to developmental attachment is the process of emotional attunement. Hughes (1999) defines this as, “the sharing of affect between mother and infant” (p.514). During this process the baby’s brain is stimulated as positive emotions of joy, interest, and specialness are experienced by the infant. Hughes summarizes a rationale for a therapeutic approach in treating attachment disorders in children. This approach involves creating therapeutic interventions which allow the child to experience emotional attunement with the therapist, for both to share positive affect, and for the child to gradually be able to tolerate the emotional intensity resulting from such experiences.

Although not referring to the process as attunement, Maier (1992) describes the importance of rhythmicity in Child and Youth Care interactions, and in human communication generally. Maier refers to the work of Byers (1972) and Condon (1975) in describing rhythmicity as “the molecules of human behavior”(p.8). Rhythmicity may be thought of as a kind of non verbal body language that lays the ground work for emotional attunement. Maier comments:
Infants and their mothers’ (or other relevant caregivers’) early attempts to establish communication with each other are essentially prototypes for all initial critical relationship-formations. The caregiving person “falls into step” with the baby’s cycle by talking and smiling in a kind of “dance”. If the mother falls out of step and disappoints the infant by presenting a still, non-responsive face while the infant gazes at her, the infant becomes “concerned”[frustrated], and keeps trying to get her attention (Hersh & Lewin, 1978, p. 3). Typically, caregiver and infant try to stay in touch in a cyclical pattern. It is a process of mutual inclusion; both parties search for a way to establish and maintain a joint rhythm. (Maier, 1992, p. 9)

It would appear from these descriptions, that talk therapies of any kind would be unlikely to generate the kind of affective experiences to which both therapist and child could attune. This theme of “talk less and act more” also shows up in the treatment literature focused on the early years, but with an emphasis on ending the child’s use of control as a behavioral strategy. Before moments of positive affect can be created and shared, other authors (Thomas, 2000; Falberg, 1990) emphasize winning the “control battle”. It is theorized that severely attachment disordered children will sabotage any positive affective experiences because these experiences generate fear in the child, or repressed rage (Hansen & Spratt, 2000), which interferes with attachment formation. This theory indicates that the adult caregiver needs to establish clear authority over the child, and be firmly in control of all situations, before the child can give up on control and learn to trust. In its most extreme versions this thinking has lead to a treatment approach
variously described as holding therapy, attachment therapy, or rage therapy (James, 1994). These interventions purposefully stimulate the child to become angry so that he/she can then be safely held by an adult. The thinking is that this demonstrates to the child that adults are in control and can be trusted to not harm or hurt him/her. However, these types of treatments have lead to child deaths, and should be avoided as unvalidated treatments (James, 1994).

Thomas (2000) while not necessarily advocating for this type of coercive treatment, nonetheless summarizes the thinking around control-based treatment strategies and states:

Attachment therapy must be the precursor to other therapies such as play therapy, art therapy, talk therapy, EMDR, or any other type that requires a therapist/client relationship and honesty... These children do not have the ability to form relationships or to trust others enough to be honest about their feelings. They are not ready to give up control without a fight. That is the nature of the beast we call Attachment Disorder. (p. 83)

At Forest Heights Lodge, a residential treatment program based on classical attachment theory, the treatment philosophy for young boys is based on ideas of “supportive control” (Fahlberg, 1990, p.143). The treatment philosophy incorporates many different therapeutic approaches, such as family systems therapy, behavior modification, and cognitive restructuring. While the focus is on helping these boys establish relationships of trust with childcare staff who become substitute attachment figures, Fahlberg acknowledges that within the milieu, these relationships cannot develop
unless basic safety is established. This invariably means that unsafe behaviors have to be externally controlled, until the child is able to develop his own internal controls.

Translated into practice at Forest Heights, “supportive control” means that children need to demonstrate increasing levels of self control as they widen their social network within the residential treatment setting. Initially, children may be restricted to their own room until they demonstrate an ability to engage in basic routines and self care. This may include looking after their room and performing basic hygiene tasks. In all of this, child care staff position themselves as the child’s ally in helping him accomplish these basic tasks, and special relationships are encouraged where it is recognized that children may develop stronger attachments with individual staff. Physical restraint is utilized as a last resort in controlling unsafe behavior.

While this kind of control may be possible with young children, a control based treatment strategy for youth experiencing attachment challenges is problematic. It simply is not possible, or desirable, to establish physical control for acting out young people.

Attempts to do so with young people, invariably resort to behavior modification techniques which rely on practice models utilizing point systems, and progressively coercive practices such as deprivation of recreational/social activities, and social distancing or isolation (Moore, Moretti, & Holland, 1998). Moore, et al make the point that such practices are counter productive for young people experiencing problems associated with attachment disturbances, and instead recommend transforming residential treatment strategies for these young people “from control to connection” (p.4).
An attachment based treatment strategy for youth, according to Moore, et al. (1998) is guided not by rules rigidly enforced, but by a set of principles based on attachment theory. These principles recognize that all behavior has meaning and reveals the underlying mental working model of the person generating the behavior. These models of how relationships work are constructed from early experiences of care, and are affected by biological legacies such as cognitive and physical capability. These models however, are always a work in progress and are open to revision based on experience, which can be added to, but not subtracted from.

The change model offered by Moore, et al (1998) relies on a consistent approach to caregiving for these youths, which ignores problematic behaviors associated with previous attachment patterns, and focuses on positive staff/youth interactions that emphasizes “doing with” rather than “doing to” (p.15). The authors propose that when young peoples’ early internal working models are not being continually reinforced, these different relationship experiences create a dissonance in the young persons’ internal working model, and the opportunity for reintegration and modification.

Although the shift from a behavioral modification strategy to an attachment based strategy generally means an increased amount of chaos in the residential setting, and does not resulted in “quick fixes” for young people, the authors report that the simple act of working with each young person’s attachment style, and accompanying cognitive working model, has resulted in duplicating early childhood attuning experience, as individual staff attune to an individual young person’s attachment dynamics. The result has been a greater
sense of psychological safety, mutuality, and connection for staff and young people, and a positive change in the residential atmosphere.

However, Moore, et al (1998) do not explain in detail how safety can be provided for out of control violent young people, without resorting to isolating, or restraining techniques, which further exacerbate dysfunctional attachment dynamics. Thinking about attachment therapy occurring in a residential setting with other young people may be problematic, without resorting to some kind of behavioral control or isolation practices, when issues of safety are considered. This should not be surprising when one considers that in the absence of external controls, the one thing needed for safety is internal emotional control, and that the mechanism for developing this is through attachment relationships (Schore, 2000, 2001, 2002).

Because early brain research seemed to demonstrate the effect of attachment on physical brain development (Bruer, 1999), it was previously assumed by many that once working models of relationship were formed and had become incorporated into a child’s identity, these cognitive models would be extremely resistant to change as the child progressed through later developmental stages. This assumption arises from two theories which have shaped practice interventions for both normal early childhood development, and also for therapeutic interventions when development is determined to be proceeding abnormally. These theories are: a) infant determinism which is based on the assumption that infant experience determines adult personality; and b) critical period theory which claims that there are certain stages within which development must occur otherwise it will not happen (Bruer, 1999). For example the first five years have been thought of as critical
for children’s attachment formation, with attachments becoming increasingly more difficult to form with increasing age.

While Sroufe (1983) argues against infant determinism, and proposes that infant attachment classifications are open to change throughout childhood, he is less clear on critical or sensitive period theory, especially as these may apply in developmental stages beyond childhood. He states: “Whether untouched children like EL can be reached in adolescence is open to question” (Sroufe, 1983, p.77). Sroufe draws on classical attachment theory to support his reticence to offer hope for teenagers who have not had treatment for severe attachment problems and quotes Bowlby: “Models once established prove very hard to change” (Bowlby, 1980, p.241).

At an attachment conference held in Victoria, B.C. as recently as the winter of 2001, participants were encouraged to be reasonable about expected outcomes of their work with severely attachment disordered youth. Participants were informed that if a young attachment disordered client was currently robbing stores with a gun, and had not had treatment earlier as a child, then treatment expectations should be limited. Convincing him to not use the gun during the robbery was presented as a realistic treatment goal (Osmond, 2001). Some other realistic treatment principles included:

- Primary focus is not to facilitate attachment. For severe cases that requires three years of exceptionally good care, if at all.
- We work to rebuild as much of the child as possible, we work to civilize.
- Our aim is to prevent the worst, not to achieve the best. Stay realistic (Osmond, 2001, p.45)
However, both these theories, while not necessarily the view of all attachment theorists, but so much in evidence at this attachment conference, are open to critical analysis as more recent neurological research is opening up new ways to think about development over the life span. Perhaps the more important questions about treatment for attachment disordered children and young people are:

- **What kinds of treatments are likely to be efficacious?** The same kind of highly structured physical control situations possible with a five year old are simply not possible with a sixteen year old.
- **When, during the life span, is treatment most likely to be effective?**
- **Can winning the control battle be accomplished in more subtle ways?**
- **What are the principles and practices of a therapy for attachment disorder?**

Infant Determinism and Critical Period Theory are discussed more fully in Chapter Four. However, despite their influences on practice, many therapists have continued to offer hope to adolescents and adults experiencing a variety of attachment disorders. Guidano (1983) was perhaps the first to write about the relationship between early attachment working models and the later development of disorders, and discusses these from the perspective of brain development, and cognitive organization, suggesting possible useful therapeutic interventions for each of these different cognitive organizations. He identifies four categories of disorders which he claims are related to attachment patterns: depression, agoraphobia and related multiple phobias, obsessive-compulsive patterns, and eating disorders. Guidano theorizes that different attachment strategies underpin the cognitive organization of each category, and shape the evolution of the disorder. Treatment is designed to provide different experiences, which then allow for cognitive reorganization that is more useful for the client.
CHAPTER IV
NEUROLOGICAL RESEARCH AND ATTACHMENT

Rapidly expanding knowledge in the field of brain research over the past ten years may be about to offer new hope to practitioners working with young people experiencing attachment disturbances. Bowlby (1969) first speculated that the limbic system was somehow involved in attachment, and states: “the upgrading of control during individual development from simple to more sophisticated is no doubt in large part a result of the growth of the central nervous system” (p. 156). But the complex and symbiotic relationship between psychosocial development and increasing physical brain growth is only in the last ten years beginning to be understood, as research into brain development has progressively become more sophisticated.

Attachment in Relation to Emotion, Brain Growth, and Social Experience

It appears that late pregnancy through the second year is a critical period of accelerated brain growth that requires not only an optimal supply of essential nutrients such as long chain polyunsaturated fatty acids, but also regulated interpersonal experiences for optimal growth (Schore, 2001). To support these notions, Schore (2001) quotes Cicchetti and Tucker (1994) who noted that “Environmental experience is now recognized to be critical to the differentiation of brain tissue itself” (p. 538). The method by which this brain growth occurs is thought to be a combination of genetic overproduction of brain circuitry, followed by a selective pruning, which is environmentally induced by the social experiences the infant encounters. Schore (2000) makes the point that genetics alone cannot account for brain growth and development and states that “We now know that the genetic specification of neuronal structure is not
sufficient for an optimally functional nervous system - the environment also powerfully affects the structure of the brain” (p.6).

The brain is thought to contain about one hundred billion neurons, each one of which is connected to on average ten thousand other neurons by means of “synapses”, or spaces between the long axons of the neurons. Electrical impulses traveling down these axons cause the release of neurotransmitters, special chemicals that allow the synaptic space to be bridged and the adjacent neuron stimulated. The number of possible neuronal “on - off” firing patterns is therefore beyond comprehension, making the human brain the most complex structure, artificial or natural, on earth (Siegel, 1999).

Siegel’s (1999) explanation of early brain development includes both a genetic component, but also emphasizes the environmental contribution, in that environment selects which genes are expressed. Siegel posits that genes contain the information that affect the general organization of the brain, its structure, and the production of its individual components - the neurons. These neurons are genetically programmed to be produced in excess. However, the environment determines which genes are expressed by affecting the synaptic circuitry, i.e. which neurons link up to form brain circuits. Neurons not utilized are pruned and die. In early childhood, interpersonal relationships constitute the environment that shapes gene expression. As genes are activated by experience, proteins are produced that enable neuronal growth and more complex circuitry in the form of new synapses. Thus Siegel (1999) concludes that, “experience- the activation of specific neural pathways- therefore directly shapes gene expression, and leads to the maintenance, creation and strengthening of the connections that form the neural substrate of the mind” (p.14).
The product of the past decade of brain research is an understanding that the brain is a "biosocial organ" (Schore, 2001, p. 12), whose growth may be enriched and facilitated by both physical and social conditions. This process is so inter-twined to the extent that new words need to be coined to describe the process. The term "psychoneurobiological" is used to describe the intimate connection between the mind, the physical neuronal structures of which it is constituted, and the social experiences which allow for its expression (Schore, 2000, p. 12).

Attachment as an Emotion Regulatory System

Bowlby (1969/1982) first conceived of attachment as having species survival value in that young children were protected and cared for, as a result of attachment to primary caregivers. However, the complexities of this are now becoming more evident as we understand more about attachment’s relation to brain development and emotion regulation. It is the emotions that begin to flow between infant and caregiver that allow for the complete development of the attachment relationship, as well as the on-going physical development of the brain itself. Schore (2001) defines attachment as a regulatory theory, and claims that attachment is essentially a "dyadic regulation of emotion" (p. 14), which both caregiver and infant achieve. Schore maintains that emotion is the highest order evidence of bioregulation in complex organisms. The building of this capacity allows individuals to not only approach the familiar, but also to approach, tolerate, and incorporate novelty, in other words to learn, and in so doing become more complex. The mechanism by which this regulation is achieved is thought to be in the brain’s production of neurochemicals relevant to emotion regulation. Learning how to communicate emotionally is now thought to be a precursor to learning to regulate emotion, and therefore perhaps the most important developmental process to take place in infancy.
Schore (2001) proposes that fundamental to this process of emotional communication is the concept of affect synchrony, during which each partner in the infant/care giver dyad learns to read the emotional state of the other, and to adapt to the other in a continuous smooth interpersonal biological rhythm. Foundational to the development of this emotional synchronicity is body language, eye contact, face-to-face interactions, posture, and body movements. Schore (2001) defines a process which he calls “contingent responsivity” (p. 18). Contingent responsivity refers to the infant learning to adjust his/her behavior to fit the context. As these relationship patterns further evolve, the processes of emotional engagement, disengagement, and re-engagement are also learned.

Sometimes disengagement occurs involuntarily causing a stressful state in the infant and a rupturing of the attachment bond. In these situations the primary caregiver’s ability to regulate his own negative affect and re-tune to the infant’s emotional state evokes a phenomenon of “interactive repair” (Schore, 2001, p.20). Interactive repair refers to the caregiver’s ability to be in control of his/her own emotional state at the same time that he/she re-tunes to the infant’s emotional state in a way that respects the infant’s emotional state and the child’s right to be upset. The caregiver then helps the child regain control of his/her own affect by means of an emotional negotiation process which is beyond words. Schore (2001) states that, “the reattuning comforting mother and infant thus dyadically negotiate a stressful state transition of affect, cognition, and behavior” (p.19). These learned interactions are thought to be fundamental to the healthy emotional development of the infant.

Schore (2000) posits that affect synchrony is the primary mechanism governing attachment formation, and is a complex process of mutual inter-twinning between
caregiver and infant that combines elements of the physical, biological, and emotional/psychological, energy flows. Attachment for Schore (2000) is the joint regulation of these energy flows between caregiver and infant. He states that, "Psychobiological attunement, interactive resonance, and the mutual synchronization and entrainment of psychological rhythms are fundamental processes that mediate attachment bond formation, and attachment can be defined as the regulation of biological synchronicity between organisms" (p. 17).

Much of the focus on the relationship between emotion regulation and attachment has been on the minimizing of negative affect. In other words the infant learns to self regulate negative affective states by coming to trust that the primary care giver will continue to meet his/her needs, and positive affect lies ahead. Schore (2000) states, "The mother and infant thus dyadically negotiate a stressful state transition. Infant resilience emerges from the child and parent transitioning from positive to negative and back to positive affect" (p. 16).

However, equally important to attachment formation is the amplification of positive affective states. Unstructured play between infant and caregiver is associated with positive affective states. Schore (2000) emphasizes the importance of this to attachment formation when he states: "Attachment is not just the re-establishment of security after a dysregulating experience and a stressful negative state, it is also the interactive amplification of positive affects, as in play states" (p. 17).

**Attachment in Relation to Resonance and Brain Growth**

Schore (2000) suggests that when infant and caregiver are able to regulate their joint emotional state, over time, a kind of resonance is created as infant and caregiver learn to transition between negative and positive affective states, share certain biological
rhythms such as eating and sleeping, and learn to amplify positive emotional states through interactive play. The resonance that results from these dyadic interactions ultimately permits the inter-coordination of positive affective brain states and Schore states: “not only is the baby’s brain affected by these transactions, its growth literally requires brain-brain interaction and occurs in the context of an intimate positive affective relationship between mother and infant”( p.19). Schore’s use of the word resonance to describe the emotional and physical effects of this series of interactions is reminiscent of the work of Maier (1992) who uses the term rhythmicity to describe a phenomenon which may contribute to resonance. In describing the importance of rhythmicity to establishing connections between people, Maier (1992) states:

At these and other moments of joint rhythmic engagement they [people] discover an attraction for each other regardless whether there has been a previous sense of caring. In fact, it is almost impossible to dislike a person while being rhythmically in “sync”. Rhythmic interactions forge people together. Rhythmicity provides a “glue” for establishing human connections. (p.7)

Resonance resulting from these rhythmic interactions appears to be fundamental in brain organization, and central nervous system regulatory processes. The central nervous system, is in turn thought to play a crucial role in the development of other hierarchical control systems as infants acquire increased mastery of themselves and their world. Periods of homeostatic equilibrium in the development process are interrupted as new imbalances are created by a maturing nervous system. Beginning with the very primitive amygdala at birth, but proceeding rapidly in normative development, this acquisition of emotional intelligence lays the ground work for other regulatory functions of the right brain. Schore (2001) comments on the relationship between brain growth,
emotional development, and emotionality's physical counterparts in the parasympathetic and sympathetic nervous systems:

As the brain develops, the orbital prefrontal region is expanded in the right cortex and exercises a kind of executive control function over the entire right brain, including both parasympathetic and sympathetic responses, which are the autonomic somatic components of emotional states. (p.41)

Thus the ability to regulate emotion, as this ability is acquired in the attachment relationship, appears to be fundamental for not only brain growth and development, but also for the on-going growth and development of other biological systems in the growing child.

**Emotion: The Emergence of Identity, and the Developing Mind**

Schore (2001) posits that it is in the orbital cortex which matures in the middle of the second year when children have an average vocabulary of less than 70 words, that the core of the self is thought to reside. Schore comments:

The core of the self is thus non verbal and unconscious, and it lies in patterns of affect regulation. This structural development allows for an internal sense of security and resilience that comes from the intuitive knowledge that one can regulate the flows and shifts of one's bodily based emotional states, either by one's own coping capacities, or within a relationship with caring others. (p.42)

Brain research over the last ten years would then indicate that emotional intelligence acquired before the age of three, mediates development over the rest of the life span, setting the tone of future relationships, constructing identity and a framework within which meaning is created from experience. What is less clear is the degree to which these patterns of affect regulation are open to change or modification as the
physical organism matures into adolescence and beyond. While Schore's (2001) analysis is useful in articulating a theoretical process of attachment formation and its relationship to brain development, emotion regulation, and identity, what is also less clear is how all of this fits together to form consciousness, memory, and the ability to construct meaning from experience. In other words, how is attachment related to the developing mind?

Siegell (1999) proposes, “that the mind develops at the interface of neurophysiological processes and interpersonal relationships” (p. 21). He cautions against thinking of the brain as a series of distinct regions each responsible for different processes, eg. the amygdala and the limbic system being responsible for emotion control, and the neocortex for thought. Rather, the brain should be conceptualized as a complex, open, dynamic system, in a constant state of change as it continuously reorganizes and adapts to a changing environment. Each of its one hundred billion building blocks, the neurons, are linked to at least ten thousand other neurons by means of synaptic circuits. Thus any particular circuit might involve neurons in all regions of the brain. It is environmental experience which triggers the firing of these circuits. Each time a circuit fires in response to environmental stimulation, the chance of future firing is increased. Memory is thought of in terms of increased probability for circuit firing. The brain is visualized as being spider-web-like, and composed of neural networks capable of firing in a myriad of different patterns. Learning, memory, and the mind, are thought to be a result of the combinations of these firing patterns which have become relatively fixed in individual brain circuitry. The mechanism whereby any particular circuit fires, is thought to be related to cell membrane changes at the neuronal synapse.

However, this “connectionist theory”(Siegell, 1999, p.24) does not explain the triggering mechanism for neural network firing. For example, in which neuron, in what
area of the brain does the initial firing take place? Could a network firing originate in the neocortex, or thinking part of the brain, or would it always be initiated in the amygdala and the limbic system? Does one area of the brain over-ride other areas in terms of initiating firing patterns? What happens when conflicts arise in terms of initiating firing patterns, i.e. cognitive knowledge conflicts with emotional knowledge? The answers to these question could have far-reaching implications for therapeutic interventions for attachment disorders.

The amygdala appears to be important in the process of initiating circuit firing in that it imparts emotional significance to objects and links these to other memory systems or circuits. Historical, and emotional significance are thought to arise when numerous circuits converge, and this same process is thought to be operative in constructing new meanings or editing old ones (Siegel, 1999). In this way it is possible to think of consciousness or of a state of mind arising from the repeated firing of neuronal circuits. Likewise, differing attachment relationships can be thought of as arising from the different ways in which states of mind and emotional communication are shared between parent and child.

Defining Emotion

It may be useful at this point to try to define emotion. Controversy exists both in accurately trying to define emotions, as well as in identifying where they are located within the brain. Siegel’s view is that although controversial, there are some common views shared by a majority within the psychological community, and he states:

Some physiological and cognitive psychologists view emotions as existing within the individual, whereas more interpersonally oriented social psychologists and cultural anthropologists view emotions as being created between people. Even
within the field of neuroscience there is a heated debate about the nature of emotion within the brain. Despite differences some common themes emerge: (a) Emotions are complex layers of processes that are in constant interaction with the environment, (b) they involve cognitive processes such as appraisal or evaluation of meaning, (c) they involve physical changes, e.g. endocrine, autonomic, and cardiovascular, and (d) they involve neurobiological, experiential, and expressive components. (Siegel, 1999, pp.122-123)

Primary emotions are thought to exist outside consciousness and represent energy flows within the brain. These represent sensations that are without words and are reflective of changing states of mind. They may be subtle or intense. Differentiated emotions such as fear, sadness, and joy, exist in consciousness and represent sensations which appear to have universality across cultures in human experience. The physical manifestation of emotional states, or affect, is the mechanism whereby emotion is communicated. Affect may be representative of primary emotion, or more differentiated emotion, and Siegel’s (1999) view is that better parenting results from more subtle attunements to the undifferentiated emotional states of the child. Ainsworth (1978), in trying to describe the difference in parenting between Secure Group-B babies and Insecure babies, refers to Group B mothers’ ability to attune to their babies as “a fine sense of timing”, and states:

Perhaps because their (Group-C) mothers tend to lack the fine sense of timing that is characteristic of Group-B mothers (which is shown in the latter by sensitivity to infant signals in all kinds of contexts), their experience in close bodily contact has not been as consistently positive as that enjoyed by B- babies. (Ainsworth, 1978, p.315)
It would appear that Ainsworth (1978) is describing an emotional sensitivity (a fine sense of timing) on the part of Group-B babies' mothers, to their infants' needs in all kinds of different contexts. This sensitivity appears to be intuitive, without language, and operative beneath consciousness. Schore (2000) in arguing for the primacy of this kind of emotional communication states:

This very efficient system of emotional exchanges is entirely nonverbal, and it continues throughout life as the intuitively felt affective communications that occur within intimate relationships. Human development cannot be understood apart from this affect-transacting relationship. Indeed, it now appears that the development of the capacity to experience, communicate, and regulate emotions may be the key event of human infancy. (p.5)

According to Siegel (1999), emotion and its regulation are the scaffolding upon which cognition, identity, interpersonal relationships, and the mind, are built. Siegel writes:

Emotion also reflects the essential way in which the mind emerges from the interface between neurophysiological process and interpersonal relationships: It serves as a set of integrating processes linking various systems in a dynamic flow across domains and through time. Within the brain itself, emotion links various systems together to form a state of mind. Emotion also serves as a set of processes connecting one mind to another in interpersonal relationships. (p.131)

The attachment relationship then, insofar as it defines the developing child's ability to regulate emotion, and all the processes that appear to flow from this ability, seems to set the course for the developing child. The child’s identity, and the actual
physical development of such structures as the brain, the nervous system, and the limbic system are all affected by this early attachment relationship.

Understanding Attachment Styles in Terms of Brain Functioning and Emotion

Neurological research allows the potential for a more complete understanding of attachment styles. For example the Disorganized/Disoriented Type D style is thought to result from parents who show frightened or frightening behaviors. This emotional state is thought to activate specific face recognition cells within the amygdala which mediate a flight or fight response within the child. But this response is thought to run contrary to genetic impulses to seek proximity to a care giver. When these specific limbic states become ingrained, disorganized attachment and dissociation results, as these conflicting impulses are irreconcilable in consciousness and lead to bizarre contradictory behaviors, such as infants backing towards parents after periods of separation rather than approaching (Main & Solomon, 1986, as cited in Schore, 2002). In Schore’s (2002) opinion all child psychopathology is a result of attachment disorders, and the effect of these on the child’s ability to regulate emotion. He notes, “There is now compelling evidence that all early forming psychopathology constitutes disorders of attachment, and manifests itself as failures of auto regulation and/or interactive regulation” (p.28).

However, these attachment styles are often referred to as mental models, or working models, of relationship. In terms of brain activity a working model would be represented by a complex pattern of neural activation that becomes coded in the brain (Siegel, 1999). This implies a cognitive process which has developed as a result of emotional experience. These attachment representations in turn affect the brain and are transformative as well as being themselves transformed. Siegel (1999) in referring to these patterns and their development over time notes that: “Such complex
transformational patterns are called cognitive processes” (p. 163). This thesis argues that attachment patterns are actually emotional/cognitive representations, and I have purposefully used the term emotional/cognitive to illustrate the inseparability of emotion and cognition in referring to “cognitive” process.

**Theoretical Debates and Interpretations of Neuronal Research**

Debates within the literature center around various theories which have evolved from the interpretation of neuronal research, and it can be argued that much of the foregoing analysis is itself only an interpretation of this research. Bruer (1999) critiques a number of these theories:

- **Stimulation theory**, claims that environmental stimulation increases synaptic formation.
- **Preservation theory**, claims that only the synapses which are utilized survive.
- **Infant determinism**, claims that infant experience determines adult personality.
- **Critical period theory**, claims that there are certain developmental stages within which development must occur otherwise it won’t happen.
- **Experience - expectant theory**, claims that the brain is genetically programmed to “expect” certain kinds of environmental experiences. Development either normal or abnormal is shaped by these experiences.
- **Experience - dependent theory**, claims that brain plasticity depends on experience.
- **Learning theory**, claims that learning occurs through the pruning of some synapses and the strengthening of others.

Many of the above theories rely on assumptions, some of which may prove to be invalid. Bruer (1999) is of the opinion that neuroscience is a difficult field in which to conduct empirical work, that the methods employed are open to criticism, and suggests
that empirical results obtained by neuroscientists are often misinterpreted and that conclusions are drawn with which the original researcher would disagree. This has not stopped those with particular social agendas from using these findings in their own ways to advance various programs.

One of the more famous examples of this occurred in the early years of brain research, but continues to shape popular understandings, and therefore continues to shape possible treatment options as well as policy. This famous piece of brain research was done by Hubel & Wiesel who won the Nobel prize in 1981 for a piece of animal research (as cited in Bruer, 1999) Hubel and Wiesel demonstrated that kittens deprived of visual input in one eye in early development remained permanently blind in that eye. It was subsequently discovered that children born with cataracts, if operated on after five years of age, remained blind in the affected eye. These results were inappropriately extrapolated and assumptions were made about brain plasticity in the rest of the brain, and throughout the life span.

Bruer’s (1999) opinion is that this kind of research has been misleading to many parents, as links were established between stimulation in the first three years and increased I.Q., and as mentioned earlier both critical period theory and infant determinism with its emphasis on early treatment have been especially influential in shaping treatment interventions for attachment disorders. However, other neuroscientists come to different conclusions. Bruer’s (1999) opinion is that the brain retains plasticity throughout life, and new learning is always possible.

Bruer (1999) refers to the work of Greenough (1987) as another example of how research can be misinterpreted. Greenough was able to show that rats reared in complex environments showed a twenty-five per cent increase in synapse formation. According to
Bruer, these results were utilized by some to suggest that more stimulation in the infant years results in higher I.Q., and that the infant years constitute critical periods. The caveats to this research that are never mentioned by the "stimulation and critical period" proponents are:

- This happens only in one area of the rat brain.
- Complex environments produce similar results throughout the rat life span into old age.
- The brain's ability to produce supporting structures to neurons (blood vessels) decreases after middle age so that new neurons do not survive.
- How does rat research translate to humans?

Greenough (as cited in Bruer, 1999, p.23) writes: "Careful examination of the evidence does not support a selective focus on the first three years...the brain continues to be plastic- modifiable by experience throughout later development and into adulthood".

However, Greenough does acknowledge the existence of critical and/or sensitive periods in mammalian development, during which times the nervous system is unusually sensitive to being shaped by environmental stimulation. However, interpreting what his rat research may mean for human development, Greenough differentiates between two kinds of environmental stimulation, experience expectant and experience dependent, and proposes that experience expectant stimulations are associated with excessive synapse formation during this stage of development. Unused synapses are then pruned after the sensitive period has come to an end. Greenough proposes that this method of development might have provided an evolutionary advantage, provided that all members of the species were exposed to the same stimulation during development. Since classical attachment theory proposes that the child is genetically programmed to "expect" an appropriate
caregiving response to attachment behavior, one can understand why critical periods have been generally accepted with respect to attachment formation, and why attachment treatment has selectively focused on the early years.

But Greenough (1987) also proposes that evolution seems to have provided remediation for individuals not exposed to the right kind of stimulation during the critical period, in that neural pruning activity is reduced when the organism does not encounter the "expected" stimulation, thereby prolonging the critical period. In addition, Greenough suggests that these early developing sensory systems may not be a "blank slate" upon which the environment writes, and in the case of human development, proposes that infants potentially contribute to the shaping of their environment. Greenough states: "In fact, we suspect that some types of "expected" experience may rely largely on the infant to produce them" (p. 545).

However, from the neuronal perspective, perhaps the more convincing argument against a critical or even sensitive period theory of attachment formation, lies in understanding how experience expectant stimulation is integrated with experience dependent stimulation. In the latter case, organisms must learn about the specific nature of their immediate environment, and it less clear in these cases how the brain becomes organized. In these cases Greenough (1987) claims that previously formed neuronal structures can be modified, and that this may account for the unique plasticity of the mammalian brain. Further, Greenough claims that the degree to which experience dependent processes may facilitate active formation of new synaptic connections requires a rethinking of critical or sensitive periods. Interpreting what this may mean for attachment processes, early cognitive working models would be open to change
throughout the life span as new experiences generate new synaptic connections within the brain, and these become organized into altered cognitive models.

Bruer (1999) refers to a magnetic resonance imaging study which was done on stringed instrument players, to support the idea of ongoing brain plasticity. This study demonstrated that the brain was able to reorganize in response to environmental stimulation, in that the brains of players of musical instruments showed increased neuronal activity in the area of the brain having to do with finger control, activity that was not found in non-players. Although this was true no matter what age the players started with the instrument, the earlier the players started in life, the stronger the response. This data supports an hypothesis of "sensitive periods" as opposed to "critical periods", in which the brain appears to have increased plasticity.

There appears to be contradictory evidence and disagreements among the experts as to whether stimulation actually causes synaptic formation, or if only the synapses that are used survive. This latter theory called "preservation theory" (Bruer, 1999, p. 96), appears to support Schore's (2000; 2001; 2002) ideas of a genetic overproduction of synapses followed by selective pruning, which is experience dependent. In any case, even the scientific methods used to measure synaptic density are open to question and challenge. Current methods rely heavily on very fine microscopic measurements of very small areas of the brain, followed by statistical analyses and projections. Bruer (1999) is of the opinion that very few researchers do this work well, and it currently is not an established field of high quality research.

With respect to ideas about critical periods, Bruer (1999) is of the opinion that:

- Critical periods apply only to specific kinds of learning. Most learning is not subject to critical period constraint.
• The quantity of experience or stimulation is not the key variable in brain development.
• Critical periods are complex and function specific. e.g. vision and language.
• Critical periods do not all fit into the first three years.
• Critical periods if present in humans, deal with basic functions such as vision, language, recognizing the mother, and social/emotional development.

Bruer (1999) differentiates between the ability to recognize the mother, and actual attachment. He claims that attachment processes are not restricted to the early years and states:

"the evidence for a critical period for attachment relations is weak to non existent" (p. 128). However, Bruer (1999) does not indicate the specific research that allows him to make this claim.

Evidence Opposing a Critical Period Theory of Attachment Formation

Since this thesis takes the position that attachment disordered young people should not be abandoned to a life devoid of caring relationships, critical period theory warrants particular attention. Schore (2000) suggests that the adolescent brain undergoes another growth spurt similar to that of early childhood. During early adolescence the brain appears to revert to earlier growth patterns in that there is an overproduction of synapses followed by selective pruning based on experience. Further, as mentioned earlier, magnetic resonance imaging studies reveal that in adolescents, the amygdala which deals with emotions, is more active than in adults and that the entire right brain circuitry dealing with self regulation and stress coping is reorganized during adolescence where there is more activity than the neocortex.
Schore (2000) therefore concludes that reorganization during adolescence allows for modification of the physiological analogues of early attachment models and claims that: “This allows for early imprinted internal working models of attachment that encode strategies of affect regulation to become more complex over the course of the Eriksonian stages of the life cycle” (p.46). Schore’s use of the term “imprinted” suggests that these patterns of affect regulation become the template for future patterns. However, Schore also suggests that this recycling of the right hemisphere into growth phases later in life may also allow for continuing reorganization of emotion processing beyond adolescence. The question of differing experiences which may confound early imprinted patterns, therefore needs to be raised. What happens for example, during this period of the right hemisphere recycling into a growth phase, if the adolescent encounters physical/emotional experiences which cannot be patterned on early templates? Schore suggests that this recycling of the right hemisphere into growth phases may allow for a cognitive restructuring that may be part of the explanation for the phenomenon of “earned security” first observed by Main, and calls for further research into this phenomenon.

These observations would seem to suggest that early adolescence may be a period during which early cognitive models of relationship may be open to change. Given the increased activity of the right hemisphere and amygdala in adolescents, this would seem to indicate a therapeutic approach aimed at emotional, rather than cognitive reprogramming. Effective therapeutic interventions for adolescents would be characterized by experiential activity that allows for a re-integration of the senses. Touch, smell, visual and auditory stimulation, experienced in conjunction with a therapist who models different ways of processing increased levels of affect arousal, would all seem to be in “sync” with adolescent ways of experiencing the world.
It also appears that during adolescence the same mechanism of brain self-regulation is again operative; the overproduction of synapses and then the pruning of these to match the appropriate environmental response (Schore, 2000). This would seem to make the possibility of changing attachment patterns during adolescence more likely, not less likely, than during late childhood, provided that the response to the adolescent does not reinforce previous experience, and in fact challenges these first experiences.

Further research needs to be done in this area, as well as into the question of whether or not this same brain response occurs during the rest of the major Eriksonian life transitions. These transition periods when physical brain function is reorganized may provide therapeutic opportunities in which people may be more open to change.

In addition to these possibilities, evidence indicates that adult brains also retain plasticity in their response to certain environmental stimuli. Schore (2000), in referring to the development of the infant/mother relational processes, indicates that it is not only the infant brain which is changing. The mother’s brain is also transformed by the relational process. Schore notes that:

In fact evidence now indicates that the organization of the mother’s brain is also being influenced by these relational transactions. A study of early mammalian mother-infant interactions (Kinsley et al., 1999), published in Nature, entitled “Motherhood improves learning and memory,” reports increased dendritic growth in the mother’s brain. (p.22)

Siegel (1999) also agrees with the proposition that the emotional quality of relationships can have a transforming influence on brain organization, posits several identifying features of such a transforming relationship and indicates that:
a transforming attuned relationship would involve the following fundamental elements: contingent collaborative communication; psychobiological state attunement; mutually shared interactions that involve amplification of positive affective states and the reduction of negative ones; reflection on mental states; and the ensuing development of mental models of security that enable emotional modulation and positive expectancies for future interactions. (p. 118)

Emotion in Relation to the Mind and Treatment for Attachment Disorders

If in fact emotion does reflect the essential way in which the mind emerges from the interface between neurophysiological process and interpersonal relationships, then it may follow that new emotional learning may also involve the mind. The orbitofrontal cortex is the link between conscious expressions of emotion and the more primal areas of the brain which control somatic and autonomic function. It is here, where different meanings can be created from experience, that can then impact on autonomic and somatic functioning, resulting in new and flexible behavioral and cognitive responses to changing environmental stimulation. While the failure to develop this “response flexibility” (Siegel, 1999, p.140), may be linked to various attachment disturbances, nevertheless there remains hope, in that this ability as with other brain functions is seen to be state and context-dependent. Siegel (1999) states: “In this manner response flexibility can be seen as an integrative capacity that is achieved under certain conditions, rather than a fixed developmental accomplishment”(p.141).

But Siegel (1999) cautions that treatment aimed at shifting attachment mental models cannot be of the “logical”(p.288) discussion oriented type, especially with avoidant styles. Treatment instead focuses on helping such people read body language as a way of helping them attune to others and their own emotional states. As such, Siegel
suggests that what is actually happening is right-to-right hemispheric connections between two brains, much the same developmental process that occurs in parent-infant dyads.

The orbitofrontal cortex’s function as an integrator of brain activity would seem to play a key role in any such transformative relationship. This appears to be where unconscious emotional experiences become integrated into cognitive mental states of mind, and according to Siegel (1999) the orbitofrontal cortex acts as an integrator of experience. He writes: “The orbitofrontal cortex mediates neurophysiological mechanisms integrating several domains of human experience: social relationships, the evaluation of meaning, autonoetic consciousness, response flexibility, and emotion regulation”(p.285).

Siegel (1999) further proposes that: “interpersonal relationships that can provide attachment experiences, can allow similar neurophysiological changes to occur throughout life”(p.285), and that these relationships “may possibly facilitate new orbitofrontal development and enhance the regulation of emotion throughout the lifespan”(p.285).

Siegel summarizes the relationship between emotion, attachment, and the developing mind:

Emotion is a fundamental part of attachment relationships in the early years and throughout the life span. The earliest forms of communication are about primary emotional states. This sharing of basic appraisal and arousal processes establishes the fundamental way in which one person becomes connected to another within emotional relationships. We can also propose that the reciprocal collaboration within such contingent communication facilitates development of a parallel, prefrontally mediated process, response flexibility, that enables the individual to
respond to changing internal and interpersonal contexts in an adaptive, internally collaborative manner. (p.142)

While the door certainly seems to be open to designing treatment programs for young persons experiencing attachment problems using an approach that targets emotional experience, many questions still remain:

- What degree of brain plasticity remains at adolescence? Are there limits to change with respect to earlier formed mental models of relationship?
- Are some stimuli (touch, visual, auditory, smell) more powerful than others in creating emotional change?
- Would modalities such as music and drama also alter emotional experience and affect brain circuitry in positive ways?
- Once emotional attunement is experienced, when and how should cognitive reflection on this be encouraged?
- Can emotional attunement to an animal be a bridge to human connection? If so are some animals better than others at this, and are there steps and processes which are likely to facilitate this?

While all of these questions would seem to provide rich avenues for future research as new treatment approaches for young people experiencing attachment disturbances are sought, the last question is particularly intriguing, given the focus of this thesis.
CHAPTER V

ANIMAL ASSISTED THERAPY

History

The literature on animal assisted therapy goes back as far as 1792 when animals were used in a Quaker psychiatric retreat. Historically animals have been used in such varied settings as:

• Treatment of epilepsy in Germany in 1867.
• Convalescent hospitals- USA 1942.
• Children’s homes- Brewster N.Y., 1948 (Conner, 2001).

The birth of modern day Animal Assisted Therapy is considered to be 1969 when Levinson discovered by accident that his dog’s presence was associated with improved communication with a non verbal child. The presence of animals has also been associated with:

• Reduced patient stress.
• Longer survival rates with coronary artery disease.
• Decreased need for medications.
• Lower incidence of violence and suicides in prison populations.
• Lower blood pressures.
• Improved physical and cognitive functioning (Conner, 2001).

Evidence for Animals as Healers

Animals have been shown to be more useful than outdoor experiences in treating conduct disorder, hyperactivity, and a variety of other behavioral and psychiatric problems in boys (Golin & Walsh, 1994). Animal assisted therapy appears to be a starting place for children suffering from emotional loss, trauma, separation from loved ones, and an
inability to make adequate social connections. Golin & Walsh (1994) write: “if they can build a healthy relationship with a horse a dog or a bird, then that’s a starting point for them to build a healthy relationship with their peers... and then with staff” (p.2).

The Emily Griffith Center, a ranch for young offenders having on average three to five previous failed placements, uses horses to facilitate attachment. Lloyd (1997) states:

We use horses to teach kids to attach to living beings. Youths who have been abused or neglected often have trouble bonding. Putting such kids one-on-one with a horse can break down emotional barriers and help develop attachment skills (p.2).

The mechanism whereby horses may be useful in accessing and changing previous emotional learning appears to be connected to touch, their intuitive sensitivity to people’s emotional states, and unconditional acceptance (McCormick & McCormick, 1997). In addition it is suggested that learning to ride reconnects people with rhythm. This may induce a trance-like state in which people are more open to interpreting experience differently. McCormick and McCormick refer to this as “shifting the psyche” (p. 62).

Horses may be able, for some people, to help establish congruency between feelings and emotional states, and McCormick & McCormick propose that when this happens, i.e. expressed emotions are in accord with underlying feelings, a sense of wholeness and harmony results. This may be the first step in affect regulation, a sense of congruency with one’s own emotional state. In this case it is theorized that by being sensitive to people’s emotional states, horses are in fact “attuning” to them. The idea here is that horses reflect feelings back in a way that lets the person know what emotion he/she is projecting. For example if the person is nervous the horse will move away; if the person is hyperactive they must slow down before the horse will allow contact.
Greenwald (2001) further notes a similar kind of rhythmicity and states: “the non-verbal communication that takes place between a rider and a horse where they respond to each other’s cues leaves them to interact as if in a dance” (p. 27). This process of horse/youth interaction sounds very reminiscent of the process articulated by recent brain research, whereby the infant learns to self-regulate emotion as a sensitive care giver attunes to this state and supportively reflects it. Treatment of this type would be mimicking the developmental process. McCormick and McCormick (1997) also report success in utilizing horses as co-therapists in treating schizophrenia, as well as a variety of behavioral disorders in young people.

Greenwald (2001) in attempting to quantitatively measure the effect of a Therapeutic Horsemanship Program on emotionally disturbed boys, discovered that a child’s attachment to a horse had no influence on the child’s self esteem or frustration tolerance. In addition she found that children with stronger attachments to a horse tended to be more anxious and depressed. Her interpretation of this finding however, was that children who are depressed and anxious feel particularly safe and comfortable spending time, and connecting with, a favorite horse, and then feel depressed and anxious when separated from these animals. This finding is supported by Beck and Katcher (1983) who state: “animals facilitate people to feel safe and create a sense of intimacy” (as cited in Greenwald, 2001, p. 71).

Greenwald (2001) cites other authors as evidence for the therapeutic value of pets and horses in particular:

- Bensel (1985) states “pets satisfy the child’s need for physical contact and touch without the fear of the complications that accompany contact with human beings” (p. 70).
Cohen (1997) notes that “...for children with poor immobilized attachments, horses may be a less threatening attachment figure [than humans]. Therefore the horse may serve as an intermediary attachment figure, allowing the child some positive attachment experiences before engaging in attachments with adults” (p. 71).

Tyler (1994) recommends horse therapy for adolescents with Oppositional Defiant Disorder.

Carlson (1983) found that with learning disabled children, a therapeutic riding program increased an internalized locus of control.

**Animals and the Healing Process**

Johnson (2000) documented the ways that relationships with animals constituted a component of the healing process for victims of childhood abuse. The theoretical framework for this study was one of relational healing, whether the relationship be with a psychotherapist or an animal. Johnson (2000) was of the opinion that relationships with animals can sometimes be more therapeutic than with human therapists, and speculates on possible reasons for animals’ effectiveness as co-therapists. She notes that animals are able to create an environment of safety where healing can occur. Animal societies have clear structures, boundaries, and rules, essential elements for safety, and a precursor to the development of trust.

**Therapeutic Qualities of Horses**

Horses in particular have a highly developed social structure, become attached to humans who care for them, and will generally include humans in their herd structure. Additionally, horses provide a sense of safety and security by discerning people’s moods, and initially set clear boundaries, that can be renegotiated as the relationship deepens (Johnson, 2000). Johnson also cites McCormick and McCormick (1996), who state:
A horse can sense vulnerability and will typically slow down and soften its movement so as not to cause alarm. ...Finally, animals set limits and establish clear boundaries in clear and effective ways. ...Humans on the other hand, with their intellectual defenses and endless excuses, often minimize the problem at hand. In the horse herd, love and discipline are inseparable. ...Love with limits can be a powerful incentive for individual growth, appropriate social functioning, and repairing broken or strained relationships. (p.12)

Johnson (2000) notes the horse’s ability to accept unconditionally the human, to differentiate the person from the problem, and to model different ways of being. McCormick and McCormick (1997) note the horse’s ability to be therapeutically challenging, as well as the ability to mirror human emotional states. Johnson (2000) and McCormick and McCormick (1997) contend that horses are able to extend love and compassion in a way that reconnects some people with maternal love. McCormick and McCormick (1997) write:

Many of the qualities inherent in the mother/infant interaction can easily be developed between a person and a horse. Through the horse, a maternal love is available and the relationship is uncomplicated by the expectations with which human interactions are charged. (p.51)

As well, Johnson (2000) notes that horses are also able to be fully present, live in the moment, and to be fully and intensely involved with the human. This makes for authenticity and congruence in the relationship, all noted qualities of good therapists.

At this point in the review of animal assisted therapy, it may be useful to discuss the use of language in that many authors make liberal use of emotional language in describing peoples’ relationships with animals, attributing emotions like “love” to
relationships that animals may have with each other, as well as to relationships they develop with people. This may strain the credibility of some who read this thesis, and questions may arise as to how animals experience emotion, or even if they do. The temptation may arise to dismiss animal assisted research as not rising to an acceptable level of academic work. While the field of animal assisted therapy has not had the research attention it feels it deserves; this literature review has not discovered a large literature on the subject, nevertheless, some distinguished researchers and therapists are committed to the field.

While I believe that some animals experience emotions in much the same way as humans, whether or not they actually do is somewhat irrelevant to the main thrust of this thesis. I believe that the point these authors are making which is relevant to this thesis, is that animals are capable of stimulating an emotional response in humans which is experienced at a bodily felt level. This is where I believe attachment therapy begins. Outcome research confirms that bodily felt experiences are foundational to therapy regardless of the theoretical orientation of the psychotherapist. Tallman & Bohart (1999) state:

Experiencing is important because real change appears to involve shifts in understanding at the bodily level as well as the intellectual level. We refer to these after Gendlin (1968), as bodily felt shifts in understanding. If there has been a commonality characterizing all approaches to therapy, it has been in the idea that sheer abstract intellectual insight by itself is not therapeutic. (p. 113)

It is helpful to recall Siegel’s (1999) description of primary emotion within the brain as being increased energy flows that are without words, beneath consciousness, and representative of changing states of mind. Once these energy flows are given meaning in a
cultural context through language, they are defined and become differentiated, eg. “sadness”, “love”, and then exist in consciousness. In a therapeutic context, these energy flows with their accompanying meanings are now available for reflection, and a possible change in meaning. I contend that therapy starts in the bodily generation of these increased energy flows, and I believe that essentially this is what the animal assisted literature is demonstrating. The words that are used to describe these bodily felt shifts in energy states, for example “love”, as opposed to “fear”, are simply our cultural constructions of what these energy flows mean, and in fact these meanings may vary with individual experience, particularly as this may differ across race, class, gender, and culture. Postmodern therapeutic approaches such as Narrative Therapy, are largely concerned with researching these experiences within therapy sessions, privileging and giving voice to individual experience and meaning. Narrative therapists have adapted the term “lived experience” (Adams-Westcott & Dobbins, 1997, p.196) which in my view describes the phenomenon of meaning making. I now return to the review of the animal assisted literature.

**Therapeutic Benefits of Connecting with the Horse**

Horses can have a cathartic effect on some individuals with a history of abuse (Roberts, 1996). Most horses, being prey animals, will initially fear human contact, since humans look, and smell like, predators. However, when the sensitive, resistance free horse trainer establishes contact with a frightened horse for the first time, the witnessing of this interaction by victims of child abuse can be cathartic (Roberts, 1996). Monte Roberts a noted horse trainer, reports that often during his demonstrations someone in the audience will faint. Afterwards the individual will often approach him with stories of their own childhood abuse, and the catharsis they experienced during his presentation. It is also worth noting that Roberts (1996; 1997) is candid about his own abuse as a boy at the
hands of his father. His choice of career and his continued involvement with horses has quite likely been part of his own healing and reconciliation of attachment issues.

Additional benefits of animal connections include, reduced blood pressure and increased cardiovascular health, increased physical functioning through increased exercise, stress reduction, relaxation, pain relief, positive effects on brain chemistry and regulation (Johnson, 2000).

**The Benefits of Animals as Co-Therapists**

Johnson (2000) documents the usefulness of animals as co-therapists, especially at the beginning of the therapeutic process:

- Breaking the ice.
- **Establishing rapport or a bridge** between the client and the therapist.
- Bridging cultural and other gaps.

In terms of therapeutic process, Johnson (2000), in summarizing the work of others together with her own observations, identifies specific steps: (a) first establishing the relationship with the animal, (b) generalizing that bond to different ways of relating to humans, (c) increasing self understanding, (d) modifying maladaptive response patterns, (e) improving relationship skills, (f) healthy regression, (g) working through feelings of dependence. (p.74-75)

Johnson also investigates a number of theoretical frameworks, Developmental, Life Energy, Psychodynamics, Self-Psychology, Social Support, Relational, Biophilia, Exchange, Acoustic and Electromagnetic, which she posits offer explanations of the usefulness of animals as co-therapists. From an attachment perspective perhaps Relational Theory offers the most useful insight. This theory emphasizes continuous connections with others, and the attunement of self with others as the source of emotional and mental
strength. The self is thought of as a duality; core self being coherent, wilful and physical, whereas the subjective self is the experience of self in relationship. Relational theory suggests that many higher animals are capable of inter subjectivity (Johnson, 2000) as well as being capable of attuning, which is defined as; “two living creatures responding to the core self of each other” (Lasher, 1998, as cited in Johnson, 2000, p. 83-84).

Johnson’s (2000) research identified a number of themes suggestive of the ways in which animals were useful in helping people heal, and all have relational overtones:

- Horses help with developing focus.
- Animal companions can help people learn how to play.
- Help people develop human relationships by teaching trust, tolerance, and unconditional acceptance.
- Helped to learn to allow others in their lives.
- Demonstrated accurate, empathetic understanding and in so doing taught emotional communication.
- Horses can help people feel powerful in that they feel reconnected to previous unconscious spiritual states.
- Horses are unique in their ability to attune to humans willing to invest in the relationship. One of Johnson’s (2000) research participants comments: “I don’t think that there is a way to describe (pause) the bond that occurs between horse and rider until you’ve done it. It’s very different; it’s like being one in body and mind. You think it and the horse does it. I don’t have that experience the same way with any other animals that I do with a horse”. (p.163)
• Accept self by reflecting, mirroring, modeling, and confronting; this is thought to allow people to acquire consciousness and awareness in an accepting and non-threatening manner.

• Horses seem particularly helpful in helping clients feel their personal power and learn that they can affect another being in a relationship.

**Summary**

My short review of the literature examining the usefulness of animals as co-therapists, indicates that animals have been effective in facilitating healing in a variety of settings. Animals have demonstrated their effectiveness in facilitating both physical as well as psychological healing. Dogs, cats, birds, and horses appear to be the most commonly used animals in this role (Johnson, 2000). While dogs and cats are commonly thought of as companion animals, and are utilized in a variety of settings to relieve loneliness, for people experiencing problems being in relationship, the horse appears more frequently as the animal of choice for relational healing. It is my hope that this thesis will add to this literature by providing a theoretical rationale for the usefulness of horses in facilitating attachments, as well as a step by step therapeutic approach which is based on knowledge discovered in the three literatures reviewed.

**Emergent Themes Pertinent to the Treatment of Attachment Disturbances**

I have examined four literatures which offer somewhat different perspectives on the problems some young people experience in forming and keeping intimate relationships. These problems are commonly referred to as attachment disorders within the field of psychotherapy. Despite the different perspectives offered by these literatures, a number of common themes emerge which are suggestive of the direction and focus of
therapeutic interventions likely to be effective for the treatment of these attachment
disturbances.

**Treatment Focuses on Establishing Trust**

The theme of establishing trust emerges in the attachment disorder literature especially as this relates to treatment interventions for younger children (Hughes, 1999; James, 1994; Fahlberg, 1990). The argument here is that with young children suffering from severe attachment disturbances, manipulation replaces trust as an operational tool in establishing and maintaining relationships. Treatment interventions focus first on rendering in-operative the child’s use of manipulation to control relationships with adults. James (1994) argues that the therapist/parent may have a chance at replacing manipulation with trust as the child learns that manipulation does not work to achieve desired goals, and that adults will meet basic child needs without the child having to manipulate.

This approach assumes that children and young people suffering from severe attachment disturbances exist in the psychological state of not being able to trust, and that the adult must establish control so that the child can learn to trust. As already noted, Moore et al (1998) question this control strategy as it may apply to residential treatment of young people, and propose a strategy based on childcare workers establishing connection with young people. It would seem, if effective attachment therapy is our goal, that we need to incorporate the following foci into treatment.

1) Treatment Focuses on Emotional Learning Rather Than Cognitive Restructuring

The idea that the roots of attachment are in emotional experiences initially lying outside consciousness, runs through all three literatures. Hughes (1999) speaks of the necessity of treatment not initially being of the “talk-therapy” type, and of the importance of the therapist attuning to the emotional state of the child. The work of Schore (2000,
documents the effects of emotional experience on brain development and attachment formation. Johnson (2000) demonstrates the effectiveness of animals, horses in particular with some people, in first establishing emotional communication, and a sense of connection.

Emotional learning in children, may be thought of as a process whereby the infant learns to self regulate his/her affective state. In so doing the child develops an internal locus of control in which the roots of identity are based (Hughes, 1999; Schore, 2000, 2001, 2002). The animal assisted literature suggests that such processes may be facilitated in older individuals, with animals, horses in particular, who are naturally inclined to reflect the emotional states of their human companions, but in a non-judgmental, non-threatening, and accepting way, that may lead to less defensiveness in the human counterpart of the relationship (Johnson, 2000).

2) Attunement as the Underpinning for Emotional Learning

The ability to recognize and learn about one’s own emotional state is acquired through “attuned” experiences with others (Schore, 2000). The state of “attunement” incorporates a number of related ideas: the sharing of affect between mother and child (Hughes, 1999); harmony in relationships, or expressive rhythm sharing (James, 1994); “Like being one in body and mind” (Johnson, 2000, p.163). Regardless of how it is achieved, emotional attunement coupled with breaks in the attuned state, allow an individual to tolerate negative affective states, in which the individual learns to trust that positive affective states will follow (Hughes, 1999; Schore, 2000). In young children it is recognized that learning to negotiate this state transition occurs sometime in the second year as socialization begins (Hughes, 1999). In developing a relationship with a horse, these transitions occur naturally, as the human counterpart in the relationship makes
mistakes in interpreting horse body language, and the horse reflects these back. The key idea in the concept of emotional attunement, is that the attuned state is a powerful enough incentive to allow for toleration of negative affect when these attuned states are broken, in the expectation that repair can and will occur.

3) Affect Synchrony and Rhythmicity as Key Aspects of Emotional Attunement

Affect synchrony as defined by Schore (2000), is a complex process whereby the infant and primary caregiver within the attachment relationship, are able to synchronize the intensity of their affective behavior. Schore posits that it is the infant who leads the mother in this process, which occurs in time in the context of milliseconds, and Schore states:

A frame-by-frame analysis shows that this moment-to-moment state sharing represents an organized dialog occurring within milliseconds. In contexts of mutually attuned selective cueing, the infant learns to send specific social cues to which the mother has responded, thereby reflecting an anticipatory sense of response of the other to the self. (p.11)

Rhythmicity seems to be a key component of this process in that rhythmicity is the glue that links individual occurrences of affect synchrony in a sequence to form a biological pattern over time. It is interesting to note that in the context of negotiating a relationship with the horse, Parelli (1993) suggests that horses prefer rhythmical stroking motions as they are being groomed. In the context of mother/infant relationships these rhythmical interactions afford infants the experience of the interpersonal coordination of biological rhythms, the opportunity to practice the mutual regulation of positive arousal, and the experience of building the lead-lag structure of adult communication (Schore, 2000). Affect synchrony then, develops as result of the partners in a dyad each learning
the rhythmic structure of the other, and adjusting his/her own behavior to fit the structure of the other. The section on Natural Horsemanship to follow, will argue that this is precisely what each partner in the horse/human dyad learns to do.

4) Body Language as the Language of Affect Synchrony

In the process of building affect synchrony, Schore (2000) reports that by the end of the second month, increasing myelination of nerves involved in sight, allow for a dramatic change in mother/infant interactions. Prior to this, the infant primarily utilizes smell, taste, and touch, to interact with his/her social environment. But by the end of the second month, the infant’s rapidly improving vision allows visual stimuli to supercede other sensory capacities. Emotional states are communicated between mother and infant by visually expressive gestures, which become the body language of affect synchrony. Schore (2000) is of the opinion that the mother’s emotionally expressive face is an important visual stimulus in the infant’s environment. The mother’s face leads the infant to track it in space and over time, to engage in mutually reciprocal interactions with the mother. This developing reciprocity may account for the emergence of the social smile in infants.

Visual stimulation, along with other sensory and perceptual systems, appears to be the primary tool of non verbal body language used to communicate emotional states, and the eventual synchronization of these states into the condition known as affect synchrony. I am claiming that for young people deprived of these affective experiences with caregivers in early childhood, having these experiences in early adolescence in the context of developing a relationship with a horse, may provide these young people the opportunity to acquire the emotional skills necessary for attachment formation, and/or enhancement.
5) Need for ongoing empirical research

While the ideas uncovered in the literature review of animal assisted therapy appear to be congruent with neurological thinking in terms of suggesting approaches for the treatment of adolescent attachment problems, there are virtually no empirical studies which support this association. The one quantitative study which was found, indicated a high correlation between anxiety and depression, and attachment to the horse (Greenwald, 2001). The researcher interpreted this to mean that these anxious children found it easier to be with a favorite horse, than with peers or adults. This same study found that the horse had no positive impact on these children’s self esteem or frustration tolerance.

Much more empirical research is required before animal assisted therapies can be considered more than simply promising. In particular, empirical research into the effectiveness of the horse as a therapeutic animal is required. Therapeutic endeavors utilizing standard horsemanship techniques may in fact be therapeutically counter productive with young people experiencing attachment problems, if young people are taught that the only way to establish a relationship with the horse is to dominate him. Themes of domination appear in the traditional horse training literature (Roberts, 1997), have been incorporated into a common understanding of cowboy culture, and it is from these ideas about man’s relationship with the horse, that we get the term “breaking a horse”. I argue that the experience of acquiring Natural Horsemanship skills (Parelli, 1993), is quite unlike traditional approaches to horsemanship, and it is in these differences that an efficacious therapy for attachment disturbances may lie.
CHAPTER IV
NATURAL HORSEMANSHIP AS A THERAPEUTIC ENTERPRISE

While it appears that horses and dogs are especially useful in a variety of therapeutic contexts, the horse appears more often in the literature in the context of helping people with relationship problems (Johnson, 2000; McCormick & McCormick, 1997; Lloyd, 1997; Greenwold, 2001). This is somewhat surprising considering that the dog is popularly referred to as man’s best friend. While Johnson (2000) and McCormick and McCormick (1997) point in the general direction of why the horse is useful in this context, the reasons remain elusive in the literature, as well as the specific relational techniques which humans wishing to establish a horse/human relationship, might employ. The ideas of Roberts (1996, 1997), Parelli, (1993), as well as skilled horsemen from whom they learned (Hunt, 19851, provide useful insights into these questions. As these ideas are developed, the reader will notice a parallel track, (a) the world as experienced by the horse, and (b) the world as perhaps experienced by some young people struggling with attachment problems.

Natural Horsemanship in Relation to Attachment Disturbances

The term “Natural Horsemanship” was coined by Parelli (1993), a modern day cowboy philosopher. The concept is one that is thought of as being dynamic, and obtained through “communication, understanding, and psychology”( p.7). As such, Parelli claims that it is not so much a horse training program as it is a people training program, in that the emphasis is placed on the thinking species to understand and perceive the world through the brain of a horse. In essence, Natural Horsemanship is a form of resistance free horse training. Resistance free implies that principles of
domination, violence, and ideas of “breaking a horse” are abandoned in favour of non-violence, understanding, communicating, and establishing a partnership with a horse. In order to accomplish this, Parelli (1993) differentiates between the psychological and physical organizational systems of predators and prey animals, and claims these give rise to different motivational, as well as different response systems. Predators vision systems are organized for depth perception, giving them a stalking capacity, whereas prey animals’ eyes are located on the sides of their heads, enabling them to detect movement from all sides. This in turn is thought to translate into different thinking patterns; predators being more direct, lineal, focused, oriented to problem solving and the future, as opposed to prey animals who are psychologically programmed to be more reactive, lateral in their thinking, and oriented to safety, comfort, and the present. Thus, humans and dogs share a predator’s psychological orientation, which is oriented to the future, whereas the horse’s psychological orientation, like other prey animals, is oriented to the present moment.

However, for Child and Youth Care practitioners working with young people experiencing severe attachment problems, some similarities with prey animals’ psychological orientation become evident. The very word “reactive” to describe the disorder known as Reactive Attachment Disorder connotes one of the disorder’s psychological attributes, namely fear and a reluctance to trust, and therefore a need to either run from, or control the relationship. “Reactive” also connotes an orientation to the present moment. Young people suffering from this disorder have learned that controlling the relationship as it exists in the moment can provide them with a degree of safety. Similarly, my experience with young people thought to be encountering attachment difficulties, seems to indicate an orientation to the present rather than the
future, a preoccupation with safety and comfort in the moment, and a reluctance to delay
gratification for some future reward.

Parelli (1993) recommends acceptance of horses as full blown "cowards, claustrophobics, and panicaholics" (p.22), and suggests that these attributes constitute a horse’s birthright. Parelli recommends that in developing the horse-human relationship, it is necessary for the human to learn to think more like a horse, as well as for the horse to think more like a human. He apportions responsibility for this change in thinking, in an 80/20 human/horse split. Child and Youth Care practitioners working with young people experiencing severe attachment problems might do well to also accept these qualities in their clients as a kind of birthright, remembering how profoundly early childhood experiences of care have shaped these young people. In doing so, the Child and Youth Care practitioner working to facilitate shifts in thinking with respect to attachment relations, might also consider following Parelli’s (1993) 80/20 split; that is to say the practitioner bares 80% of the responsibility to learn to think like young people who have encountered severely abusive early experiences of care. These similarities in both the horse’s and attachment disordered young person’s psychological orientations, may mean that an initial connection with horses may be easier for some young people. There are a number of other characteristics that horses share with young people suffering from attachment problems that are worthy of comment.

Opposition Reflex

This is a tendency for horses to oppose or go through direct pressure. An example would be a horse throwing his head back against a lead rope when he is being taught to lead. An experienced horse person rather than opposing this force, goes with it, until the horse’s natural momentum causes the head to move in the direction the trainer wants. At
that point the lead rope is slackened to give the horse comfort (one of the horse’s prime psychological motivating factors), and reinforces the horse’s movement in the direction required by the trainer.

Although this training sequence can be interpreted as a behavior modification approach, many trainers familiar with the horse’s social world would interpret it differently. The highly organized social world of the herd animal depends for its survival on a strong leader who is able to command respect from the rest of the herd, and is able to discipline members of the herd lower on the social order to follow its lead so that the herd remains intact. As previously mentioned, the horse does not differentiate between discipline and love. They are two sides of the same coin. The Natural Horseman would argue that the above training sequence respects the horses’ motivational system and psychological orientation, while at the same time communicates to the horse what his leader (in this case the young person) requires.

Opposition reflex sounds like the “reactive” component of Reactive Attachment Disorder, attachment disordered young peoples’ natural tendency to oppose any adult attempt at direction or control, and to engage in distancing, negative, and oppositional behavior. Rather than using isolation techniques as a disciplinary measure, the experienced Child and Youth Care practitioner, operating from an attachment perspective, stays with the young person, attempting to recognize and respect the young person’s tolerance for intimacy, at the same time maintaining proximity until some movement in a positive relationship direction is achieved. The young person is then recognized for positive attachment behavior rather than punished for the reverse. In engaging with the horse, understanding the horse’s psychological dynamics, and being in a leadership role with respect to the horse, young people may acquire both a feeling for,
and insight into, their own internal states, and into their reactions with respect to human social intercourse.

**Approach and Retreat.**

The experienced horse person approaches a horse in a non linear fashion rather than in a direct line with eyes forward. A linear, eyes forward, focused approach, mimics a predator stalking its prey, and sets off instinctive distancing behavior in the horse. A non linear approach sees decreasing distance alternating with pauses, and increases in space, between the approaching person and the horse. The experienced Child and Youth Care practitioner operating from an attachment perspective and seeking to establish a relationship with a young person experiencing attachment problems, utilizes a similar approach in negotiating both physical as well as psychological proximity. This approach sees the practitioner adjusting proximity in response to an attachment disordered young person’s tolerance for intimacy, avoiding direct confrontation, but at the same time not losing contact.

By respecting and honouring the horse’s tolerance for intimacy, young people in a leadership role with the horse may come to better understand and respect their own individual needs, processes, boundaries, and tolerance for intimacy.

**Manipulation vs. Positive Influence**

Manipulation in the early childhood attachment disorder treatment literature, is seen as a negative and a dysfunctional personality trait that interferes with the child’s ability to establish relationships of trust. However, these are skills which these children have learned that in many cases these skills have contributed to the child’s very survival. As a Child and Youth Care practitioner it is worth enquiring into the difference between positive influence and manipulation. When exactly does one become the other? Some of
the most successful people in our society are those who are expert in getting others to do their bidding: politicians, lawyers, and generals, spring to mind.

As therapists it is probably more useful to re-frame manipulation as a skill, rather than pathologize it as a deficit, and to stop thinking of “manipulation” or “trust” existing as some absolute psychological state. The relational ideas of Bird (2000) are appropriate in this context. Bird (2000) posits that therapists should avoid dichotomous thinking in relation to psychological states, as not being useful. Rather, Bird (2000) suggests that psychological absolutes are not clinically useful ways of relating to ideas, and that in an attachment context, rather than conceptualizing people as existing in a dichotomous psychological state with respect to trust, a more useful frame of reference would be to think of a young person’s relative relationship to the idea of trust. Treatment interventions are then conceptualized as facilitating shifts toward trust. In the case of young people experiencing attachment problems, it may be more useful therapeutically, to consider facilitating the young person’s relationship to the idea of trust, rather than attempting to break down manipulative behavior. Young people attempting to establish a relationship with a horse have the opportunity to experiment with both concepts in the absence of judgment, as they decide whether or not the idea of trust is worth considering as a valuable relationship dynamic.

Horses are expert at winning games of positioning with persons who do not understand horses. This may be considered a form of “position manipulating”, and I once watched my lead mare teach my wife to run around her in a circle, when it was the opposite result that was required. Putting two “experts” in manipulation (horse and young person experiencing attachment problems) together, may provide both with learning opportunities, and the young person in particular with the opportunity to slowly
begin to experiment with trust. The following is an example taken from personal experience, although at the time I did not recognize it as such.

This young person was about to ride for the first time. She had completed the work on the ground with her horse, a beginning relationship with the horse had been established, and it was now time to ride. However, a Natural Horsemanship program encourages riding without a bit, bridle, or saddle. Direction is communicated to the horse via a natural fibre halter to which is attached one rein. This way of riding depends on a relationship of trust and cooperation established between rider and horse on the ground, in that the rider is unable to coerce the horse with mechanical aids and must trust her mount to move in the direction and at the rate requested by the rider. This moment had arrived for the youth in question, and she was understandably nervous. After helping her mount and settle comfortably on her horse’s back, I went over once again the details of how she would communicate direction and her wishes to the horse, and it was time for her to solo. I was videoing this session for the young person, and we have on record her jubilant exclamation of joy and wonder as she and her horse moved off together into the ring and performed a series of maneuvers demonstrating the trust and respect that each had for the other. Since then, as I have more fully understood the connection between bodily felt experience and therapeutic change, I have wondered about possible shifts which might have occurred for this young person in that moment, in terms of her relationship to the concept of trust.

**Natural Horsemanship and Communication**

Foundational to the Parelli system of developing a relationship with the horse is the idea of learning to communicate, and this is not a new idea in the horse literature. Monte Roberts (1997), another modern day version of the cowboy philosopher pays
special attention to the language of horses for which he has coined the term “Equus” (p.xii). However, both Roberts and Parelli (1993) in the introduction to their books, credit others who predate them, and from whom they have learned. This has been an oral tradition, and both Parelli and Roberts who have done the writing, credit others with passing on these oral traditions and knowledge.

First nations peoples are also recognized as establishing close relationships with the horse. The Sioux, Navaho, Blackfoot, and Cree, are credited with utilizing means other than force, domination, and punishment, as they went about establishing relationships with the horse. Ideas of spiritual connection, admiration, respect, and harmony, run as themes through this horse training literature and oral tradition. Hunt (1978), to whom both Parelli and Roberts refer, has written his own short book entitled *Think harmony with horses*. While the book focuses on establishing trust in the horse/human relationship, it is short on the pedagogy of how this may be accomplished.

Both Parelli and Roberts refer to ancient history in trying to understand where these horse training ideas arose, and mention Xenophon, a Greek cavalry officer of 300 B.C. He is credited with the first book on horsemanship, and urged gentleness, patience, and understanding, in training horses (Roberts, 1997). Lyons (1991), another modern day “horse guru”, who believes in a conditioned-response approach to horse training, and who would not necessarily place himself in the same philosophical arena as Parelli (1993) and Roberts (1996, 1997), nevertheless opens the introduction to his book with; “I want my horse to be my partner... Someone I can trust, and who trusts me; someone I don’t have to force to do something”(p.3).
Relationship of Natural Horsemanship to Treating Attachment Disorders

Much of this literature review has focused on trying to understand the mechanisms by which meaning is created from very early child/adult interactions. Classical attachment theory asserts that this process of meaning making, defined by classic attachment theorists as a developing cognitive working model, arises from an individual's attachment style. The process appears to originate in the attuning of undifferentiated emotional states between child and caregiver. The caregiver's ability to self regulate his/her own emotional state, and then attune to the child's, is seen as the primary mechanism whereby the child comes to recognize his/her own emotional state, and then acquires the ability to regulate it. Neurological literature indicates that as the child's developing right orbitofrontal cortex matures, this unconscious ability gradually becomes integrated into thinking patterns, which in turn have the ability to affect emotional states. The consensus of opinion resulting from brain research would suggest that the brain retains plasticity, and an ability to establish new circuitry. This dynamic ability especially in adolescence, allows for reorganization and adaptation to the changing social and environmental conditions of early adulthood.

Research on parenting attachment disordered children reveals that these ingrained learned patterns of relating are extremely resistant to change if the initial mechanism of accessing these patterns is via the neo-cortex and consciousness. The history of animal assisted therapy suggests that animals have a unique ability to assist in treating a variety of physical and mental disorders. The suggestion from the animal assisted therapy literature is that animals may be able to sense emotional states more easily than their human counterparts and emotionally attune to the human. If this
suggestion is correct then animals may duplicate with their human companions, processes of attachment occurring in early childhood.

However, Thomas (1998) cautions against giving attachment disordered children small pets, in that their own abuse is often visited upon the animal, further ingraining their own patterns of dysfunctional relating. A 500 kg horse is considerably more difficult to abuse, and the horse’s own instincts to flee such situations make this possibility remote, especially when the interactive situation is supervised by a qualified therapist.

I argue that as the young person goes about acquiring horsemanship skill, a relationship is built that in many ways duplicates the earlier child/adult dyad in which attachment occurs. These similarities can be summarized as:

- Aspects of the therapy are initially beyond consciousness.
- Therapy mimics developmental sequences in that the horse initially will reflect the young person’s emotional state and resultant behavior. This natural attuning ability of the horse allows the young person to learn to recognize these emotional states first in the animal, and then in him/herself.
- Physical sensations such as touch, smell, eye contact, and body language are utilized by the young person to establish contact with the animal. It is suggested here that these physical experiences may facilitate the firing of different neuronal circuits resulting in a different kind of emotional experience, and the possible co-construction of different cognitive meanings from such experiences.
- As horsemanship skills are acquired, a kind of resonance is experienced as rhythms in positive and negative affects are experienced between young person and horse, and each learns that positive can follow negative. This approach
mimics earlier developmental experiences of childhood typically found in secure attachment styles, and referred to by Schore (2000) as “affect synchrony” (p.9).

- As the young person acquires skill in mastering Equus, the language of horses, the process becomes so subtle that the average observer would not recognize the mechanism whereby the young person communicates with the horse. This produces a similar kind of rhythmic emotional engagement of the type referred to by Maier (1992) that leads to feelings of connection.

- By sharing in the affective experience of the young person with the horse, the therapist guiding this process is provided with many opportunities to attune to the affective state of the young person.

- Once this step is achieved, it may be possible for a reflexive mentalization (Fonagy, 1997) process to be engaged, wherein therapist and young person construct new or altered meanings around this experience of relationship.

In summarizing this therapeutic process, I am suggesting that effective treatment for attachment problems experienced by young people should not start with a battle for control, or in traditional “talk therapy” sessions. As indicated by Moore et al. (1998), this battle for control is counter productive with young people. Additionally, outcome research indicates that therapeutic gains are more often achieved when, (a) clients play an active role in determining the direction of therapy (Duncan, Hubble, & Miller, 1997), (b) bodily felt experience underpins the therapy (Tallman & Bohart, 1999). Therefore, I suggest that the therapeutic alliance needs to start in a common interest with potential to provide for emotional attunement between young person and therapist, and that the young person should be proactive in selecting the activity. I go on to argue that the acquisition of Natural Horsemanship skills (Parelli, 1993), for those young people who
are interested, duplicates many of the above processes which underpin the formation of attachment. If utilized as proposed, this program is in keeping with outcome research. Once achieved, this relationship with the horse is available for integration into consciousness at a time in keeping with the stage of change of the young person (Prochaska, 1999), and meanings of relationship renegotiated which may be more useful for the young person.

_Horse Therapy With Young People Experiencing Attachment Problems: A Step by Step Approach._

It is not the suggestion of this thesis that putting every attachment disordered young person together with a horse would be therapeutically efficacious. My contention, for a number of reasons which are described in more detail in the concluding chapter, is that young people should first indicate an interest in horses, and in some way be proactive in selecting the experience. My experience indicates that this program may appeal more to females. However, more research is needed in the area of animal assisted therapy generally, and the possible gendered aspects of this intervention need to be investigated. For those who are interested in this approach, and for those who may wish to evaluate such an approach, the following horse therapy program presents a step by step approach to the utilization of the principles of attachment therapy identified in this literature review. However, until research has established the validity of the therapeutic aspects of this approach, it may be wiser to think of horsemanship programs as therapeutic recreational outings. This idea of experience as therapy, is developed the final chapter of the thesis, as outcome research confirms the notion that individual clients play a major role in selecting experiences therapeutically beneficial to them.
Safety

Safety should be the first consideration of anyone attempting to utilize the horse as a therapeutic animal. Therapists working with young people and horses, need to also be experienced horse people. Young people should never be allowed to ride without wearing a riding helmet. Footwear is also important. In the beginning of this program, which happens on the ground before young people begin to ride, steel toed boots are recommended. When riding begins, boots should have a long enough heel to prevent the foot from slipping through the stirrup and becoming entangled in the saddle gear.

Special attention should be paid to the selection of a horse. Horses that have had severely abusive treatment in the past can be dangerous, and can kick and/or bite. These animals, known as problem horses, should never be utilized in a therapeutic capacity. Stallions should never be used as therapeutic animals, and lead mares (mares who have proven their leadership capability within the herd) should be avoided with beginning young people.

Safety is a prime concern for horses too, and in the horse world this is tied to herd leadership. This leadership role within the herd is won by the smartest and most athletic mare, with the rest of the herd falling in line according to their ability to be socially dominant. Social dominance is established by horses playing a number of athletic games of positioning. In order to achieve acceptance within the social order of the herd, Parelli (1993) posits humans must learn, and be able to perform the rudiments of these games.

When a human wishes to enter the horse world, the first order of business for the horse, is to establish the human's social position within the herd, and especially with respect to the horse with whom the human wishes to establish the relationship. This is a
safety issue for the horse, and a matter of establishing the human’s trustworthiness as a leader of the horse in question. In order to demonstrate this leadership ability, and therefore his/her trustworthiness, the young person must be willing to play the games of social dominance with the horse, and win. This is simply the way of the horse, and as previously indicated, in the horse world love is inseparable from discipline, and adherence to the cultural rules of horse society. Therefore, expecting a beginning young person to form a relationship with a lead mare would be setting the young person up for failure. Geldings are generally recognized as being the safest horses with which to work, and I have found that older, gentle mares, who are lower down in the social hierarchy of the herd, can be wonderful animals, and especially sensitive to children.

Getting Acquainted

This may be the most important phase of the entire therapeutic process and should not be rushed. Prior to actually meeting the horse for the first time, the young person should be briefed on the principles of Natural Horsemanship. Since teaching horsemanship skills is not the thrust of this thesis, it is recommended that anyone utilizing this approach, contact the Canadian Center for Natural Horsemanship located in Armstrong, B.C. The beginning young person can be registered as a student in Natural Horsemanship, and receive his/her own set of instructional materials. Certified instructors are also available for helping in the development of specific horsemanship skills. This places the therapist in the role of supporter and helper rather than teacher. The focus of this outline is on presenting a theoretical rationale for the therapeutic opportunities this program may present, rather than on developing horsemanship skills per se.
Once the young person has been oriented to the program and has expressed an interest in proceeding, it is time to meet the horse for the first time. Since a good deal of effort has already gone into selecting a horse, the young person can be briefed on the special nature of her/his horse. Information about the horse including pictures can be shared with the young person. I have found it useful to share a history of the horse’s life with the young person. This can provide an opportunity to begin to talk about the horse’s possible perceptions, and for the young person to begin to think about how the horse may react to their meeting.

Parelli (1993) speaks of the difference between “natural horsemanship” and “normal horsemanship”. Most horses have had experiences of “normal horsemanship”, and so will be wary of human contact since “normal horsemanship” relies on fear, domination, force, and in some cases serious abuse, to train and subject the horse to the human. The more serious instances of this approach can leave horses psychologically damaged and dangerous, and these are the horses which should never be utilized as therapeutic animals. Abuse with horses as with humans, exists on a continuum of severity, and it is up to the therapist to decide whether or not a horse is dangerous. However, even milder versions of a “normal horsemanship” training approach can leave horses with personality traits, which while not necessarily dangerous, still need to be recognized and dealt with by the natural horsemanship student.

For example, an older very talented rodeo mare was retired to our farm. She was to become our most valuable animal in that she developed a preference for younger children, and seemed to be sympathetic to their vulnerability. However, when she came to us she was difficult to catch, was wary of human contact, and was very reactive to being touched in specific areas of her body. While it was obvious to me that this mare’s
experience of humans had not been entirely positive, it was my judgment that she was not dangerous. On introducing this mare to one of our foster young people whom I will refer to as Sally, I explained her history to Sally, indicating it would be up to Sally to prove to this mare that Sally would not hurt her.

This proved to be a valuable opportunity to talk about this horse’s experiences of abuse, its effects, how these effects could be overcome, and how Sally could help this mare begin to trust. Over the course of the next year, this issue of facilitating trust, became Sally’s focus with this mare, and changes in both began to occur. Sally took great delight in the small steps taken towards this goal. An indicator of developing trust in this case, was the mare’s comfort level with having her ears handled. Initially, any motion toward the ears was met with opposition reflex by the mare, and a violent jerking away from even the possibility of touch in this area. Together, Sally and I speculated that this reaction probably had to do with this mare’s previous experiences, since many “normal” horse trainers’ immediate response to non compliance is to clout the animal in the head, usually with a grooming brush.

Using the principles of approach and retreat this mare was gradually desensitized until she could tolerate touch in this area by Sally. Eventually Sally was able to catch her mare, and ride her bare-back without bridle and bit in a figure eight circle in the riding ring, demonstrating the greatly improved level of trust and the developing partnership between horse and Sally. Sally’s delight in her accomplishments, her trust in the horse in the absence of physical restraints, and my own pride in her achievements, lead to one of those moments of affect synchrony between Sally and myself.

Taking time in this introductory phase pays off as young person and horse get to know each other. Having a conversation about the horse as therapist and young person
lean over the corral or horse pen, can give the horse a chance to approach the young person first, to smell, and even to make the first overture to touch. This can give the young person a sense of being chosen by the horse, and can result in a feeling of specialness and hope for the future relationship.

This is also an opportunity for the young person to begin to learn Equus (Roberts, 1996, 1997), the body language of horses. The therapist can begin to draw the young person’s attention to the horse’s attempts to communicate, focusing particularly at this point, on the horse’s ears. Flattened ears indicate hostility and an initial rejection of the offer of friendship. Therapist can speculate with the young person about the horse’s attitude at this point, and what it might take to change the horse’s mind. If the proper selection work has been done in terms of sorting out whether or not this horse is truly dangerous, flattened ears at this point need not be cause for giving up on the possibility of future friendship.

Rather, the horse’s emotions can simply be acknowledged as young person and therapist speculate on the reasons for these emotions. Perhaps the intensity of the interaction as indicated by front-focused, predator-like staring, has proven too much for this horse to tolerate. If so, this horse’s emotions can be acknowledged by both young person and therapist changing their direction of gaze and approach, to be less visually confronting. Adjusting body position so that shoulders are at an angle to the horse is a clearer acknowledgment of horse emotions, is less threatening, and begins to indicate to the horse that Equus is understood by young person and therapist. When the horse’s ears again point forward, this acceptance can be acknowledged by a more direct approach, and thus a horse/youth body language dialogue begins. Depending on the young person and therapist’s relationship, this can present opportunities for a conversation about
human body language, emotions, their acknowledgment, communication, and relationship to personal boundaries.

**Increasing Proximity**

When the young person has demonstrated an understanding and acceptance of horse psychology and horse values, it is time to decrease boundaries and increase intimacy. Together, young person and therapist can enter the horse’s pen or enclosure, being careful to watch for, and pick up on, whatever the horse may be communicating about his emotions with respect to this increased proximity. Sudden movements should be avoided, and an atmosphere of calmness and slowness should prevail, with both young person and therapist respecting the horse’s tolerance for decreased boundaries. This does not mean that therapist and young person give up on getting closer, should the horse continue to indicate fear and reluctance. Rather, using the principles of approach and retreat, and increasing and decreasing proximity, the horse’s fear can be acknowledged at the same time it is demonstrated that therapist and young person understand the horse’s way of communicating, and mean the horse no harm.

Again, standing obliquely to the horse conveys a message of no harm intended, and quite often, since horses are naturally curious, remaining still in this position can result in the horse initiating an increase in proximity, as he investigates these interesting and atypical humans who appear to understand him. Depending on the quality of the therapist and young person’s relationship, this process can open up interesting conversations and observations with respect to human relationships, and the processes whereby these relationships can become more intimate and meaningful.
Let the Games Begin

The Parelli (1993) system of acquiring horsemanship skills and language, utilizes six games which the beginning student learns to play with his/her horse. Parelli (1993) believes that these games are the ways in which horses interact with each other, and constitute both horse language, and the mechanism by which social order is achieved within the herd. These games of positioning rely on increasingly sophisticated communication of emotional states. The first three games involve physical touch to communicate emotional energy, while the games four, five, and six rely primarily on communicating emotional energy through the eyes, and through body language. Once trust has been established through playing the first game, the friendly game, the horse will rely on these games of positioning to know what his youth/leader requires of him.

The Friendly Game

Once an increase in proximity has been negotiated and achieved, physical contact between young person and horse can occur. Again, this new stage in relationship building should not be rushed, and should proceed at a pace with which both young person and horse are comfortable. The young person can now utilize his/her beginning knowledge of horse language to communicate, and to recognize and respect the horse’s tolerance for physical intimacy. Parelli (1993) recommends a rhythmical stroking action for touching and caressing the horse, rather than patting, and Parelli claims that while dogs may experience patting as comforting, horses prefer rhythmical stroking. This way of caressing teaches the horse what to expect, and duplicates the horse’s natural way of touching each other when they establish friendly relationships in the herd. Very often it is possible to observe two horses who are special friends, mutually grooming each other.
Usually they are relatively close together in terms of social dominance, and stand head to tail. The tail of each will rhythmically brush away the flies from the face of the other, while mouth and teeth gently massage the neck and back of the partner/friend.

Remembering how early childhood attachments are rooted in physical sensations and rhythmical interactions between mother and infant, and the effects these have on brain development and organization, the young person should be encouraged to fully explore this new dimension of his/her expanding relationship with the horse. Therapist can encourage the young person to notice the horse’s smell, and to feel the texture of the horse’s hair and skin in all areas of the horse’s anatomy, including inside the nostril’s and ears, under the belly, under the tail, and down the legs, inside and out.

All the time this process continues, both therapist and young person should be open to the horse’s feelings about how quickly this increase in intimacy is occurring. Flattening of the ears or swishing of the tail is indicative of discomfort on the horse’s part, and is a request to slow down! Acknowledging these feelings by retreating from the area being touched, while not stopping the rhythmical grooming, and then slowly advancing toward the sensitive area again, communicates both respect for the horse’s feelings, and at the same time, a belief in the future possibility of a more intimate friendship. By taking responsibility for negotiating the pace of the relationship formation, at the same time the young person is respecting the horse’s feelings, the young person is also demonstrating to the horse that he/she is capable of leadership in this horse/young person dyad.

Eventually the young person should be able to caress the horse in all areas of its anatomy. However, most horses will indicate discomfort in one or more areas depending on previous experiences. Desensitizing these areas can take months of patient work, and
the young person needs to understand that years of abuse cannot be undone in one session. The metaphor should be obvious, and this can be a connecting point with the horse for young people who have themselves experienced abuse. The pay-off for all this effort is vastly increased levels of trust, as both young person and horse come to realize that each means the other no harm, and each experiences pleasure in the company of the other. One is reminded of early childhood infant/parent interactions, and the importance of these physical interactions to the development of affect synchrony, emotional attunement, and eventual attachment, as well as physical brain development. Grooming and touching should be an integral part of the horse program throughout, and should occur at the beginning and ending of every session with the horse.

Not only is rhythmicity an integral part of the grooming sessions, but rhythmicity is present in the structure of the program. Rhythmicity leads the horse to know what to expect, and therefore to experience a sense of safety, one of his primary motivating factors. Rhythmicity may also contribute to a sense of safety for the young person in that a sense of structure in the program allows the young person to predict what will happen next. Rhythmicity also leads to feelings of connectedness (Maier, 1993; Schore, 2000), and as such may assist in the development of an attachment between horse and young person.

The Porcupine, or Pushing Game

Once the beginnings of trust are established through the friendly games, the young person can enhance his/her leadership role with the horse. Parelli (1993) theorizes that the pushing game both mimics the developmental process mares use in communicating what is desired from new-born colts, and is also a social game which is played within the herd to establish social dominance. In the case of new-born foals in the
wild, because of the possibility of predator attack, it is essential that a communication system be established between mare and foal immediately, in order that the mare may instruct the foal where to go, how fast to go there, and where the foal should be with respect to the mare.

In teaching this communication system to the new-born, the mare may push the foal with her nose to indicate the direction in which the foal should move. If the foal disobeys these instructions the mare may choose to nip the foal to indicate these instructions must be obeyed. As the foal matures and the communication system evolves, these instructions become more subtle, and are conveyed through other body language gestures. However, the communication system begins in its most elemental form, with actual physical contact, with increasing levels of pressure or force being applied to communicate direction and speed.

This game can be most often witnessed as a mechanism for establishing the social order of the herd when a new horse is introduced. The first order of business is to find out where the newcomer belongs in the social order within the herd. The lead mare will be the first to investigate, and establish her leadership role with respect to the newcomer. If the more subtle body language signals are ignored, and the newcomer wishes to challenge the lead mare’s leadership, then the contest invariably boils down to variations of this pushing game, which can become quite brutal by human standards, and can include kicking and biting. This is sometimes difficult for humans to watch because we bring our own interpretations to these interactions, the first of which is that these horses are trying to kill each other.

But we forget that horses live only in the moment, and that this contest is part of their cultural world, and a necessary part of their survival as a herd animal. The up-side
of this contest is that horses do not bear grudges, or take this struggle personally. It is common to see two horses who were seemingly trying to kill each other one day, crying pitifully for each other the next, when one of them is moved or taken for a ride in the absence of the other. However, other than problem horses who have been severely abused, horses generally will not take this positioning game to this length with their human handlers.

**Communicating Direction**

In establishing his/her leadership role with the prospective horse partner, the young person will want to establish the right to ask the horse to yield position. The horse must be willing to do this in all directions, with all parts of his body. Parelli (1993) suggests that this results in the horse yielding position in six different directions, forward, backwards, up, down, left, and right. The initial mechanism by which the young person asks for this repositioning is called “fingertip yielding” (p.88), and the reader is referred to Parelli (1993) for detailed instructions.

Parelli (1993) recommends utilizing increasing levels of pushing force with the fingertips, as the horse is being taught “the four phases” (p.88). Although this process sounds easy, it is amazingly difficult to accomplish in practice, because the horse is so expert at maneuvering the human out of position, as he tests whether or not this human is capable of leadership with him. In order to qualify for the leadership role with respect to the horse, the young person must gain the horse’s respect by performing this game competently. Since the rest of the games are built upon this foundation, it is important to get this one right before proceeding to more advanced communication.

In asking the horse for these yields, Parelli (1993) suggests being “polite, passively persistent, and in the proper position” (p.77), as increasing levels of pressure
are applied in intervals of about three seconds to whatever part of the horse's body is being asked to yield. The instant the horse yields to the pressure, even the tiniest bit, the pressure is immediately released, and the horse is comforted by the rhythymical stroking action utilized in the friendly game, applied to the area of the pressure.

It is in the timing of this release, that the horse learns what his leader is requiring of him, and Parelli (1993) claims that in developing horsemanship skill this sense of timing is crucial. Parelli posits that the difference between the beginning student, and the advanced, lies in the development of this skill. The expert horseman has honed his sense of timing to the point that he responds to the horse's thoughts rather than the action. As the young person progressively refines this sensitivity, a sense of connection with the horse is experienced, and this fine sense of timing leads to softer and softer movements and quicker responses on the part of the horse. Maier's (1992) ideas on rhythmicity may help to explain this sense of connection, as this communication system perfected over time, takes on rhythmical patterns. As a result, each partner in the horse/human dyad learns to anticipate the other, and communication becomes subtle and is experienced as a personal and intimate property of the relationship. Parelli (1993) explains this contribution of rhythm to a horse's sense of security in terms of rhythm leading the horse to know what to expect. The same may hold true for the human counterpart of the horse/human dyad.

This idea of the importance of timing also shows up in Ainsworth's (1978) work, and one is again reminded of her comments with respect to mother's of secure babies who also had this "fine sense of timing" (p.315) with respect to being able to respond to their infant's needs. The rhythmical nature of these parent/child interactions when this
sense of timing is perfected, may be part of the explanation for the phenomenon of infant security.

Witnessing this pushing game in its more polished form, in combination with more advanced games, leaves the onlooker with a sense of watching horse and young person perform a beautiful dance. The horse may yield his forequarters to the young person, resulting in a pivoting turn on his hindquarters, or the young person may ask for the hindquarters to yield, resulting in a pivot on the front legs. Eventually, both fore and hindquarter yields can be requested at the same time, resulting in a dancing sideways movement. Both young person and horse are focused on each other and are enjoying the activity, as increasing levels of sophistication, communication, and rhythm, are worked into the routine. Again, Maier (1992) states, “In fact it is almost impossible to dislike a person while being rhythmically in sync” (p. 7). Watching horse and young person perform this game, one would have to agree.

The Driving Game

After the young person has begun to get the horse’s respect and compliance with requests for fingertip yielding, the young person can begin to request that the horse yield without any physical contact. This is accomplished utilizing the “tools” of Natural Horsemanship (Parelli, 1993, p. 72). The primary purpose of these tools is to extend the athletic range of the human, who is no match athletically for the horse one on one. These tools allow the human to reposition himself with respect to the horse very quickly, at a distance. For example the “carrot stick” (p. 75) looks like a whip, but is meant simply to be an extension of the human arm. As such it can be utilized to rhythmically rub, providing comfort, as well as to push and direct from a distance. Specially constructed natural fibre halters and lead ropes transmit energy to specific parts of the horses body,
thereby allowing the human to carry on the pushing game at a distance. As the young person acquires athletic skill in the utilization of these tools, he/she also begins to practice communicating with the eyes, and with body language.

For example, in the yo-yo game (a derivative of the driving game), the horse is being asked to approach and back away from his youth leader in a rhythmical straight-line sequence. The horse stands facing his leader, with both eyes focused on the young person. The horse is wearing a natural fibre rope halter, to which is attached a natural fibre twelve foot lead rope. Phase one of the request, is for the young person to summon “Chi” (energy) from the belly, and attempt to project this energy through the eyes toward the horse. If the horse does not move backward, then phase two would be a gentle sideways wiggling of the lead rope. This transfers energy to sensitive areas of the horse’s head via the halter. Energy is increased in phases until some movement backwards away from the pressure is achieved. Immediately, the lead rope is dampened, and body posture relaxed. The horse then can be invited back in towards the student, first with an inviting gaze, and failing a movement, with a gentle pull on the lead rope. In its final polished form, this game also looks like a dance performed by young person and horse. Both horse and young person are attentive to each other, and their movements are rhythmically coordinated.

Three More Games

Building on the first three games, the sideways game, the circle game, and the squeeze, are designed to build communication and trust, as horse and young person have fun together on the ground. The squeeze game asks the horse to go between the young person and some fixed object like a fence, such that the horse can just get through the opening. Since horses naturally fear confined spaces, accomplishing this task
demonstrates the horse’s developing trust in the young person. The sideways game requires the horse to yield both forequarters and hindquarters simultaneously without going forward or backward. The circle game is similar to lunging techniques used by “normal” horse trainers, except Parelli (1993) emphasizes having the horse go both directions, and no more than three revolutions in the same direction at any one time, so that the horse doesn’t get bored and continues to be focused on the young person’s requests. The emphasis here is maintaining the same gait until a change in gait is requested.

As previously indicated, it is not the thrust of this thesis to teach this system of acquiring horsemanship skill, and the reader is referred to the aforementioned source. However, when sufficient skill and leadership ability is acquired on the ground through the practice of these games, the young person begins to ride, and these skills are then utilized to communicate requests to the horse from the horse’s back. Riding brings with it a whole new set of athletic challenges for the young person. By now the young person has acquired a sense of partnership and connection with the horse, that begins to allow him/her to both think of the horse’s feelings, as well as begin to accept his/her own deficits and frustrations.

Personal Observations

The Parelli (1993) system organizes the acquisition of horsemanship skill into a number of levels, with the first level being referred to as Partnership, the second as Harmony. In order to achieve a partnership level, the student must be able to accomplish nineteen tasks with the horse that demonstrate trust and a working relationship. Two of these are worth mentioning here for their possible therapeutic value.
Task One

When the young person feels ready to demonstrate the partnership he/she has achieved with the horse, the young person must demonstrate that the horse will approach him/her in the riding ring and accept the halter. According to Parelli (1993), this signifies that the horse wants to be in the company of the young person, is enjoying their time together, and both trusts and respects the young person's acquired leadership ability. Achieving this task can be a valuable tangible recognition of the value of trust in relationship, and a powerful motivating factor for young people to consider inviting more trust into their own lives and relationships.

For example, one of my foster daughters, Sally, was sharing her horse with another young person who came to ride periodically, but wasn't interested in pursuing Natural Horsemanship. Although this young person loved this mare and was never harsh with her, the young person had not established the same level of trust and respect, as had Sally. As a result, this young person, on arriving at the farm, could never catch the horse in the pasture to bridle and saddle her. She would have to ask Sally who had earned this horse's trust and respect, to catch the horse. This was a tangible recognition of Sally's accomplishments, and of the value of trust and respect in establishing relationships.

Task Two

This task demonstrates that the young person has mastered the correct use of the bridle and bit. Most inexperienced riders use the reins as balancing points to compensate for their own lack of athleticism. This places unacceptable levels of force on the bit in the horse's mouth, and causes unnecessary discomfort for the horse. Riders who have
developed a good seat are naturally balanced, and are able to use the bit for its intended purpose, which is to communicate direction to the horse.

Task two requires the young person to ask the horse to accept the bit while the young person is kneeling on the ground. This necessitates the young person asking the horse to lower its head to the ground, and to stay in this position while the halter is removed, and the bridle and bit substituted. Since the horse is now naturally situated in a more powerful position with respect to the young person, remaining in this position while the young person substitutes bit for halter, demonstrates the horse’s confidence in the young person’s ability. This task also is a demonstration of an increased level of trust in the young person for the horse. Being in this position with respect to such a large animal feels intimidating, and requires the young person to trust that the horse will not bolt or injure the young person.

Having young people who have completed the program demonstrate their competency through performing a number of tasks such as the two described, can have the effect of witnessing, honouring, and celebrating, the relationship they have established with the horse. This can serve to further enhance relationships and a sense of connection with the adults who have supported the young person’s efforts.

**Summary**

It is the hypothesis of this thesis, that effective treatment for attachment disorders begins in affective experiences that replicate the natural processes of early childhood known to lead to attachment formation. The literature review has demonstrated that the pathway to attachment relies on these physical/affective experiences, which initially lie outside of language, and involve sensations that connect to areas of the brain operating outside of consciousness. These physical sensations and experiences generate increased
energy flows within the individual, and are thought of as aroused emotional states. However, it is in the communicating of such aroused emotional states, and the sharing of such states with a significant other, that the individual comes to first recognize these states in himself, and then to regulate them.

As the dyad learns to share these aroused emotional states, to modulate them, and to shift between positive and negative affect, the state of affect synchrony occurs, and attachment bonds deepen. Rhythmicity, both within the activity, and within the process over time, contributes to this experience of connection. It is further argued that if such experiences can be replicated in early adolescence, increased brain plasticity during this period may allow for the development of new neuronal circuitry, which may replace or modify previously formed circuits within the brain and central nervous system.

I argue that the process of acquiring Natural Horsemanship skill may replicate some of these essential processes of attachment. However, while I argue for the primacy of such experiences in the effective treatment for attachment disturbances, once achieved, these attachment experiences need to be integrated into conscious experience. While controversial, the concept of “earned secure” (Hesse, 1999), suggests that this process of integration into conscious memory, of past experience with the present, may contribute to more functional and less troubled attachment relationships. While Hesse’s (1999) comments refer to adults who have processed early traumatic childhood events in ways that has allowed for the development of a secure attachment representation, I argue that whenever possible, a conscious integration of the present with the past is likely to be therapeutically beneficial. I do caution however, that there needs to be some indication on the part of the young person that he/she is ready for this stage of therapy, and this is in
keeping with Prochaska’s (1999) ideas of the importance of therapeutic interventions fitting with the stage of change of the client.

An Enquiry into the Meaning of Trust

The process of acquiring Natural Horsemanship skill presents many opportunities for the therapist to begin to facilitate an integration of new emotional experiences into the young person’s cognitive processes. However, the therapist’s assessment of the cues the young person is providing as to his/her readiness for this process, are key as to whether or not the young person will benefit from a cognitive integration of these experiences. It is my personal belief that it is better to err on the side of “talk less”, and that the young person will indicate when he/she is ready for this stage of treatment. This readiness may be communicated by the young person in a variety of ways, but if the therapist is emotionally attuned to the young person then the timing will be right, and such conversations will occur naturally as opportunities present. The young person may initiate a conversation by asking a question, or the horse may present the opportunity by not complying with the young person’s wishes, and this can lead to the therapist speculating with the young person about what may be going on for the horse. However the conversations occur between the young person and therapist, their tone, direction, and intensity, should be established by the young person. I present in this section, a series of therapeutic questions modeled on the work of Bird (2000). These questions are designed to help the young person explore the meaning and significance of Natural Horsemanship experiences, and for those young people who are ready, to integrate these with past experiences of relationship.

Bird’s (2000) relational externalizing conversation shifts the focus from a singular self, to self that is never singular, and is only experienced in relationship. Bird
expands the idea of relationship to include people’s relationship to certain ideas, and thus Bird rejects the idea of “fixed psychological truths” (p.ix), that is to say Bird in an attachment context, would reject the notion that some young people may lack the capacity for attachment. Instead Bird would be interested in the young person’s relationship to the idea of attachment, and might want to research this relationship. The therapeutic objective of this narrative enquiry is to expand the landscape of the idea of attachment, thereby opening up possibilities which may have been previously invisible.

In a clinical consultation with another therapist concerning a client, Bird (2000) provides the example:

Okay, I’d like to talk about an enquiry around attachment. I’m wondering if we move away from the idea of attachment or not, could we consider the possibility of forms of attachment. I’m wondering about an exploration of the early mother/baby activities of attachment. I’m wondering about the changes to and with attachment as the baby becomes a toddler and the toddler becomes an active boy. I’m wondering about the environment and the ideas and practices that support attachment-thinking and attachment-practices. I’m wondering about Roses’s relationship with the experiences of attachment with her self and with another person in the present and in the past and the hopes she carries for possibilities for the future. I’m wondering what would constitute good enough attachment or beginning attachment... I’m wondering if Rose notices differences or similarities in the experience of attachment or connection between her self and her parents and her self and Trevor... I’m using the language of attachment in this enquiry, but that may need to be negotiated and changed in conversation with Rose. (p.175)
Similarly, the following questions attempt to expand the landscape of connection and belonging with young people who are demonstrating beginning levels of relationship with the horse. However, in doing so it is important to pay attention to what Bird (2000) calls “just talk” (p.1).

While Bird (2000) delineates four descriptors of a just conversation, perhaps it is the third which is most appropriate in counselling young people experiencing attachment problems. She frames this as a question, “What style of conversation challenges detached diagnostic categorization that turns tragic circumstances into personal deficit?” (p.6). In posing this question, Bird (2000) is suggesting that therapists avoid dichotomous thinking, and engage with the complexities of peoples’ lives. This often involves negotiating life’s contradictions in a way that makes sense to the client. While this may sound easy, the practice of this kind of therapy can take therapists to unfamiliar emotional places that are difficult to navigate. How, for example, do I set aside my own outrage over a young person has been sexually and physically abused by a parent, and in the face of that young person’s continued love for this parent, help this the young person negotiate this contradiction?

Since this literature review has indicated that most severe attachment disturbances are associated with a Type D attachment style in which severe abuse and/or neglect has been the child’s primary experience of relationship, a just therapy would not further traumatize the young person by forcing a confrontation with these past experiences, in terms of “good” vs. “bad” parenting. Such an approach both pathologizes the young person and his/her family, and in so-doing further traumatizes. It has been my experience, that no matter how traumatic childhood experiences of parenting, young people experiencing attachment problems are drawn to their biological parents. In spite
of all the deficits, these young people can often recount positive experiences and strengths. A just therapeutic conversation in the context of this horsemanship program avoids confrontation and seeks to explore the meaning of past and present experiences, taking into account their cultural and social context, as well as how past experiences may be integrated with new experiences of relationship, connection, and belonging, as these may develop within the context of a relationship with a horse.

**Examples of Possible Therapeutic Questions**

**Getting Acquainted Phase**

- What do you imagine this horse is feeling as we lean over his stall and look at him?
- Where do you imagine this horse is, on a balance continuum between fear and trust?
- What practices might others have engaged, that might be stimulating this horse in the direction of fear?
- What practices could we engage that would have meaning for the horse, in helping him shift the balance more toward trust?

These questions require the young person to engage a process of reflective mentalization. Fonagy (1997; 2000) refers to this process in children, as being able to explore the mind of a caregiver, and in so doing learn about the nature of mental states. This ability is thought to be crucial to the development of a concept of self and according to Fonagy (1997), depends on attachment. The young person’s response to these questions may provide some clues as to the state of the developing attachment relationship with the horse.
The questions also create space for a multitude of different feelings to exist at the same time within the horse. Depending on what the horse is communicating with his body, these possible feelings in all their complexity can be explored with the young person. The metaphor is obvious and needs no further elaboration. For if complex feelings can exist in a horse, could they not also exist in a young person? Depending upon the young person’s readiness for this conversation, the meaning of words used to describe these feelings can be further expanded, and/or negotiated. For example, can fear and trust exist simultaneously within an individual? What practices might shift the balance from one state to the other? Is fear useful? Under what circumstances? Does fear exist in relationship to trust? Could one state exist without the other? Under what circumstances?

These questions also allow for a consideration of the fact that meanings created from experiences are culturally constructed. In order to renegotiate meaning with the horse we must first enter his cultural world. This principle might be utilized to generate an enquiry into human relationships. When people attempt to form relationships with others, do culture, class, gender, and past experience, affect the balance between fear and trust? How could we engage practices that might shift this balance more in the direction of trust?

**Increasing Proximity**

- As we are getting closer to this horse what is he telling us about how he’s feeling?
- How do we know this?
- What actions could we take that would let him know we are respecting his feelings?
These questions require the young person to focus on the body language of the horse, and to consider actions he/she might take to move the relationship in the direction of increased trust. The young person can be encouraged to reflect on human body language signals. How do we let each other know when personal space is being invaded and comfort levels with closeness not respected? Is there a sequence or process that humans generally utilize as relationships become more intimate? How do we let each other know when intimacy is happening too quickly? How might we utilize this knowledge when forming new friendships?

The Friendly Game

- What part of this horse feels the softest to you?
- Is this horse enjoying being stroked by you?
- How would you know?
- How are you feeling as you groom this horse?
- Can you imagine that this horse might know how you are feeling?
- How would he know?
- Is it possible that how you are feeling right now might affect how he is feeling right now?
- If you are not comfortable with how you are feeling right now, what could you do that would move yourself in the direction of increased comfort?

Depending on the young person’s response to these questions, any number of conversational paths may emerge and lead to further enquiry. Hopefully, what emerges for the young person is discovery; a discovery about the connection between touch and feelings; a discovery that feelings can affect feelings; a discovery that behaviors affect feelings and that we can control these behaviors.
Porcupine Game

- This horse is not yielding. He just seems to be ignoring you. What are you feeling as he ignores you?

This question can begin to put young people in touch with negative feelings, and can begin to differentiate and name feelings; anger for example, frustration, helplessness, hopelessness, fear. It may also be useful to imagine what the horse may be thinking and feeling. Is he angry or afraid; of what? Is he being willfully disobedient and disrespectful of the young person?

It may be therapeutically useful to allow young people to experience some frustration, since learning this pushing game with horses is not easily or quickly accomplished. However, one of my basic rules in working with young people and horses, which I make clear at the onset of the program, is that both need to be having fun. When fun has stopped for the young person, it has also stopped for the horse, and the session needs to be terminated.

Continually checking in with the young person regarding building levels of frustration and negative feelings, can also have the effect of regaining some control over these feelings, as the young person comes to experience that simply naming feelings helps in dealing with them. An enquiry into possible actions the young person could take to help deal with these feelings, can also be initiated by the therapist. A conversation about the possible relationship of trust and respect may also prove useful. In order for trust to deepen, does respect also need to be present? How does one gain another's respect? Can this be easily or quickly accomplished? What might be involved in this process; in terms of the horse; in terms of human relationships?
Getting the first response from the horse can be very difficult for a beginner because of the importance of timing. I have sometimes found it useful to physically guide the young person’s hand in the application and release of pushing force. This physical contact needs to be negotiated with the young person first. Once young people get an initial feel for timing, the four phases, and release, then this success can be built upon. It is important to end the first session of the pushing game with some success being experienced by the young person. Once this happens, the meanings of the horse’s initial non compliant response can be de-constructed and possible new meanings constructed. This conversation can lead to an exploration of the importance of not assigning motives to non-compliance with another’s wishes in human relationships, and to the importance of understanding and continually checking out meaning, before motives are assigned to behavior.

**Driving Game**

The driving game is difficult to achieve in its purest form, without some use of the tools of Natural Horsemanship. This need not preclude a discussion of body language gestures and emotional energy, as these might pertain to human relationships. Since young people experiencing attachment problems very often have difficulty picking up on these non verbal signals and emotional tones in human relationships and responding appropriately to them, it may be useful to draw young people’s attention to some of these body language signals as they may apply in human relationships.

- Can you imagine that humans communicate with each other utilizing body language? What have you noticed?
- What happens to fear and/or trust in a relationship, in your experience, when body language signals are recognized? What happens when they are ignored?
Can you imagine actions you might take that would help you pay better attention to body language signals in others?

Can you imagine actions you could take that would help others pay closer attention to your body language signals?

This series of questions may help young people connect behavior with relationship, and may be helpful in transitioning to an action phase of change in some instances.

In summarizing this section of the treatment intervention I wish to emphasize again, the importance of young peoples' readiness to engage with any of these questions. As I will now discuss in the concluding chapter, outcome research confirms the notion that the client must lead in any therapeutic process.
CHAPTER VII

POSSIBILITIES, LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

I believe that I have proposed an innovative approach to working with some young people struggling with attachment, connection, and belonging. Since to the best of my knowledge, this approach is unique, it is important to note that this theory lacks empirical validation supporting its efficacy as a treatment option. If one accepts several recent trends in the field of psychotherapy towards a managed care model of service delivery, which emphasizes empirically validated treatments, the use of therapy treatment manuals, and protocol-driven interventions (Ogles, Anderson, & Lunnen, 1999), then the most obvious limitation of this thesis is this lack empirical validation. As noted in chapter five, empirical validation appears to be lacking in the animal assisted literature generally, and this is a lack which needs to be rectified. Hopefully, other researchers will begin to address this deficit.

A lack of empirical validation however, is not specific to this theory, or to animal assisted therapies. Empirical validation continues to be an issue for every psychotherapeutic theory (Hubble, Duncan, & Miller, 1999). It is not my intent in developing this thesis, to add yet another unvalidated treatment to the list. Nonetheless, recent empirical research into the effectiveness of psychotherapy provides a different lens through which to view psychotherapy, and this intervention. Outcome research reconfirms what Child and Youth Care practitioners have always known; namely that effective therapy originates within the context of a supportive therapeutic milieu (Trieschman, Whittaker, & Brendtro, 1969; Polesky, 1962), and that therapeutic relationships constitute a corner stone for effective Child and Youth Care practice
Brendtro (1969) outlines how such relationships with children and youth can be facilitated.

Tallman and Bohart (1999) suggest that a preoccupation with theoretical perspectives in psychotherapy may be a red herring issue, and that current trends in psychotherapy are headed down the wrong path, since 70% of client therapeutic change is attributable to client experiences outside of talk therapy sessions, and to therapeutic relationships. This final section discusses these research findings and their implications for this intervention, as well as for Child and Youth Care practice generally.

**What is Psychotherapy**

It is my belief as outlined in this thesis, that the theory and practice of Natural Horsemanship (Parelli, 1993) would be one way to begin to engage and connect with some young people suffering from disconnection and severe attachment problems. Earlier in this thesis, I have suggested in light of the lack of empirical evidence validating this intervention, that the horsemanship program described here not be regarded as “therapy” in the traditional sense, but rather as an experience some young people may choose, in the same way that other young people may choose different recreational and social activities. I will now develop the context around this suggestion.

The search for an answer to the question, “what is psychotherapy?”, or perhaps more appropriately, the question “what is psychotherapeutic?”, has preoccupied the field of psychotherapy from the days of Freud’s science of psychoanalysis (Hubble, Duncan & Miller, 1999). As stated earlier, Bowlby’s (1969/1982) attachment theory was, in part, his attempt to better understand the origins of psychopathology, and in so doing be more effective as a psychiatrist. As previously noted, Bowlby’s theory of attachment lead to a
schism in the psychiatric community, but it also provided new insights into therapy for a
variety of disorders. Bowlby was not the first to part company with Freud, generally
considered to be the first psychotherapist (Hubble, Duncan & Miller, 1999), and
according to Corey (1996) it did not take Freud’s original disciples long to establish their
own brands of psychotherapies. The debate heated up in the 1950s over claims by those
adhering to a behavioral perspective, that talk therapies were not effective, and that to
achieve public credibility, the effectiveness of psychotherapy had to be empirically
established (Bachelor & Horvath, 1999).

Unfortunately, despite the best efforts of many therapists to prove the validity of
their specific theoretical orientations, there remains no empirical evidence suggesting the
superiority of one approach over another, although there is empirical evidence that
psychotherapy works; that is to say treated patients fare much better than untreated (Asay
& Lambert, 1999). Today, more than 400 distinct brands of psychotherapy continue to
compete for clients (Mahoney, 1991), and each brand lays claim to being superior to all
the rest (Tallman & Bohart, 1999). However, the fact that it has been empirically
established that psychotherapy works, despite the fact there appears to be no superiority
of any particular perspective, has lead recent research into investigations of what does
work in psychotherapy. This empirical outcome research has focused on identifying
common factors to all approaches, which appear to be responsible for the efficacy of
psychotherapeutic healing (Hubble, Duncan & Miller, 1999). These research findings
have implications for how we understand therapy, for the usefulness of this specific
horsemanship program, as well as for Child and Youth Care interventions generally.
The Common Factors in Relation to Child and Youth Care Therapeutic Practice

Assay and Lambert (1999) in establishing the empirical case for common factors in therapy, refer to meta-analytic outcome reviews. These reviews document the empirical evidence supporting psychotherapeutic outcomes across six decades, including: controlled studies, thousands of clients, many presenting problems, and "highly diverse therapeutic approaches" (p.23). The results are not encouraging for those therapists attached to a specific theoretical orientation, for no extraordinary therapeutic benefits accrue to any one theoretical perspective. Instead, the most powerful factor associated with therapeutic change (accounting for 40% of positive change) were events occurring in the lives of clients outside of therapy. The quality of the therapeutic relationship accounts for a further 30% of change, followed by placebo effects, and perhaps surprisingly for some, therapeutic technique each at 15% (p.31). Even here it is important to note that therapeutic technique is not specific to any particular theoretical orientation, but includes diverse techniques associated with a variety of theoretical orientations which were useful for some clients. These common factor findings should be encouraging for Child and Youth Care practitioners, especially given that the practice of Child and Youth Care has always emphasized developing a rapport with children and youth.

The Child and Youth Care Context

Personal Observations

It has been my experience in working with children and young people in a number of treatment contexts, that most young persons are not always prepared to
engage in formal “talk therapy” sessions. I have found that one exception to this has been in addictions counselling, where extremely negative impacts of drugs can sometimes cause young people to enter counselling. However, most young people struggling with problems in their lives, may be what Prochaska and DiClemente (1982) term as precontemplative (not willing to consider that they may be experiencing a problem), with a minority being in the contemplative (beginning to think they may have a problem) stage of change. At this point in the evolution of Child and Youth Care practice, a formal survey of this situation with young people who are in treatment settings of one sort or another would be a valuable research contribution, for Prochaska (1999) claims that therapeutic interventions need to fit with the stage of change of the client. As already documented, talk therapies are not even recommended for children experiencing severe attachment disorders.

**Defining Therapy in a Child and Youth Care Context**

It may be useful in developing a definition of therapy in a Child and Youth Care context, to consider the origins of the word “therapy”. The Greek word “therapeia” means: to carry; to support; to hold (Hillman, 1991). In this sense, the work of therapy is being done by the client, who is being supported by the therapist while this work is being done. The fact that many children and youth may not be ready for formal talk therapy does not mean that therapeutic benefits do not take place, and it certainly does not imply that the two most powerful common factors associated with change (outside of talk therapy events in the lives of clients, and relationship factors), also do not occur with precontemplative children and young people. Taken together, these factors account for
70% of positive change events in the lives of clients. Child and Youth Care operates in the milieu of these two common factors; that is to say Child and Youth Care is primarily concerned with providing children and youth with rich, healthy life experiences within the context of a therapeutic milieu promoting pro social skills, wellness, and safety. Child and Youth Care practitioners depend on relationships they establish with young people for cooperation, and it is these relationships which will support young people while they do their own unique therapeutic work.

Therefore, current outcome research reconfirms the potential therapeutic benefit of quality Child and Youth Care practice. It also provides new challenges; what kinds of experiences are most likely to be therapeutic; how, or even should, new experiences be targeted for specific problems; what relationship factors are therapeutically beneficial; would different kinds of relationships be therapeutic under specific circumstances?

**Experience as Therapy**

It may be useful for purposes of this discussion to distinguish between “therapy” and “talk therapy”. Tallman and Bohart (1999) in developing a model of client generativity and self healing, maintain that most therapy happens as a result of life experiences, as people experience problems, think about solutions, and try out different behaviors. Talk therapy is simply a distillation of these processes. Tallman and Bohart (1999) comment:

The real therapy is living. What we call therapy is a special example of processes that occur outside of therapy. [Talk] therapy concentrates or distills the experiential and intellectual contexts of everyday life. [Talk] therapy then can be
thought of as a prosthetic provision of contexts, experiences, and events which
prompt, support, or facilitate clients' self healing. (p.111)

Tallman and Bohart (1999) emphasize the importance of felt experience at a “bodily
level” (p.113). They claim that real change appears to happen at this level, beneath an
intellectual understanding of the problem and possible solutions, and claim that
intellectual insight by itself is not therapeutic.

Seen through this lens, Child and Youth Care practitioners have every right to
think of themselves as therapists. The professional Child and Youth Care practitioner is
constantly thinking about how to maximize the possible therapeutic benefit of milieu
experiences. These milieu experiences provide children and young people with
opportunities for felt experience. This work may involve structuring the milieu for
specific client needs, and may involve weighing the possible therapeutic benefits of
many different theoretical approaches. Uppermost on practitioners’ agenda are
considerations of client needs. Such was my intent in designing this horsemanship
program; first comes the opportunity for a different felt experience of relationship as the
young person engages behaviorally with the horse; then the opportunity to process this
experience cognitively in conversation, if and when the young person indicates a
readiness.

**Targeted Experiences: The Client as Expert**

Should Child and Youth Care practitioners attempt to target specific experiences
to the special needs of their clients? This is a complex question to which there is not an
easy answer. On the one hand, the age of clients often puts practitioners in a
guardianship role where decisions regarding experiences have to be made by the practitioner on behalf of children and young people, especially where safety is concerned. On the other hand, lies the notion and evidence for the fact that all change is self change, and that given the chance, people will select the experiences they need for psychological healing. Tallman and Bohart (1999) refer to evidence suggesting many individuals “mature out of” Borderline Personality Disorder, Antisocial Disorders, alcoholism, and smoking (p.99). Underpinning this belief of self change, is the idea that life provides, or that people choose subconsciously or otherwise, the experiences they need for psychological healing, and that “human psychosocial development is highly buffered and self righting” (p.109).

Perhaps the answer to this question in a Child and Youth Care context, lies in the direction of collaboration. Tallman and Bohart (1999) refer to this as more than client participation and compliance. It involves the client taking a leading role in the therapeutic journey and creatively generating their own solutions to problems. Surely this idea is equally applicable to children and young people, and the selection of experiences. In my own fostering experience and judgment, young people who actively chose the placement because of their desire for a horse experience, probably benefitted most from the placement. In one instance the young person actively pursued the placement with her social worker for six months until finally the opportunity arose. In a residential treatment setting, having a Natural Horsemanship Program be part of the activity choices young people may make, would be congruent with outcome research, in that the suggestion is that therapeutic benefit is more likely to occur when clients select the experience.
Relationship Factors and Therapy

While current outcome research indicates that therapeutic relationship factors account for 30% of client change in talk therapies, the implication is that these relationship factors are operative in relationships outside of talk therapy sessions. Simply being listened to is therapeutic, and Tallman and Bohart (1999) suggest that in instances where people have friendships in which active listening occurs, therapy also may be occurring. The problem is that this is rare. Tallman and Bohart (1999) comment:

For example, outside of (talk) therapy people rarely have a friend who will listen to them for more than twenty minutes. Friends do not usually provide the time and space for individuals to think about and explore their problems...Instead friends and relatives may jump in with premature advice, and inadvertently, discount their fears...Nonetheless, as noted above, people often solve their problems by talking to friends, relatives, co-workers, religious leaders, or some other confidant in their lives.(p.111)

In a Child and Youth Care context these outcome findings are important to remember. Simply listening to children without judgment or comment, can be a therapeutic act.

Bachelor & Horvath (1999) indicate that attachment styles of both client and therapist may affect therapeutic outcomes through their impact on the quality of the therapeutic relationship. For example, not paying attention to client avoidance behaviors may result in less engagement on the part of the client. They suggest that with avoidant clients, therapists should be wary of expressions of warmth, and interpretive or challenging responses. Conversely, anxious/ambivalent clients may benefit more from a
therapist who can tolerate opposition, and who can work to establish collaboration in therapy.

Therapists' attachment styles and previous personal relationship histories have also been shown to affect therapeutic outcomes in that secure therapists are able to challenge both avoidant, and anxious/ambivalent clients in a sensitive and timely way. This involved responding to the dependency needs of clients who dismissed these needs, and appropriately not responding to clients who were preoccupied with these needs. Conversely, therapists preoccupied with their own attachment needs, or therapists who tended to be dismissive of their own attachment needs, either intervened more, or less with their clients, in accordance with their own attachment style. Generally, therapists with secure attachment styles were found to be more proficient at establishing early therapeutic alliances (McKee, 1992, as cited in Bachelor & Horvath, 1999). This research suggests that in a Child and Youth Care context, practitioners should not only be aware of children's attachment styles, they should be aware of their own, as they plan and implement interventions, and engage with their clients in the therapeutic milieu.

Conclusions

I believe that this thesis is congruent with the general principles of effective therapy as outlined by recent outcome research. I do not suggest that this approach is universally applicable to all young people experiencing attachment and relationship problems. I suggest that the first criterion that must be met, is that young people must want to participate, and demonstrate a desire for the program. This is congruent with the principle of client generativity and self healing as elucidated by Tallman and Horvath,
Secondly, this horsemanship program emphasizes bodily felt experience as the primary path to change. As documented by outcome research, bodily felt experience, whether occurring in talk therapy, or outside the therapy room in real life, is where therapy begins. Thirdly, opportunity for cognitive processing of this experience is provided, but this program emphasizes that this occur only when the young person is ready, and initiates the process in some way. This is in keeping with Prochaska's (1999) thinking suggesting that therapeutic interventions need to fit with the state of change of the client. Finally, this horsemanship program emphasizes human relationship, and the connection between practitioner, horse, and young person, as a primary agent responsible for therapeutic change. My theory takes the hopeful position that some young people who may be experiencing difficulties in establishing satisfying relationships, can learn to do so under the auspices of a Natural Horsemanship program. It is my hope that those for whom this theory resonates, will find their own unique ways to shape and translate these ideas into Child and Youth Care practice, as they support young people suffering from a lack of attachment, connection, and belonging.
REFERENCES


