

**CHILDHOOD TRAUMA: ITS IMPACT ON ATTACHMENT, PSYCHOSOCIAL  
DEVELOPMENT, AND SYMPTOMATOLOGY IN WOMEN**

by

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### **Abstract**

The purpose of this study was to examine the relationship between reported childhood trauma related to maltreatment, developmental correlates of attachment and psychosocial development, and adult symptomatology in women. Ninety six women between the ages of 24 and 55 (mean age 38) participated in the study by completing several questionnaire measures. Results were analyzed using structural equation modeling as well as other conventional statistics. It was found that reports of early maltreatment in the form of physical and/or emotional abuse were related to adult symptomatology and that this relationship appeared mediated in a complex way through attachment and psychosocial development. Sexual abuse was correlated with physical and emotional abuse but was not as strongly correlated to symptomatology as these other abuse variables. Furthermore, sexual abuse was not correlated to attachment or to psychosocial development. Exploratory and qualitative approaches were used to examine the results further and to discuss issues of resiliency, change, and coping.

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## CHAPTER 1

### INTRODUCTION

The study of personality and its development has been a central aspect of psychology since its beginnings as a discipline. A fundamental issue within this field has been to ascertain the importance that actual interpersonal experiences have on development. While all theories give these experiences a certain role, there is a classical debate between theories that focus on internal drives and theories that focus on interpersonal experiences as the generators of psychological structure (Greenberg & Mitchell, 1983).

This drive versus relationship issue is particularly relevant for the understanding of development in dysfunctional environments. Classical authors who emphasize the relational aspect of development have naturally focused on the role that adverse childhood interpersonal experiences have on dysfunctional personality outcomes (Horney, 1937; Guntrip, 1969). However, the main thrust for research in the area has arisen out of an understanding of the extent and severity of child abuse and maltreatment in society. Prevalence statistics and impact studies, as well as evidence of impact of child maltreatment on both child and adult psychological functioning have made the issue a most central one in current theory, research, and clinical practice.

Early studies of child maltreatment impact were empirically and not theoretically driven, and they tended to focus primarily on symptomatology. However, the new trend in the field is to study maltreatment impact within the context of comprehensive theoretical networks that include many aspects of bio-psycho-social development. In this context, old

and new theories and research meet in new ways. The theory of attachment developed by Bowlby (1971), rooted in classical relational theories of development, has become a central organizing principle in much research on child maltreatment. Parallel to this, studies of resiliency have often included ego developmental concepts, classically related to drive structure models, to understand adaptive functioning in adverse contexts (Cicchetti, Rogosch, Lynch, and Holtl, 1993). Finally, new theories of trauma integrate the concept of trauma impact and concepts of ego psychological structure (Horowitz, 1992).

The purpose of this study is to examine dysfunctional child rearing environments and how these interact with and contribute to personality development and traumatization in adult women. In accordance with recent theoretical advances in the field, the theoretical context for the study is provided by attachment theory (Bowlby, 1971), psychosocial development theory (Erikson, 1959), and trauma impact theory (Horowitz, 1992). The aim of the study is two-fold. On the one hand, it examines theoretical approaches and the extent to which they can explain the data. On the other, it attempts to integrate theory and data with ideographic and clinically relevant issues.

Chapter 2 includes a review of child maltreatment literature and describes recent theories of trauma impact. Chapter 3 is dedicated to a review of attachment theory and research with children and adults. Studies of child maltreatment in relation to attachment are also included in this chapter. Chapter 4 is a review of psychosocial development theory and research. Chapter 5 reviews theory and research that present some form of integration of trauma, attachment, and ego developmental issues. Chapters 6-8 describe the study hypotheses, methods and results. The final discussion chapter focuses not just on a

discussion of statistical results but includes specific details of the lives of some of the participants. This was done in order to add a richer, more ideographic context for the data. Interpretation of results in the context of specific life struggles makes the data more clinically relevant as well. Specific implications of the results for the treatment of adults with traumatic childhood histories conclude the study.



## CHAPTER 2

### CHILD MALTREATMENT

While documented studies of child abuse are a relatively recent phenomenon, child maltreatment is not. Historical accounts indicate that the problem has been present since time immemorial. Infanticide, severe physical punishment, forced labour, sexual exploitation, and many other violations, have been described in most cultures (see Zigler and Hall, 1989 for a historical review). Over the last century or so, societal public outcries at severe child maltreatment has waxed and waned alongside media disclosures of specific cases. A classical example is the story of Mary Ellen in the US, who had been found chained, beaten and starved in her home in 1874, and which led to the foundation of the Society for the Prevention of Cruelty to Children (Zigler and Hall, 1989). Recent public outcries have resulted in specific governmental reports and actions, but the problem continues to be a serious one. In two current issues, the American Psychological Association periodical, the Monitor, writes that reported cases of child abuse and neglect have increased by 300% over the last 15 years (April 1995 issue), and that 2,000 American children are killed by their parents every year (August 1995 issue).

The public and governmental concern regarding child abuse is reflected in the research literature. The last fifteen years, in particular, have produced a massive accumulation of research in this area (see, for example reviews by Alter-Reid, Gibbs, Lachenmeyer, Sigal, and Massoth, 1986; Brassard, Germain, and Hart, 1987; Cicchetti and Carlson, 1989; Finkelhor, 1986). This empirical research has provided an important

contribution to our understanding of the prevalence and the impact of different kinds of abuse.

Prevalence figures based on retrospective reports of sexual abuse in the United States range from 19% to 54% for women (Alter-Reid et al., 1986). A large scale survey conducted by Finkelhor and his associates (Finkelhor, Hotaling, Lewis, and Smith, 1990) found that about 27% of women and 16% of men in the general population reported being sexually abused as children. In Canada, a Royal Commission report (Badgley et al., 1984) showed that one in two women reported unwanted sexual experiences, and that, of these, four out of five had had these experiences during childhood. Physical abuse has not been as extensively studied as sexual abuse. Prevalence figures range from 11% to 20%, but these have been primarily obtained from college samples (Briere, 1992). Psychological abuse has been studied even less and there are no clear prevalence figures for this type of abuse. While official reports of psychological abuse can be relatively low, authors in the field believe that this type of abuse is an integral component of all cases of child abuse (Brassard and Gelardo, 1987; Briere, 1992; Finkelhor, 1986).

Incidence figures, which are usually based on abuse reported to various institutions, tend to give conservative estimates of child abuse. As well, the figures tend to vary from year to year. In the United States, incidence per 1,000 of population in 1991 was reported as 6 cases for sexual abuse, 10 cases for physical abuse, 3 cases for psychological maltreatment, and 20 cases for neglect (see Finkelhor and Dziuba-Leatherman, 1994). Incidence figures vary dramatically depending on the definition of abuse used. For example, when expanding the definition of violent abuse to include any

type of violence against the child in the home, and not just cases of extreme violence, incidence figures for 1985 increased six-fold to 620 per 1,000 (see Finkelhor and Dziuba-Leatherman, 1994).

Given the reliance on either retrospective reports or abuse reported to institutions, and given that different definitions are often used by different authors, available abuse figures cannot be considered as accurate reflections of the situation. Retrospective reports have often been considered inaccurate due to the possibility of inaccurate recall and other memory distortions. In other cases family and cultural norms interfere with the recognition and the reporting of abuse. This is true for all kinds of abuse, but it is particularly the case for psychological maltreatment, the most invisible kind of abuse (Brassard and Gelardo, 1987). Another important point to keep in mind is that specific prevalence or incidence figures based on specific abuse types do not give a clear picture of what the actual family environments are like. Yet abuse often happens in a overall dysfunctional family context where different types of abuse and maltreatment combine and potentiate the impact that isolated abuse would have (Briere, 1992).

The reliance on retrospective reports is particularly relevant when studying the adult survivor. The validity of retrospective reports has been questioned on several grounds, including the accuracy of memory over long periods of time, repression mechanisms, selective recall mechanisms, social desirability, and other reporting biases. The classical psychoanalytic tradition has made claims that people are likely to exaggerate or imagine negative early experiences, thus casting doubts on the validity of child abuse

reports (see Herman 1992). Three recent longitudinal studies to be described next cast some light into the debate.

One of these studies was conducted in Sweden over a 25 year period (Stattin Janson, Klackenber-Larson, and Magnusson., 1995). The sample selected consisted of every fourth pregnant woman entering a prenatal clinic between 1955 and 1958. A massive amount of data was collected over the years regarding the parenting practices of these women, including variables related to rejection, demandingness, spanking, and beating of the children. The adult children were later asked to describe retrospectively their upbringing, and these descriptions were then compared to the actual parenting records obtained earlier. There was a clear relationship between reports and actual experiences, as all reports were positively correlated with the measured early records of parenting practices. However, inaccuracy of reporting was also an important factor. Multivariate analyses indicated multiple correlations of .30 to .40, which left much of the variance unexplained. As well, there were variations in accuracy of retrospective reporting related to interactions between the gender of the child and the parent, and related to the childhood age period assessed. These inaccuracies were due to over-reporting in some cases and to under-reporting in others.

The second study covered a time span of 15 years and examined the problem using prospective (using both questionnaires and observations) and retrospective measures (Maughan, Pickles, and Quinton., 1995). A general population sample and a high risk family sample (at least one parent with a personality or psychiatric disorder) were studied over a four year period. A follow up of the now adult children was conducted about 10

years later. Results indicated that adults who were not functioning well at the time of the retrospective reports, did not exaggerate in their reports of early parental hostility.

However, the adults who were functioning well, tended to underreport early negative experiences. This is interesting, given that the opposite assumption is usually made in the psychoanalytic and psychiatric literature regarding the interpretation of retrospective data.

Regardless of what the “true” figures of abuse are, there is enough evidence to consider the problem of violent and abusive families as a very substantial one. One wonders whether or not the more or less benign “average expectable environment” (Hartman, 1939) to which people are considered to be phylogenetically adapted, is actually the current societal norm. A recent compilation of studies (McCord, 1995) indicates that coercion and punishment practices are widely spread in families and that these practices are significantly detrimental for the children. As Wolfe and Jaffe (1991) state, “What has emerged from (the) effort to understand interpersonal violence is a growing recognition by the research community that the North American family is a violent institution, second only to the military and police in terms of its accepted use of violent tactics to control others” (p. 284). This is not a conclusion limited to a certain historical time or a certain geographical location, as earlier authors working in the US and in Europe have held a similar outlook of the family environment (Horney, 1937; Miller, 1986).

Turning now to the review of maltreatment impact studies, we find that a large portion of the research has concentrated on the listing of separate symptoms both in the child and in the adult survivor. In children and adolescents sexual abuse has been found to

correlate with a long list of symptoms: depression, withdrawal, sexual acting out and precocious sex-play, low self-esteem, learning difficulties, delinquency, aggression, anxiety, bed wetting, sleep disturbances, suicidal behavior, dissociation, somatization, impaired ability to trust, role confusion, failure to accomplish developmental tasks, pseudo-maturity, separation anxiety, and more (see, for example, Adams-Tucker, 1982; Alter-Reid et al., 1986; Conte and Schuerman, 1987; Finkelhor 1986; Gomez-Schwartz, 1985; Kendall-Tackett, Williams, and Finkelhor, 1993; Kolko, Moser, and Weldy, 1988; Mannarino and Cohen, 1986; Schetky, 1990).

The symptoms found in adult survivors of sexual abuse are varied and cover a long list of symptoms not very different from those found in children. Some examples are depression, feelings of isolation, fear, anxiety, distrust, negative identity, low self-esteem, self-destructive behavior, drug and alcohol problems, dissociation, sense of not being in control, sexual problems, disturbed relatedness, parenting problems, etc. (Alter-Reid et al., 1986; Briere and Runtz, 1993; Cole, Woolger, Power, and Smith, 1992; Kinzl, Traweger, and Biebl, 1995; Nash, Hulsey, Sexton, Harralson, and Lambert, 1993).

A number of studies have focused on the relationship between sexual abuse and psychiatric problems. For example, Bagley and Ramsay (1986) found that sexual abuse was related to a higher incidence of poor mental health in the victims. Mullen (1990) found a higher proportion of abuse in a population of psychiatrically ill patients. Sexual abuse was particularly related to eating and affective disorders and to borderline personality disorder.

Physical abuse of children has been associated with similar outcomes as sexual abuse with some exceptions. For example, some studies have found that sexually abused children show more sexually inappropriate behaviors compared with physically abused children (Deblinger, McLeer, Atkins, Ralphe, and Foa, 1989). Kolko et al. (1988) studied a sample of children psychiatric inpatients with emotional and behavioral problems. They found no significant differences between the children who were physically abused and the other disturbed children. However, sexually abused children were distinguishable by hypersexuality and by higher fears and anxiety. Other studies have found symptoms which are more typical of physically abused children, including hyperactivity, non-compliance, and aggression (Egeland and Erickson, 1987). Briere (1992) suggests that physical abuse results in more autonomic arousal symptoms, such as tension, flinching, and "jumpiness".

In the adult survivor, the presence of sexual problems often differentiates between sexual and physical abuse (Elliott and Briere, 1991). Ratings on symptom scales generally do not differentiate the two types of abuse on other symptoms (Briere and Runtz 1990). It appears, however, that the combination of sexual and physical abuse results in higher scores on symptom inventories than either type of abuse alone (Alter-Reid, as cited in Elliott and Briere, 1991).

Studies with adult psychiatric inpatients have found a higher rate of both sexual and physical abuse in this population compared with the general population (see for example Bryer, Nelson, Miller, and Krol, 1987). Mancini, Van Ameringen and MacMillan (1995) found higher rates of clinical depression and state/trait anxiety in patients with histories of sexual and/or physical abuse. Abuse was not related to a specific anxiety

disorder diagnosis, but when the diagnosis was present, abuse was significantly related to its severity.

There are fewer studies of psychological abuse in the literature. Some studies have associated psychological maltreatment with low self esteem, dysfunctional peer relations, underachievement, withdrawal, aggression, and suicidal behavior. (Egeland and Erickson, 1987; Hart, Germain, and Brassard, 1987; Ney, Fung, and Wickett, 1994). Briere and Runtz (1990) found that, compared with sexual and physical abuse, psychological maltreatment had a unique independent association with low self-esteem. Briere (1992) suggests that much of the cognitive impact of sexual and physical abuse is probably due the underlying psychological abuse inherent in all other forms of abuse. A similar conclusion has been presented by other authors. For example, Hart et al. (1987) suggest that the impact of any type of abuse is dependent on the underlying psychological maltreatment. Finkelhor (1983) stated that abuse always occurs in a context of psychological abuse and exploitation aimed at controlling the victim's perception of reality. In his view, this manipulation results in the victim blaming oneself.

There are several important limitations to the symptom approach reflected in many of the studies described above. The listing of symptomatology in the absence of theoretical organizing principles does not provide understanding of the complex interpersonal dynamics behind abuse, of how these come to impact the person, and what the consequences of this impact mean for the person's life. Neither does it provide information regarding processes that lead to differential outcomes and to positive adaptations in the face of adversity. As well, the focus on studying impact by abuse type is perhaps not very



useful given that different types of abuse often coexist in the context of dysfunctional family environments. It is not possible to study this complexity in a theoretical vacuum. Because of these issues, the focus of maltreatment research has progressively shifted towards theoretical integrations and complex models of abuse impact which are more readily applicable to the understanding of people's lives.

The study of complex theoretical models for child maltreatment impact has been facilitated by the development and application of multivariate statistical techniques. Recent research efforts have included multiple parent and child psychological, interpersonal, and environmental variables, conceived as interrelating in complex ways. For example, Belsky (1993) proposed an ecological model for child development that includes a range from organismic variables, such as temperament, to interpersonal variables and to larger societal dynamics. Models like Belsky's may seem over-inclusive and not parsimonious. However, the statistical techniques available permit meaningful assessments of the relative importance of the model variables as well as the evaluation of overall theoretical issues.

Cicchetti and Howes (1991) and a number of other authors (Brassard and Gelardo, 1987; Egeland and Erickson, 1987; Hart et al., 1987) have proposed a developmental organizational approach to the study of child abuse impact which has received significant attention in the maltreatment literature. This approach draws primarily from attachment theory (Bowlby, 1988), but includes elements of ego developmental, specifically psychosocial development theory (Erikson 1959) and ecological theories. According to Cicchetti,

“Development may be conceived as a series of qualitative reorganizations among and within behavioral systems, which occur through the process of differentiation and hierarchical integration. Variables at many levels of analysis determine the character of these reorganizations: genetic, constitutional, neurobiological, biochemical, behavioral, psychological, environmental, and sociological. Furthermore, these variables are viewed as being in dynamic transaction with one another.” (Cicchetti, 1989, p. 379).

As we shall see later, there are a number of important longitudinal studies of child maltreatment that have used this organizational perspective (for example, Egeland and Farber, 1984).

Research that has focused on adult survivors of early abuse has often been organized around tenets of trauma theory. Much of the research in the area of trauma has been conducted with adults impacted by serious stressful events of adult life which result in a particular cluster of symptoms. The recent version of this symptom cluster is Post Traumatic Stress disorder (PTSD), as defined by the DSM-IV system of psychiatric classifications (American Psychological Association, 1994). PTSD includes a variety of symptoms in three different clusters: Reexperiencing the trauma, numbing responses, and increased arousal. The development of this diagnosis originated in research with Vietnam veterans, though its historical roots backdate to the first world war and the study of what was called “shell shock syndrome”. The application of PTSD to the study of child abuse and maltreatment is a relatively recent phenomena.

The field of trauma theory has not limited itself to the clustering of symptoms and the diagnosing of PTSD; much effort has been placed in understanding the processes of trauma development. Horowitz (1990) has developed a theory of trauma that relates symptomatology to underlying personality processes. He describes the response to

traumatic events in terms of two symptom clusters, intrusion and avoidance. A normal response to trauma goes through a series of phases, starting with emotional outcry, followed by a phase of exhaustion and denial, and then a phase of intrusive thoughts and memories about the event. The working through of the experience requires that the individual exert enough control or avoidance to prevent being overwhelmed, but also allow memories and feelings about the event to be available for processing. A pathological response to trauma prevents the working through and integration of the experience. In these cases there is alternation between extreme states of intrusion that overwhelm the person, followed by intense avoidance that may take the form of dissociation or involve substance abuse for added numbing of thoughts and feelings (Horowitz, 1993).

Horowitz (1992) believes that the impact of the trauma has to do with the intensity and nature of the event, as well as with the nature of existing cognitive structures and the person's capacity for self-regulation. Schemas of self and others result in normal expectations that are challenged by unexpected trauma. The resulting discrepancy brings about an emotional reaction of alarm which initiates the process terminating in the transformation of the previous schemas. As a consequence, a new meaning of self and others is created out of the experience. However, if the person does not have the capacity for the self-regulation required to tolerate the experience to some degree, the integration and development of new schemas cannot take place.

When trauma occurs in childhood the impact is believed to almost always have maladaptive effects because children have not completely developed the self-regulating capacity and their cognitive schemas are not adequately formed. Horowitz (1992)

suggests that lack of self-regulation capacity results in contradictory, unintegrated schemas of self and others, held in isolation from each other. This results in dissociation between different aspects of the personality which, in turn, is believed to prevent normal development. Furthermore, children may develop a "trauma schema" that is later activated by life events and which results in maladaptive responses to current situations.

Along the same general lines, a perhaps more comprehensive theoretical integration has been provided by Judith Herman (1992). In her view, trauma "overwhelms the ordinary systems of care that give people a sense of control, connection, and meaning" (Herman, 1992, p.33), thus affecting both the psychological structures of the self and the interpersonal attachment system. Because the child is a personality in formation, the impact of childhood ongoing trauma has very pervasive consequences:

"The child trapped in an abusive environment is faced with formidable tasks of adaptation. She must find a way to preserve a sense of trust in people who are untrustworthy, safety in a situation that is unsafe, control in a situation that is terrifyingly unpredictable, power in a situation of helplessness. Unable to care for or protect herself, she must compensate for the failures of adult care and protection with the only means at her disposal, an immature system of psychological defenses." (Herman, 1992, p.96).

In Herman's view, the adult who grew up in that kind of abusive environment then attempts to negotiate adult relationships with the same immature child defenses which are no longer adaptive and which prevent the development of an integrated identity and of intimacy in relationships.

Herman (1992) specifically proposes a model of Complex Post-traumatic Stress Disorder which encompasses several areas of personality change and function that have

been found related to child abuse. The diagnostic areas include alterations in affect regulation (including for example dysphoria, and explosive anger), alterations in consciousness (for example, dissociation), alterations in self-perception (self-blame, paralysis of initiative, etc.), alterations in the perception of the perpetrator (from preoccupation with revenge to idealization), alterations in relations with others (distrust, withdrawal), and alterations in systems of meaning (hopelessness and despair). It is easy to see that this model includes an array of interacting personal and interpersonal and environmental variables along the same lines as the models arising from research with children.

Building on this model, Harvey (1996) has proposed an ecological view of trauma impact and recovery. This view integrates factors related to the person, the event, and the overall context and meaning structure of the community and society the person belongs to, and from which the person draws identity. Person factors include specific demographic and personality characteristics as well as developmental and trauma history, and factors related to the relationship of the person with the individual(s) connected with the traumatic event. Person factors also include culturally-based meanings the person gives to the trauma event and to recovery. Event factors include specific characteristics of frequency, severity, duration, and violent and violating nature of the event. As well, they include circumstantial factors that may make it particularly significant for the individual and for the community the individual belongs to. Finally, environmental factors are related to specific characteristics of the individual's support system and its capacity to provide

safety or enhance adaptive coping. At the larger level, it includes community's attitudes and values that may affect traumatization, victimization and recovery.

In conclusion, models of maltreatment impact and trauma recovery arising both from research with children and with adults have become progressively more inclusive and complex. From a focus on specific impact symptoms these models have evolved to include historical and current, personal and interpersonal, and individual and community variables. This larger picture of trauma facilitates an integration and understanding that brings ideographic richness back into research. As well, this more comprehensive and integrated knowledge would seem quite necessary to facilitate both prevention and recovery from trauma impact.

## CHAPTER 3

### ATTACHMENT THEORY AND RESEARCH

#### Attachment Theory

Attachment theory has its formal origin in the work of John Bowlby in the 1950's. According to his own account (Bowlby, 1988), he developed his theory while working for the World Health Organization on a study of the needs of homeless children. During this period he had the opportunity to investigate the effects that severe maternal deprivation, as found in institutionalized children, had on the children's health and psychological development. Bowlby, who had previously worked within the scope of psychoanalysis, found that his observations of these children's behaviour could not be explained in terms of classical theory. These children would go through a sequence of reactions to institutionalization which started with a stage of loud protest at separation from the mother, followed by increasing anger and despair, and ending in a third stage of withdrawal and listlessness. The children who were reunited with their mothers later tended to ignore her rather than rejoice at the encounter. Bowlby did not believe that this behaviour sequence could be explained in terms of build-up or discharge of libidinal energy. He proceeded to abandon libidinal theory and to focus instead on the impact that the depriving environment had on the personality. That is, he returned to Freud's earlier postulates of traumatic events as focal influences in the development of psychological pathology. In pursuing his theoretical alternative, Bowlby was greatly influenced by the ethologists of the time, particularly Konrad Lorenz, who was investigating the process of imprinting in animals, by Neo-Darwinian theories of evolution, and by theories of cybernetics

and biological control systems. Bowlby also describes later being influenced by Harry Harlow's work on maternal deprivation in monkeys, which seemed to him to prove that the formation of a strong bond to a maternal figure was not dependent on the satisfaction of hunger, as libidinal theory maintained (Bowlby, 1988).

The thrust of attachment theory is based on the nature of the relationship bond that an infant develops with the caretaking figure, often the mother. In his writings Bowlby (1971) describes this bond as arising from a basic instinctual need to pursue a felt sense of security by seeking proximity to the caregiver. Bowlby's idea of instinct is very different from that found in classical psychoanalytic theory. Classical theory sees instinct as a survival (or as entropy = death) urge based on tissue needs. The mechanisms of action are based on a push-pull "hydraulic" analogy of over-full or empty containers. Attachment theory, in contrast, is based on a biologically more modern theory of instinct. It describes the instinctual bond of the infant to the mother as based on an inborn behavioural system that has arisen out of biological adaptive pressures and which has the consequence of increasing the chance for survival. The genetic component of this system determines a very basic cognitive-affective template which in the neonate shows as highly stereotyped and reflex-like behaviours such as grasping, smiling, crying, etc. With cognitive maturation and environmental feedback, the system gains in organization and complexity, and becomes adapted to the particular environment of the particular individual. Thus the final product is unique to a specific individual and is the result of the continuous interaction between the schematic inborn systems and the specific environment in which the individual is embedded.



Bowlby not only proposed a different way of understanding instinct, but he gave precedence to a different kind of survival instinct compared with psychoanalytic theory. While classical theory proposes that the most basic expression of the survival instinct is centred around feeding and sexual needs, attachment theory sees the survival instinct to be centred around security and protection needs. This survival instinct is considered the result of adaptation to ancestral predatory selection pressures. Bowlby believed that his theory of the primacy of the attachment system was demonstrated by a series of experiments conducted by others with rhesus monkeys. In these experiments, newborn monkeys were separated from their mothers and placed in the presence of two artificially constructed “surrogate” mothers. One of these “mothers” was made of uncovered wire mesh, the other was covered with terrycloth. Only one of the “mothers” had a feeding bottle attached to it. It was found that, regardless of which of the “mothers” had the bottle, the monkeys always preferred the terrycloth mother, particularly when they were frightened (Harlow and Harlow, 1969; Suomi, 1984).

In Bowlby’s view, it is this attachment survival instinct, conceived as a behavioural control system, that is at the core of personality development from infancy into adulthood. The theory is a structural one, as is psychoanalytic theory (Bowlby, 1988). That is, it hypothesizes the existence of psychological structures that influence how we relate to the environment. In attachment theory these structures are conceived as cognitive-affective schemata (working models) that arise out of the interaction between the innate behavioural systems and the interpersonal environment. They form a coherent set of thoughts and feelings about oneself in relation to others (working model of self) and about

others in relation to oneself (working model of others). In order for these working models to develop, the young child must be cognitively capable of maintaining object constancy in the absence of the specific object, thus internalizing concepts of self and others in interaction. This cognitive capacity is not available to the child until the second half of the first year. It is at this time when organized attachment behaviours and when a clear attachment preference for a particular person is seen (Bowlby, 1988).

Development in attachment theory is conceived as the outcome of an interactive process between person and environment along a particular developmental pathway (Bowlby, 1980). This idea of developmental pathways is based on Waddington's theory of epigenesis (Waddington, 1957), which states that the biological organism has at birth a number of genetic developing potentials conceived of as "time extended properties" or alternative pathways of development. Which pathway unfolds and how it unfolds depends on the interaction of this organism with the environment. According to Bowlby (Bowlby, 1973), development needs to deal with an apparent contradiction: there is an advantage to adapting to a particular environment so as to prepare and set goals in anticipation to predictable changes. But then, adaptation to a specific environment limits the ability to accommodate to new environments and to unanticipated events. Development then requires both adapted psychological structure and adapting flexibility. Working models are thus conceived as relatively stable structures which may persist even in the face of environmental disconfirmation, but which have the capacity to adapt to environmental changes.

The persistence of working models is accounted for by cognitive processes, such as selective attention, and by the choice of environments that are congruent with the existent models. Significant environmental changes, however, should produce a cognitive accommodation and a re-working of the previous model. In Bowlby's view (Bowlby, 1988), this relatively flexible capacity to accommodate takes place when the person is securely attached. He believes that when the person is insecurely attached, the resulting working models become inflexible schemata that do not adapt well to new environments. It is in this context that Bowlby talks about defensive processes by which the person persists in interpreting the new environment as identical to the earlier environment, and continues to respond in the same, now maladaptive, way.

In general, attachment theory holds onto principles of ethology and biology that are still mainly current. However, Bowlby's focus on predatory selection pressures as the origin of attachment adaptations is not a current one in ethology and evolutionary theory. More current views include the concepts of inclusive fitness, parental investment, and kin selection as responsible for evolutionary processes (Hess and Petrovich, 1991). Along these same lines, Lamb, Thompson, Gardner, Charnov, and Estes (1984) suggest that survival of the individual per se is not selected for: The key to inclusive fitness is the reproductive success of a set of individuals who share similar genes. From this evolutionary perspective, there is a trade off between lifetime parental fitness (which implies dividing resources among the set of offspring) and individual offspring survival. As we shall see later, this is an important point to keep in mind when attachment behaviour is interpreted in terms of biological adaptation.

## **Attachment Research: Childhood**

Attachment theory has produced a large body of research literature over the years. The impetus for the research in the area came from the operationalization of the theory by Mary Ainsworth (Ainsworth, Blehar, Waters, and Wall, 1978), which has made it relatively easy to test and to apply to different situations. Ainsworth designed a laboratory experiment in which 23 one year old infants were observed under seven different conditions in a novel environment. Each condition lasted three minutes and varied in terms of the presence/absence of the mother and the presence/absence of a stranger. At first the strategy had been to measure the child's protest at separation from the mother. However, it was found that it was the infant's behaviour upon return of the mother that produced a reliable classification of the infants into different groups. Upon the mother's return, Group A infants avoided their mothers. Group B sought contact and soothing. Group C infants displayed a mixture of contact seeking and angry, resistant behaviour which prevented their mothers from soothing them. Infants in groups A and C were considered to be anxiously attached, while the infants in group B were considered securely attached to their mothers. Later, subgroups were also found for each category, up to a total of eight. These patterns seen in the infants were then compared with previous observations in the home. It was found that mothers of securely attached infants were generally more responsive to the infant's needs and cries, while the mothers of anxiously attached infants were unresponsive, rejecting, or inconsistent in their responses.

Ainsworth's research has been criticized by some on methodological grounds. Lamb et al. (1984) have pointed out several methodological problems, including, 1) lack of interobserver reliability ratings for the home observations; 2) use of a large number of

highly intercorrelated exploratory variables regarding mother's behavior with the infant, only reporting a minority of these, and never testing these with new data; 3) tests of significance in the study do not prevent the capitalization on chance given the tremendous number of comparisons and subgroups and the small number of subjects.

Notwithstanding the criticisms, the strange situation design itself, as we shall see, has become a standard procedure used and validated in many studies across different types of samples. Antecedents of the attachment classification, including for example infant temperament, maternal attitudes toward the infant, maternal personality, maternal attachment style, caretaking behaviors, family stressful circumstances, etc., have been extensively studied. As well, a significant number of studies have focused on the issue of stability of the attachment classifications over time, and on their predictive validity.

Ainsworth's original study used a stable middle class US sample of mothers and their infants. The findings from this study have been reproduced in other middle class samples (Waters, 1978), in samples of populations below the poverty line (Vaughn, Egeland, Sroufe, and Waters, 1979), and in different countries (van Ijzendoorn and Kroonenberg, 1988). This study by van Ijzendoorn and Kroonenberg conducted a meta-analysis of 2000 strange situation classifications across 8 different countries. They found that infants from different social backgrounds and from different cultures could be classified into the attachment groups described in the original study. However, there was variation in the proportion of infants found to fit each group. For example, while the middle class American standard is about 70% secure, 20% avoidant, and 10% resistant (Ainsworth et al., 1978), German samples have produced proportions of 33% secure, 50%

avoidant, and 12% resistant infants (Grossmann, Grossmann, Spangler, Sues, and Unzner, 1985). Van Ijzendoorn and Kroonenberg (1988) meta-analysis found other cross-cultural distributional differences in Japan and Israel, where the proportion of resistant infants was found to be particularly high. Overall, however, the study found that intracultural variation was 1.5 times greater than cross-cultural variation; thus the authors concluded that the strange situation is cross-culturally applicable.

While most strange situation studies appear to be able to assign most infants to the three main groups described in Ainsworth et al. (1978), there have been exceptions. It appears that in certain samples, particularly in those including maltreated children, a significant number of infants cannot be classified into one of the three standard groups (see review by Cummings, 1990). Some authors have proposed a fourth category for these unclassifiable children. Crittenden (1988) described this fourth category as A/C (avoidant and resistant) because the infants presented with both avoidant and resistant behaviors. These infants also displayed odd behaviors (face covering, rocking, huddling on the floor) not seen in the other groups. Main, Kaplan, and Cassidy (1985) have suggested a different classification scheme including a group D of infants showing a disorganized/disoriented version of the main A B C patterns. These infants have been described as confused and apprehensive upon reunion with the parent, displaying simultaneous contradictory behaviors, incomplete movements, and unusual behavior sequences. Recent studies with older children include a fourth group labeled "controlling". Children in this group display a "role reversal" pattern with their parents and dominate the situation either by being caregiving or punitive toward the parent (Stevenson-Hinde and

Shouldice, 1995). Cummings (1990) has proposed that, given the difficulties of classifying children into three discrete groups (even Ainsworth et al., 1978 found several subgroups within each category), and given the heterogeneity found in the fourth proposed category, a continuous measure of attachment be included alongside the categorical grouping. As we shall see later, categorical versus continuous approaches have become important issues in adult attachment research.

In addition to the establishment of a standard procedure for measuring attachment patterns in infants, a most important aspect of Ainsworth's work relates to the association between these patterns and parenting factors. As we saw earlier, some of the findings related to this aspect of the early study (Ainsworth et al., 1978) have been criticized on methodological grounds (Lamb et al., 1984). However, there has been a large body of research on the antecedents of attachment that give support to the early conclusions. For example, Rothbaum, Rosen, Pott, and Beatty, (1995) found that ratings of maternal acceptance were related to secure attachment at ages 18-24 months. Egeland and Farber (1984) reported findings from a longitudinal study in which a large array of maternal variables were measured before the birth of their babies and at different intervals thereafter. The majority of maternal overall personality variables used in the study did not predict later infant attachment classification. However, scales related to maternal attitudes and feelings and nurses' ratings on mother's interest in the baby were related to attachment. The mothers of babies later classified as secure appeared to have a more mature attitude toward the child-rearing role. On the other hand, mothers of later avoidant children had negative feelings toward motherhood and were less interested in caring for

the baby. Findings related to observations of mother-infant interactions in the first few months after the birth generally supported the findings of Ainsworth et al. (1978). Mothers of infants later classified as secure were more cooperative with their infants and more sensitive to their needs compared with mothers of insecure infants. The weakest caretaking skills were found in mothers of resistant infants. Similar results have been found for mothers of older children. Stevenson-Hinde and Shouldice (1995) measured attachment in 4.5 year old children and found that the mothers of the children classified as secure were rated higher in their ability to provide a relaxed home atmosphere, and were more affirming and sensitive to the child during a laboratory joint task compared with the mothers of insecurely attached children. Findings relating attachment to the parenting practices of the child's primary caretaker have been replicated in many other studies (see reviews by Bretherton, 1985; Cassidy and Berlin, 1994). The evidence thus supports the hypothesized relationship between parenting and attachment patterns in the child.

Some attachment studies have included a complex multivariate context in relation to the formation of attachment patterns. The inclusion of a combination of factors like infant temperament, mother's marital and social support, and stress variables in addition to mothering styles appear to explain attachment outcomes relatively well (Belsky, Rovine, and Fish, 1989). For example, there is evidence that infants rated by nurses as temperamentally more irritable and harder to soothe are over-represented in the resistant attachment group. However, the path to resistant behavior appears to need the additional factor of poor mothering skills, as irritable infants who are exposed to good caretaking skills become later securely attached (Egeland and Farber, 1984). Furthermore, maternal



attitude and sensitivity toward their babies seems to be negatively affected by marital discord (Belsky et al., 1989). Life stressors can also affect the quality of mothering, but only in the absence of adequate social supports for the mother (Egeland, Carlson, and Sroufe, 1993).

Attachment theory predicts both stability of attachment patterns over time and variability of these patterns under certain circumstances. Furthermore, early child attachment is believed to be more readily affected by environmental changes compared to mature patterns which have been organized into consistent working models.

Evidence to support these points is growing as new methodology for measuring attachment at different ages becomes available. The strange situation procedure, originally designed for infants of one year of age, has been developmentally modified in order to apply it to toddlers, preschoolers, and even older children (see for example Main et al., 1985). Temporal stability between 12 and 18 months of age has been found to be high in middle class samples with high environmental stability. For example, Waters (1978) found that 96% of their sample of 50 infants received the same attachment classification at 18 months as they had at 12 months. Similar findings apply to stability over longer periods of time. Main et al. (1985) found significant stability between attachment to mother classifications at one and six years of age (correlation .76) for a middle class sample. Low SES samples exposed to high environmental stress have lower attachment stability. For example, Vaughn et al., (1979) found that only 62% of their sample of 100 infants retained the same classification over a 6 months period. Furthermore, it was found that

changes from secure to insecure attachment were related to the occurrence of specific stressful-events.

Findings regarding attachment temporal stability, as those described above, have not always been interpreted as supportive of attachment theory. Lamb et al. (1984) have suggested that the strange situation is most likely a measure of the stability of the child's environment rather than a measure of an enduring pattern of relating (see also Lewis and Feiring, 1991). Arguing against this conclusion, Sroufe, Egeland, and Kreutzer (1990) set to test attachment theory predictions regarding how early attachment adaptations would affect later adaptations beyond the influence of the concurrent environment. The sample consisted of 190 low SES families participating in a long-term longitudinal study. Attachment was measured at 12 months and 18 months with the strange situation procedure. A variety of measures of competence and adaptation were obtained at 24, 42, and 54 months of age, and for a subsample at 10 years of age. These measures included observations of how the children managed specific tasks and situations, as well as teacher ratings on a variety of factors including behavior problems, peer competence, and emotional health. As well, a global measure of the home environment was obtained when the children were 30 months old and 6 years of age. It was found that early home environment and early attachment each had unique contributions to the prediction of adaptive functioning in preschool. For grades 1-3, both early home environment and preschool adjustment had predictive power, but the contribution of early attachment did not. However, attachment showed a significant contribution if the effects of preschool adjustment were removed from the equation. At 10 years of age, early attachment had a

significant unique contribution to current functioning (social skills and self confidence) beyond the contribution of elementary school variables. The authors conclude that the results support Bowlby's view of development in which both developmental history and current circumstances contribute to current adaptive functioning.

The predictive validity of early attachment has been examined in a large number of studies. In general, infants classified as secure show better cognitive development, better adjustment, and better social functioning than insecurely attached infants during the preschool and school years (see Bretherton, 1985 for a review). For example, Sroufe (1983) examined several outcome variables in 4-5 year old children whose attachment patterns had been obtained at age 24 months. He found that, compared to the anxiously attached groups, the children who had been classified as secure were more flexible, resourceful, were higher in agency and self-esteem, showed more positive affect, and were higher in social competence and empathy. Berlin, Cassidy, and Belsky (1995) found that 5-7 year old children with a history of ambivalent attachment in infancy had higher loneliness scores than children with a history of secure attachment. Consistent with the researchers' expectations, children with a classification of avoidant attachment, had the lowest loneliness scores. This finding was interpreted as reflecting an internal working model that suppresses the recognition and expression of emotional vulnerability. Internal working models are also believed to shape social interactions. For example, Troy and Sroufe (1987) observed preschoolers dyadic social interactions and found that patterns of exploitation and manipulation (which they labeled "victimization") were never found whenever at least one of the two interacting children had a history of secure attachment.

In contrast, all pairings where one child had a history of avoidant attachment and the other a history of resistant attachment showed a pattern of victimization. All victimizers had an avoidant attachment history.

In summary, child attachment research has developed some reliable and cross-culturally valid ways to measure attachment in childhood. While some issues remain, for example in terms of whether three or four classification groupings should be used, results are encouraging. Both parental and stress factors, and to a lesser extent, temperament, have been associated with the formation of attachment in children. The stability of attachment patterns over time is greater for secure than for insecure attachment. Stability appears related to the stability of the environment to a certain extent. Both findings are congruent with attachment theory although they cannot be unequivocally interpreted. Theoretical predictions regarding adjustment and adaptive functioning of the different attachment styles have generally been supportive by research findings.

### **Attachment research: Adulthood**

Attachment theory hypothesizes that the internal working models formed in infancy will continue to organize experience throughout the life span. At the same time, life experiences can have an impact on internal working models which can then be updated to include the new experiences. Thus the theory predicts that infant attachment patterns will show a significant stability over the life course, but in a context of change in response to environmental variations. As we saw earlier, these hypotheses have received support from longitudinal data relating infant attachment and childhood attachment patterns. The link between infant attachment and adult attachment has not been as clearly established. Neither has the continuity of attachment patterns in adulthood been much studied. However, indirect support for the continuity of attachment patterns comes from studies relating parent's attachment styles to their infant's attachment patterns. Studies in this area have multiplied since Main (Main and Goldwyn, 1984) designed a measure of adult attachment, the Adult Attachment Interview (AAI).

The AAI is based on the idea that internal working models of attachment will show in the way that subjects talk about their early experiences with their parents and their current state of mind in relation to these experiences. State of mind refers to factors such as current idealization, anger, or dependency towards the parents. Ratings for this dimension are based not on specific content as much as on process variables such as congruency, affective quality, and form of the descriptions. The interview groups respondents into four categories or attachment styles that are believed to correspond to the infant attachment patterns defined by Main et al. (1985). The theoretical

correspondence between infant and adult classification are: Secure infant-Secure adult, Avoidant infant-Dismissing adult, Resistant infant-Preoccupied adult, and Disorganized/Disoriented infant-Unresolved adult. An adult is classified as secure with the AAI if the person shows a good and balanced understanding of self and others and can describe early experiences easily and coherently, backing assertions with specific memories of events. The dismissing pattern is assigned in the context of having been exposed to rejecting parenting. Dismissing adults tend to focus only on positive accounts of early experiences which are not accompanied by specific memories of positive interactions. The impact of negative experiences is thus unacknowledged. Preoccupied adults, present a copious but confused account of early experiences and feelings. Lastly, the unresolved style is assigned when an adult seems to not have resolved past trauma or attachment loss issues, and has disorganized thought processes in relation to the traumatic or loss experiences.

Using the AAI with parents and the Strange Situation procedure with their infants, inter-generational agreement between attachment styles has been found to be relatively high. Main et al. (1985) studying a sample of 40 upper-middle class families found a concurrent significant correlation of .62 between the attachment styles of mothers and their 6 year old children's early attachment classifications. The specific attachment pairings were in the expected direction for all four attachment types. However, the relationship between father and infant attachment was weaker with a significant correlation of .37. Steele and Steele (1994) in a recent review article report some of their own unpublished findings with a similar middle class sample of 96 mothers and 90 fathers. Father-infant

attachment correlations were lower ( $r=.35$ ) than mother-infant attachment correlations ( $r=.50$ ). They comment that given that the strange situation was designed for studying infants and their mothers, it may not be as sensitive to characteristics of the father-infant relationship. An alternative explanation is that given the greater caretaking role that mothers tend to have with their infants, this relationship becomes the primary one for the formation of internal working models in the child. Since most attachment research has focused on the relationship with the mother, the role of fathers in attachment remains unclear.

Three prospective studies of mother-child attachment give strong support for the transmission of attachment but also show the complexity of the issue. Fonagy, Steele, and Steele (1991) studied attachment styles in primipara pregnant women and the subsequent attachment patterns of their infants a year later. The sample was a stable, well educated, middle class sample ( $N=97$ ). The AAI was administered during the third trimester of the pregnancy and coded for three attachment styles. Sixty two percent of the women were classified as secure, 23% as dismissing, and 15% as preoccupied). The strange situation procedure, coded for three infant attachment patterns resulted in 57% secure, 32% avoidant, and 11% resistant. It was found that 75% of the secure mothers had secure infants and that 73% of insecure mothers had insecure infants. Within the insecure classification, 68% of dismissing mothers had avoidant infants, but only 20% of preoccupied mothers had resistant children. In fact, 55% of resistant children had secure mothers, a finding that is discussed in terms of a possible unsuccessful adaptation to

motherhood in these women. It would have been interesting to see whether, in fact, these mothers could still be classified as secure at the time of the infant classification.

Several other discrepancies were discussed in the study. An interesting post-hoc finding was related to ethnic background. About 73% of the mothers born outside the UK were classified as insecure (compared to 33% of the UK born), but only 55% of their infants were coded as insecure. This could indicate that there was a confounding factor related to a cultural bias in the interview ratings. Another interesting finding was related to the fourth attachment classification of unresolved/disorganized patterns. Only 8 of the 97 women were unresolved, and of these, three (33%) had disorganized infants. The proportion of disorganized infants with mothers who were not unresolved was only 6%. The authors point out that while these findings are in the expected direction, the measured association between unresolved and disorganized patterns is not as strong as that found in retrospective studies. The number of subjects with this attachment classification was perhaps too small to generalize the results.

All together, the results of this study give strong support for the transmission of attachment security/insecurity from the mother to the infant. Findings are not so clear in terms of transmission of specific insecure styles. Because other factors such as environmental changes, attachment to father, or change in mother's attachment classification over one year, were not studied, the discrepancies found are hard to interpret.

Ward and Carlson (1995) conducted a similar prospective study with a low SES sample of 72 pregnant teenagers from ethnically diverse, mainly non-Caucasian



backgrounds. As in the previous study, the AAI was given to the mothers prenatally. At the time of the infant participation in the strange situation procedure (15 months after birth), observed ratings of maternal sensitivity in her interaction with the infant were also obtained. Using the four-group classification system, there were 32% secure, 36% dismissing, 6% preoccupied, and 26% unresolved mothers. The proportion for the infants was 44% secure, 34% avoidant, 4% resistant, and 18% disorganized. The correspondence between mother and infant attachment was high. Eighty-six percent of the secure mothers had secure infants, 73% of the dismissing mothers had avoidant infants, 60% of the preoccupied mothers had resistant infants, and 43% of the unresolved mothers had disorganized infants. Unexpectedly, ratings of maternal sensitivity, although related to maternal attachment, were unrelated to infant attachment. The authors suggest that these findings might be due to a confound factor related to living arrangements in which some of the adolescent mothers delegated their infant's primary care to others. This situation may also account for findings showing that a significant number of secure infants (41%) did not have secure mothers.

Benoit and Parker (1994) extended the study of attachment transmission to three generations. The sample consisted of 96 stable Caucasian families from middle to upper-middle class background. As in the other studies, the AAI was given to the participating mothers before the infants were born. The AAI was also given to the grandmothers at this time. In addition, measurements of life stress, social support, self-esteem, and marital satisfaction were obtained for the mothers. A further innovation in this study was the administration of a second AAI to the mothers a year later, at the time the infant's

attachment was measured. The stability of attachment for the women over a year period was high (77%) using the four-group classification and very high (90%) using the three-group classification. These stability findings are not unlike those presented above in relation to infant attachment stability over six months in middle class samples (Waters 1978). As expected, the concordance between the pregnant women's attachment and their infants' attachment patterns a year later was high (81% for three-group and 68% for four-group classifications). The concurrent attachment measurement provided slightly higher concordance between mother and infant (82% for three-group and 74% for four-group classifications). The concordance between mothers' and grandmothers' attachment style was 75% for the three-group classification but only 46% for the four-group classification. The authors comment that this last result was due to a large number of unresolved grandmothers with secure daughters. An explanation is provided by the naturally higher number of losses (twice as many compared with the daughters) experienced by the grandmothers during their longer lives. Using the three-group classifications, the triads of grandmother-mother-infant showed 65% correspondence of attachment across the three generations.

The results described above give support to the hypothesis that the mother's own attachment style determines to an important extent the attachment pattern of her child. The findings of concordance across three generations particularly add to the strength of this conclusion. Indirectly, these findings give some support to the notion of stability of adult attachment: No such transmission would be possible unless the attachment styles of the adults remained to some extent stable over time. The findings with the one year

stability study for mother attachment renders additional support for this conclusion, specially for the secure attachment pattern. Secure attachment, as we saw earlier, is also more stable over time in children's samples and the pattern of stability seems to continue into adulthood.

The AAI has been also applied to the study of personality correlates of the attachment styles. For example, Kobak and Sceery (1988) examined ego-resiliency, ego-undercontrol, hostility, anxiety, psychological symptoms, and perceived social support in a middle class sample of 53 college students. Q-sort descriptions of each subject by three of their friends were also obtained. Using the three-group classification for the AAI, they found that the insecure groups had less ego-resiliency than the secure group. The secure group was overall, both in terms of self-ratings and peer-ratings, the best adjusted group. Dismissing subjects were rated low in ego resilience by peers, but their self-ratings indicated that they believed themselves to be high in ego-resiliency. Peers' ratings also indicated that the dismissing subjects were the most hostile of the three groups. At the same time, dismissing subjects rated others as being less supportive compared with preoccupied and secure subjects. The preoccupied subjects had low ego-resiliency, were the highest in anxiety and psychological symptoms, and perceived themselves as socially incompetent. However, they believed that others were available and supportive. As we shall see later, these findings fit well with Bartholomew's (Bartholomew 1990) view regarding preoccupied subjects having a negative model of self while holding a positive model of others, a situation which is reversed in the dismissing group.

Another step in the study of personality and attachment style has been the inclusion of physiological correlates. In a very interesting study, Dozier and Kobak (1992) examined the issue of attachment deactivation in 50 college students. The idea of deactivation comes from the hypothesis that the activation of attachment seeking behaviors is a primary coping strategy. That is, under situations of fear or stress, the person will naturally reach towards the attachment figure. When this strategy fails to produce the desired results and the infant meets rejection or worse, secondary strategies of deactivation or hyperactivation of the attachment system develop. Deactivation strategies are associated with restricted access to memory while hyperactivation strategies are associated with excessive memory detail. Theoretically, deactivation strategies would be found in the dismissing adult and the avoidant child. Preoccupied strategies would be typical of the preoccupied adult and the anxious-resistant child.

Dozier and Kobak (1992) measured deactivation and hyperactivation as a continuous variable using a Q-sort method developed for assessing responses to the AAI. Skin conductance levels were monitored during the administration of the AAI, in the belief that subjects using deactivating strategies would feel conflicted as the interviewer probed into attachment events they did not want to think about. As expected, the results showed that subjects who used deactivation strategies had the greatest rises in skin conductance with questions that probed into childhood interpersonal negative events. While the skin conductance levels indicated autonomic arousal related to a stress response, the subjects appeared behaviorally unperturbed.

Similar findings of high physiological stress (measured in terms of cardiac response and cortisol levels) concurrent with low behavioral appearance of distress have been obtained for avoidant children in the strange situation (Spangler and Grossmann, 1993). The findings are thus congruent with the expectations of attachment theory regarding the prototype of the dismissing individual and the avoidant child and support the notion of a common underlying strategy in infants and adults assumed to have a similar internal working model. Parallel investigations are not yet available for the prototypes of preoccupied adults and anxious infants.

In summary, research with the AAI has produced encouraging results. Studies of intergenerational transmission of attachment indicate a strong connection between mothers' and infants' attachment styles. There is evidence of temporal stability of attachment in adults over one year. As well, there are many correlates of personality and even physiological responses that differentiate among attachment classifications. However, there are some limitations to the measure. Some issues of attachment classification, particularly related to the fourth type of unresolved adults, remain unclear and produce inconsistent results. Perhaps another limitation is the focus on attachment in terms of the family of origin exclusively. From the point of view of attachment theory, internal working models operate not just within the realm of parent-child relationships in the adult, but serve to organize romantic relationships which now become the central stage for attachment adaptations (Bowlby 1988). As we shall see in the next section, a significant amount of adult attachment research has shifted towards the study of attachment in adult romantic and peer relationships.

A very productive area of adult attachment research originated with the conceptualization of romantic love and attachment developed by Hazan and Shaver (1987). Romantic love is seen, in agreement with attachment theory, as an integration of several behavioral systems including the attachment, the caregiving, and the reproductive system. While attachment is not conceptualized as equivalent to romantic love, Hazan and Shaver believed that much phenomena seen in romantic relationships could be understood and theoretically organized in terms of attachment processes. They proceeded to develop a single-item measure of romantic love attachment designed to correspond with Ainsworth's child attachment patterns. The new measure consisted of three paragraph-length descriptions of adult attachment styles designed to correspond to the secure, avoidant and resistant styles found in childhood. Subjects were to read the three paragraph-length descriptions and decide which one described them the best.

Hazan and Shaver (1987) validated their new measure over several studies. They predicted that the proportion of attachment styles would be similar in adults and children. Therefore they compared the attachment style percentages found with their measure and those found in children using the strange situation procedure. It was found that the distributions of attachment styles in adults and children were very similar: the distribution found in adults was 56% secure, 24% avoidant, and 20% ambivalent, compared with the average distribution of 62% secure, 23% avoidant, and 15% ambivalent found in American children using the strange situation (Campos et al. study as cited in Hazan & Shaver, 1987). Another way to validate their measure consisted of concurrent and criterion validity studies. They found correlations among romantic attachment, behaviors

believed related to attachment, and attachment history. For example, secure subjects were trusting, happy, and friendly in relationships, were able to receive and provide support to their partner, saw themselves and their significant others in a realistic light, and had longer marriages than the other two groups. They also reported warm childhood relationships with their parents. Avoidant subjects appeared afraid of intimacy, presented a history of emotional highs and lows and jealousy, and were the least accepting of the three groups. In terms of childhood history, they described their mothers as cold and rejecting. The ambivalent group appeared obsessed with love and the desire for union. Love at first sight was a familiar experience for them, and they were subject to extremes of emotions and jealousy in their relationships. Childhood history indicated that ambivalent subjects presented their fathers as having been unfair to them.

The findings reported in these initial projects have been replicated and expanded in the context of new methodological developments. The initial one-item measure has been expanded to include 7-point rating scales for the dimensional measurement of attachment. The paragraph descriptions of attachment styles have been broken down into several separate questions to derive a multiple item questionnaire (see Brennan and Shaver, 1995 for a selective review). The most recent approach has focused on the development of a series of 7 new scales for the measurement of specific attributes of the attachment styles. These scales cover aspects of trust, jealousy, ambivalence, self-reliance, proximity seeking, frustration with partners, and anxious clinging to partners. Brennan and Shaver (1995) compared these scales to their single-item measure in a sample of 242 college students. The findings were congruent with expectations with the exception of the ambivalence

scale which seemed to apply to the avoidant rather than to the anxious-ambivalent attachment style. In general, avoidant subjects were more frustrated with their partners and more self-reliant, trusted less, and did not seek proximity. The anxious ambivalent subjects were more clingy and jealous and also had low trust and high frustration with partners. The secure subjects were high in trust and proximity seeking and were low in all the other scales. The authors also examined the construct of affect regulation operationalized in terms of strategies used to regulate emotions. The strategies measured were: 1) fantasizing about and engaging in casual sex; 2) use of alcohol to reduce anxiety; and, 3) using food to reduce anxiety. Results indicated that avoidant subjects were less committed to relationships, engaged more in casual sex, and tended to drink more than ambivalent subjects, these latter using alcohol more than secure subjects. Eating disorders were positively correlated with insecure attachment and negatively correlated with secure attachment.

In general, predictions for the three attachment styles in relation to personality and psychological functioning variables are compatible with those found with the AAI. One exception is the AAI dismissing attachment style and the Hazan and Shaver avoidant style. As we shall see later in more detail, the two styles should be equivalent but this is not so. In fact, Hazan and Shaver's avoidant style has some of the characteristics of the AAI disorganized type and does not show the same defensive structure of the dismissing type. This issue relates to problems of classification into predetermined typologies and, as we saw earlier, is frequently found in attachment literature. The problem has encouraged the



development of new ways of studying attachment which include the use of continuous dimensions.

A number of authors have independently arrived at the idea of using continuous dimensions for evaluating attachment. Cummings (1990), facing the problem of inconsistencies in attachment classifications in children proposed the inclusion of a continuous measure of felt security. As we saw earlier, the child literature showed that it was not always possible to classify attachment into three distinct categories. Ainsworth et al. (1978) had found several attachment subtypes in addition to the three main categories, and other authors had seen it necessary to add a fourth attachment style (Crittenden, 1988; Main et al., 1985). In Cummings' view, the continuum of felt security would add useful information particularly for cases that were not easily classifiable into the established categories.

Some researchers working with continuous ratings of the AAI have conceptualized attachment in terms of two orthogonal dimensions. Dozier and Kobak (1992), in the study described earlier, proposed one dimension of security/anxiety related to primary attachment strategies and a second deactivation/hyperactivation dimension related to secondary attachment strategies. The first dimension differentiates between security and insecurity, the second differentiates between avoidance and ambivalence.

Brennan and Shaver (1995) have reported factor analytic studies with three continuous scales and a questionnaire measure derived from Hazan and Shaver (1987) original single-item measure. Two underlying orthogonal factors have been consistently found, one which has been labeled Insecurity, the other Preoccupation With Attachment.

The first factor correlates positively with avoidance and negatively with security, and does not correlate with anxious-ambivalence. The second factor correlates positively with anxious-ambivalence, negatively with security, and does not correlate with avoidance.

While Hazan and Shaver (1995) have focused research on three attachment groups, they believe that the two factor structure they have found is compatible with a two theoretical dimension solution proposed and tested by Bartholomew and Horowitz (1991) which results in four adult attachment classifications rather than three. Bartholomew and Horowitz (1991) conceptualized these two attachment dimensions as a positive-to-negative continuum, one related to an internal working model of self and the other to an internal working model of others. Placed orthogonally to each other the two dimensions have been used to describe four distinct attachment prototypes: secure, preoccupied, dismissing, and fearful.

The use of “prototypes” as opposed to attachment types is an interesting innovation. According to Griffin and Bartholomew (1994), a categorical typology implies the grouping together of individuals that might be quite different from each other, specially when forced classification of not-so-well-fitting cases is used. Individual differences within each group are then considered error variance. This implies a possibly significant information loss in the analysis. In contrast, a prototype is conceived of as an abstracted description of an attachment pattern against which individuals can be compared. Thus the degree of association between an individual’s responses and each prototype can be examined, allowing the retention of more information about individual variation compared with the typological approach. The four prototypes proposed by Bartholomew (1990) are

related to the attachment dimensions in the following way: the secure prototype has both a positive model of self and others; the preoccupied prototype has a negative model of self but a positive model of others; the dismissing prototype is the opposite, with a positive model of self and a negative model of others. Finally, the fourth prototype has negative models for self and others. The first three prototypes correspond to the three styles found in the literature (secure, anxious/ambivalent and avoidant). The fourth style, labeled "Fearful" represents a new addition to adult attachment research.

Bartholomew (1990) argued for the inclusion of the fourth adult attachment prototype because of differences found in the literature regarding the avoidant style. Research with the Hazan and Shaver (1987) approach produced a different type of avoidant subject compared with the avoidant subject found with the AAI. As we saw earlier, Hazan and Shaver's self-report measure asks for the view a subject has of oneself. The AAI, on the other hand, taps into incongruencies of presentation which are believed to represent more unconscious attachment strategies. The avoidant style found by Hazan and Shaver is fearful of closeness because there is a concern that rejection is what will follow. The avoidance is self protective in the awareness that one would actually like to be close but believes that trying will result in rejection and hurt. The avoidant style obtained with the AAI method is more consistent with the deactivation of attachment strategy described by Bowlby (1988). These avoidant subjects do not pursue closeness because they do not consciously feel they need it or want it. Behaviorally both groups may engage in avoidant strategies that might look the same to an observer, but the internal processes behind the behavior are very different.

Bartholomew (1993) has suggested that this fourth group, the fearful avoidant, may correspond to the fourth style described in the childhood literature (Crittenden's avoidant/ambivalent and Main's disorganized/disoriented styles described earlier). Unfortunately, Bartholomew's model has not yet been adapted to the study of attachment in children. Research with adults, however, has produced compelling evidence supporting the four-prototype, two-dimensional model of attachment.

Bartholomew and Horowitz (1991) investigated peer and romantic attachment and family attachment in a series of studies with college students. A semi-structured interview, self-report questionnaire measures, and peer ratings were used. The interview (Peer Attachment and Family Attachment Interviews combined) explored family relationships, friendships, romantic relationships, and attitudes regarding the importance of close relationships. Two kinds of ratings were obtained. Similarity of the respondent to each of the attachment prototypes was judged along 9-point rating scales. Another 15 scales related to attachment issues were also coded for each subject. The self-report measure of attachment was the Relationship Questionnaire (RQ), an adaptation of Hazan and Shaver's (1987) measure which uses four short paragraph descriptions for the four attachment styles. Subjects use 7-point scales to rate how similar they think they are, or how similar they think a friend is, to each attachment description. The remaining measures in the study rated interpersonal problems, self-esteem, self-acceptance, and sociability, among others.

The results obtained by Bartholomew and Horowitz indicated a significant convergence of interview-based family and peer attachment patterns, attachment self-

reports, and peer reports. Consistent with expectations, the interview ratings produced the hypothesized two-dimension solution. As well, the prototype ratings showed criterion validity in relation to a number of variables. The secure and the dismissing prototypes correlated positively, and the fearful and preoccupied, negatively, with self-concept. Sociability correlated positively with the secure and preoccupied prototypes, and negatively with the fearful and dismissing prototypes. Each prototype was also found to have a particular pattern of interpersonal characteristics using a circumplex analysis. The circumplex patterns were generally congruent with expectations regarding each attachment style.

Griffin and Bartholomew (1994) have summarized validation studies of their two-dimension, four-prototype model, in the context of a multitrait/multimethod assessment of convergent and discriminant validity. Using the Peer and Family Attachment Interviews and the Relationship Questionnaire (RQ) described above, plus a multi-item attachment questionnaire (the Relationship Scales Questionnaire, RSQ), they found significant evidence of convergent validity for the four prototypes across methods. Discriminant validity was supported by low intercorrelations for different constructs measured by the same method. Further compelling evidence was also presented in the form of a latent variables analysis for the two hypothesized attachment self and other model dimensions. Results indicated a good fit between the hypothesized latent variable model and the actual sample data. The latent variables representing model of self and model of others were multiply determined by self-reports, interviews, and peer reports. The methods converged adequately in the measurement of the corresponding latent variable. Further, the

attachment latent variables were related in predictable ways to latent variables of self-concept and interpersonal orientation. Further discriminant validity studies also indicated that the attachment dimensions are not entirely explained by personality variables such as those measured by the five-factor model of personality. This model of personality explained only 27% of the variance in the latent model-of-others dimension and 48% of the variance in the latent model-of-self dimension. As well, the two attachment dimensions had additional explanatory power beyond the five-factor model in relation to interpersonal functioning measured with a standard interpersonal measure.

In summary, adult attachment research using different methodologies is converging in the validation of attachment theory. Whether researchers use three or four typologies, or discrete or continuous measures, the field shows promising results. Perhaps the two dimensional, four prototype approach is the most promising given that it has the potential to bypass previous classification and interpretation problems in the literature. Beyond the issues of stability and validity, attachment methodology seems now ready to explore more complex problems involving child maltreatment and trauma impact. As we shall see in the next section, attachment theory fits well with the application of complex models of trauma impact and personality development.

## **Attachment Research and Child Maltreatment**

Over the years attachment research has progressively focused on issues of child maltreatment. The theory lends itself very readily to this kind of investigation given its focus on the impact of actual experiences in the formation of the personality. Attachment theory is well suited for studying a continuum of dysfunctional parenting or the overall caretaking environment. The idea of internal working models is particularly useful because it can provide an organizing framework for the study of the impact of these early experiences on the adult. It can also help to understand situations of revictimization and intergenerational transmission of abuse. It has been hypothesized that parents maltreat their children because their internalized models of insecure attachment lead to avoidance, rejection, role reversal with the child (Crittenden and Ainsworth, 1989), and violence (Bowlby 1984). As we shall see, there is growing evidence that child maltreatment results in an insecure attachment organization that has maladaptive consequences both for personal development and for the development of the next generation.

There are a number of longitudinal studies that have studied child maltreatment and attachment. One of these is the Minnesota mother-child interaction project, aspects of which were already described in the child attachment review section. Egeland and Erickson (1987) studied a subsample from the larger study by selecting four groups of maltreated children: physically abused, verbally abused, neglected, and exposed to maternal psychological unavailability. They also selected a control group of non-maltreated children from the same sample. Results showed that at 18 months of age, the proportion of insecure attachment was much higher in the maltreated children compared

with the control group. As well, maltreated children had a significant number of behavioral, cognitive and social problems throughout the preschool years. A very interesting result of this study was that maternal psychological unavailability had the greatest impact on the preschoolers: at 12 months of age, 43% of the children from this group were classified as anxious avoidant; by 18 months, 86% of these children were classified as anxious avoidant and none were classified as securely attached. These children also showed a decline in development between 9 months and 24 months as measured by the Bayley Scales of Infant Development. Their behavioral problems during the preschool years were the most severe of all groups.

The finding related to maternal psychological unavailability is important because this variable is not usually included as a factor in maltreatment studies. An interesting corroboration for this finding comes from a study of infant's physiological responses (Field, 1994). This study measured maternal psychological unavailability experimentally by asking mothers to act as if they were unavailable. As well, they studied actual psychological unavailability in mothers who were suffering from depression. In both cases, psychological unavailability had more of a physiological and behavioral impact on the infant than actual maternal physical unavailability.

The impact of maternal psychological unavailability, however, seems to decline with age. Erickson, Egeland, and Pianta (1989) studied maltreatment in the children from the Minnesota project at six years of age. Some of these children, but not all, had been studied in the project described earlier. There were new abuse cases, in particular cases of sexual abuse that were not apparent in the younger sample. The new selected groups of



maltreated children included physical abuse, neglect, maternal emotional unavailability, and sexual abuse. Attachment was not measured again at this age so the percentage of insecure children in this sample was not known. The results indicated that maternal psychological unavailability did not have as extreme an impact at age six as it had had for younger children. Instead, neglected children were now the ones who presented the most severe problems compared with the other maltreated groups. Again, these findings are interesting given that physical and sexual abuse are usually the focus of maltreatment studies instead of either maternal psychological unavailability or maternal neglect.

This study found that some behavioral problems were uniformly present across maltreatment groups. For example, inattentiveness, difficulty concentrating, anger, social unpopularity, and inability to function independently. They also found behaviors that differentiated the physically and sexually abused groups: The physically abused children were particularly angry and aggressive, while the sexually abused children were the most dependent on adults and had the highest need for approval. The authors suggest that these behaviors appear related to attachment models of self and others, and that they are likely to make these children vulnerable to further abuse.

Findings from the Minnesota study at a later age are not very optimistic in terms of recovery or resiliency. Egeland et al. (1993) reported findings with these children up to age 18. The results indicate that maltreated children continued to deteriorate over time. Some presented sporadic improvements in certain areas of behavior at different points in time. These improvements tended to be temporary and were often related to specific changes in life circumstances or specific school programs. Overall adaptation remained

low. Protective factors such as improved care and support appeared to diminish, but did not eliminate, negative consequences.

Another important longitudinal data base that has studied attachment and maltreatment is the Harvard Child Maltreatment Project. Schneider-Rosen, Braunwald, Carlson, and Cicchetti (1985) studied two groups of low SES maltreated and non-maltreated children from this sample both cross-sectionally and longitudinally. They found high rates of insecure attachment in maltreated children compared with the controls. The maltreating families included had a legal record of child abuse/neglect. The children had experienced physical abuse, emotional abuse, and neglect. More than 53% of the children had experienced more than one type of abuse. Three cross-sectional measurements using the strange situation procedure were conducted, with 12, 18, and 24 months old infants. The maltreated 12 months old infants had attachment rates of 29% secure, 29% avoidant, 42% resistant compared with 67% secure, 11% avoidant, and 22% resistant in matched controls. The maltreated 18 month old infants had rates of 23% secure, 46% avoidant, and 31% resistant compared with 67% secure, 7% avoidant, and 26% resistant in the controls. The patterns were similar in the 18 and 24 months old infants. In the longitudinal section of the study it was found that the maltreated children's attachment patterns had low temporal stability compared with the control group. Furthermore, the classification changes within the maltreatment group tended to be from secure to insecure attachment and from one insecure group to the other. No differences were found for type of maltreatment received.

Carlson, Cicchetti, Barnett, and Braunwald (1989), also using a sample from the Harvard Child Maltreatment Project, classified the children into four instead of three attachment categories. As we saw earlier, both Crittenden (1985) and Main et al. (1985) had associated a fourth attachment classification with maltreatment. Carlson et al. (1989) found that about 82% of the infants in the maltreated group fit the fourth category of disorganized/disoriented attachment. In contrast, only 19% of the control group infants received this classification. Had the three-group attachment system been used instead, 50% of the maltreated children classified as disorganized/disoriented would have been classified as avoidant, 33% as secure, and 17% as ambivalent.

Carlson et al. (1989) also recoded the data from the earlier study by Schneider-Rosen et al. (1985). They found that most previous classification disagreements, when attempting to force-classify into three attachment groups, were with infants that fit the disorganized/disoriented category well. They also found that much of the attachment temporal instability found in maltreated children appeared due to the instability of this fourth attachment classification.

In summary, studies of child maltreatment and attachment with samples of children show a strong relationship between maltreatment and insecure attachment. Insecure maltreated children seem to move into the avoidant category over time when using the three-type classification system. However, when using four attachment categories, most of the maltreated children fall into the disorganized/disoriented attachment pattern. Longitudinal studies show that maltreated children deteriorate into insecure attachment, developmental delays and behavioral problems over time. Finally, types of maltreatment

that are often ignored in the literature, such as maternal psychological unavailability and neglect have a greater impact at some ages than either physical or sexual abuse.

Some of the studies of maltreatment and attachment have focused on the characteristics of the abusing parent. Pianta, Egeland, and Erickson (1988) studied a sample from the Minnesota longitudinal study when the children were 6 years old. They measured maternal variables related to personality, intelligence, home environment, life stressors, and experienced emotional support. A discriminant analysis indicated that maternal emotional stability was the strongest predictor for the assignment of children to maltreated and non-maltreated groups, followed by life stressors, experience of support, and maternal IQ. The discriminant function predicted 83% of the cases correctly. The findings give support to the notion that while stressors and social support have moderation effects, maternal personality organization, possibly attachment organization, is the crucial factor in child maltreatment by mothers.

DeLozier (1982) studied attachment variables in 18 mothers of physically abused children using a projective test (the Separation Anxiety Test) and a structured interview (Wallace-DeLozier Attachment Questionnaire). Compared to a control group of non-maltreating mothers, the physically abusive mothers were more anxious in response to mild separation test stimuli and more angry in response to strong separation test stimuli. They also had higher feelings of rejection, anger, and self-blame, and lower self-reliance. The results were interpreted as reflecting higher levels of attachment pathology in the abusing mothers. The structured interview showed that abusing mothers had been exposed to more threats of separation and threats to their physical safety than the control group

(actual physical abuse was not measured). However, they had not been more exposed to actual physical separations from caregivers compared with controls. In terms of current attachment variables, the abusive mothers had fewer expectations of support from others, and experienced more attachment difficulties during the stressful event of childbirth. They felt more unsafe, alone and frightened than controls, yet the two groups had very similar social support structures. Thus, it appeared as if their current feelings and attitudes arose not so much from the current circumstances but from an earlier personality organization around insecure attachment working models.

Main and Hesse (1990) have specifically related the transmission of abuse from parent to child to the disorganized/disoriented attachment pattern. They have suggested that adults who have not resolved past abuse issues or losses develop this attachment pattern which results in an unpredictable and perhaps abusive pattern of behavior. Unpredictable and confusing behavior in the parents is believed frightening for the children. A situation then arises in which the attachment figures that are supposed to provide safety when the child is afraid become the source of danger themselves. Main and Hesse (1990) have argued that under these conditions, the child's attachment system cannot get organized around a particular pattern, thus the observed disorganized and contradictory behaviors seen in these children.

Crittenden and Ainsworth (1989) argued that the disorganized/disoriented classification and the avoidant/resistant attachment classifications in children reflect the same behaviors. They proposed that they be considered not just a disorganization of the other three styles but that they be considered as an independent fourth style with a

particular course into adulthood. Crittenden (1988) has suggested an association of this fourth attachment pattern and a fearful or compliant/passive style later in life. This fearful style is congruent with the descriptions of abusive mothers provided by DeLozier (1982) and with the fearful attachment style proposed by Bartholomew (1990). As we shall see next, there is evidence supporting an association between a fearful attachment style and a history of child maltreatment.

Alexander (1993) has found a strong relationship between Bartholomew's fearful style and a history of child sexual abuse. The sample consisted of 112 women who had been incestuously abused as children. The measure of attachment used was the RSQ self-report measure developed by Bartholomew and described earlier. It was found that 58% of the women in the sample were in the fearful category, 14% were secure, 13% preoccupied, and 16% dismissing. This contrasts with proportions found in college students (Bartholomew & Horowitz, 1991) of 21% fearful, 49% secure, 12% preoccupied, and 18% dismissing. Another study with a sample of women of mixed SES using the peer and family adult attachment interview described earlier found a proportion of 24% fearful, 47% secure, 16% preoccupied, and 12% dismissing (MacKinnon, 1993). Interestingly, 79% of the women in the fearful category reported having experienced some form of child abuse compared with 23% of the women in the other attachment categories. An unpublished study conducted with college students and reported by Shaver and Clark (1994) also found a relationship between the fearful attachment style and a history of parental violence, incest, and psychological abuse.

As we saw in chapter 2, lack of resolution of early trauma has been associated with the formation of a Post-Traumatic Stress Syndrome (Briere, 1989, Deblinger et al., 1989, Herman, 1992)). It typically results in intrusive symptoms, such as flashbacks, anxiety states, nightmares, and avoidant strategies, including dissociation. It also includes symptoms of increased arousal, for example, hypervigilance, exaggerated startle response, outbursts of anger. Alexander (1992) has suggested an association between the fearful attachment style and PTSD given that the fearful individual fluctuates between approach and avoidance strategies. This fluctuation is believed to provide little affect regulation, thus leaving the individual in a state of anxiety. Given that the fearful style has negative models of both self and others it makes sense to think that their coping resources would be the least adaptive. From the trauma theory perspective provided by Horowitz (1992), people with an attachment fearful style could be seen as having the least capacity of the styles for trauma integration and resolution.

Alexander (1993) compared attachment styles in a group of sexually abused women to symptoms related to Horowitz's (1992) theory of trauma. The study used Bartholomew and Horowitz (1991) four attachment styles and Horowitz, Wilner, and Alvarez (1979) Impact of Events Scale among other personality and symptom measures. A secure style was associated with trauma resolution as reflected in low avoidance and low intrusion symptoms. The differences among the three insecure styles were not as clear cut. The preoccupied style was characterized by low avoidance; the fearful style had more symptoms in general; and the dismissing style did not show a characteristic symptom pattern.

The findings with the fearful style are congruent with expectations that this group will be the most unresolved in terms of trauma. High intrusion and high avoidance indicate a succession of overwhelmed states and rigidly controlled states which are believed to preclude working through the trauma (Horowitz, 1992). It is not surprising that women who experienced maltreatment and abuse in childhood are more likely to have a fearful attachment style and that this style is associated with lack of resolution of trauma. Here join theories of attachment, trauma, and ego development. A child who is impacted by maltreatment cannot form a secure attachment with caregivers who are the source of danger themselves. In this situation overwhelming experiences cannot be contained because the child does not have the attachment figure that would help contain it and does not have, because he or she is a child, the ego strength necessary to contain it. Resolution, which requires that the memory of the trauma be tolerated without becoming emotionally overwhelmed, is then impossible, and further ego development is compromised.

In summary, the research discussed in this section gives strong support to the association of maltreatment experiences and insecure attachment both in children and adult samples. Both the disorganized/disoriented style in children and the fearful style in adults seem to be over-represented in maltreated samples. These two styles have been associated with lack of resolution of trauma. Finally, the specific kind of maltreatment received does not seem associated with a particular type of insecure style.



## CHAPTER 4

### PSYCHOSOCIAL DEVELOPMENT THEORY AND RESEARCH

#### Psychosocial Development Theory

Erik Erikson developed his theory of psychosocial development in the late fifties and early sixties. As Bowlby, he had been trained as a psychoanalyst but found it necessary to expand classical psychoanalytic theory in order to better account for the interaction of social environment and psychological development. In contrast with Bowlby, he did this without either discarding or reformulating psychoanalytic libidinal theory. Thus underlying Erikson's theory we still have the classical version of instinct as an urge based on tissue needs and a motivational energy based on the aspect of survival related to feeding and sexuality. However, his emphasis on ego development and on the relational world, adds something important to the libidinal assumptions. For example, in relation to early development, Erikson (1959) pointed out that the importance of the mother for the infant goes well beyond the capacity of the mother to satisfy the infant's hunger. Rather, it is the relational context of maternal sensitivity to the child's needs that matters. Erikson moves beyond classical libidinal theory particularly in relation to his concept of ego development. For Erikson, ego development is not just motivated by the demands of instinctual urges. Rather, it has its own independent potentialities for development which unfold within the context of the interpersonal and cultural environment.

Erikson based his theory of development on an application of the epigenetic principle, a biological concept which applies to an organism in utero. He described this principle as follows: "everything that grows has a ground plan, and out of this ground the parts arise, each part having its time of special ascendancy, until all parts have arisen to form a functioning whole"

(Erikson 1959, p.53). He then applied this idea to development after birth and throughout the life span. Erikson believed that given a reasonable environment, a child unfolds his or her potentialities and develops in a healthy way. Nevertheless, this development is not without conflict. Each step represents a potential crisis because it brings together an awareness of a new ego potentiality, new societal demands, and a shift in instinctual energy. These changes require a new integration of the personality, task which implies a certain disequilibrium of previous developmental adaptations. The successful resolution of a stage crisis results in the emergence of new ego capacities contextualized to the demands and rewards of the culture.

Erikson divided development into eight stages covering the whole life cycle (Erikson, 1959). The resolution of each stage is conceived as a balance tilted to some extent to the positive side of two poles, each defined as dialectical opposites. The resolution implies a certain integration of the two opposites which requires the ego's capacity to contain and contemplate both possibilities. In part, this implies a theory of affect regulation: rather than being emotionally "thrown" by the internal or external situation towards, for example, total mistrust, or towards blind trust, the person can contain emotions enough to appraise the situation and make decisions as to when and how much to trust and when not to trust.

The eight developmental stages are named after the dialectical pair that constitutes the particular challenge of the stage in question. Trust/Mistrust, Autonomy/Shame, Initiative/Guilt, and Industry/Inferiority are the four stages of childhood. Identity/Diffusion is the transitional stage between childhood and adulthood. Intimacy/Isolation, Generativity/Stagnation, and Integrity/Despair are the three adulthood stages. One important assumption in Erikson's theory is that the different developmental stages have their own rate and order of ascendancy, and that

each stage builds on the resolutions of the previous stages. However, Erikson also describes a progression through time for each stage that also implies an interrelationship of all the stages at any point in time, whether they have reached their ascendancy or not. In this way, every stage includes aspects of all the other stages which are in a more or less resolved state (Erikson, 1959).

Trust-Mistrust chronologically arises while attachment is in the process of being formed and it unfolds in the context of the relationship of the infant with the mother. As we saw earlier, Erikson believed that the crucial aspect of the relationship with the mother at this point in time is not the feeding situation per se, as would be assumed by classical psychoanalytic theory, but the context of overall maternal sensitivity to the infant's needs. From the perspective of the infant, the challenge of trust is to receive what is being offered and to have the confidence that one's needs will be met. The crisis of this stage arises out of the interplay of a more violent drive to incorporate, an increasing awareness that one is a distinct person from the mother, and the experience of the mother becoming more involved with her own life concerns after the period of postnatal care (Erikson, 1959, p.62). Resolution implies that one come to trust oneself and the environment enough even in the awareness that things are short of perfect and short of totally gratifying. At the larger societal level, trust is related to religion. Erikson believes that religion serves to restore a sense of trust in the form of a faithful surrender to a Provider who encapsulates a sense of hope and promises the banishing of the sense of evil and mistrust (Erikson, 1959).

Autonomy-Shame becomes the central issue at the same time that attachment is consolidated. The maturation of the muscular system is what opens up the possibility of having

control over one's bodily functions and over the environment. Erikson believed that the issue of toilet training in this culture reflected some problematic attitudes which were contraproductive to the child's healthy development:

“..it has been more or less consciously assumed that early and rigorous (toilet) training is absolutely necessary for the kind of personality which will function efficiently in a mechanized world...we have assumed that a child is an animal which must be broken, or a machine which must be set and tuned-while, in fact, human virtues can grow only by steps.” (Erikson, 1959, p.69).

Erikson believed that this overcontrol by the parents interferes with the child's gradual growth towards increased self-control and that this resulted in the child feeling powerless over his or her own body. This loss of self-control in the context of parental shaming practices is at the bottom of the sense of shame. Autonomy, on the other hand, is based on “...a sense of self-control without loss of self-esteem...” (Erikson, 1959, p.70). At the societal level what arises out of autonomy is a principle of “law and order”, of rightful dignity, and lawful independence (Erikson, 1959).

Initiative-Guilt is the stage where locomotion and language come together to expand the child's ability to have an impact on the world (Erikson, 1959). This a stage where imagination is possible, where the consequences of behaviour can be anticipated, and where early identifications take place. Imagination allows both the contemplation of what one wants to be and do, but at the same time it provides the contemplation of disastrous and terrifying outcomes. The latter is at the base of a sense of guilt which in the right proportion is the seed for a moral sense. However, it also has the potential to overwhelm the child's initiative if the stage resolution is tilted towards that pole. The challenge here is to tame what one wants to be and what one wants to get to what one can realistically be and can realistically obtain.

Industry-Inferiority carries the initiative-guilt resolution into the school world. The child is given the opportunity to develop early identifications into a sense of mastery arising out of academic learning and of interpersonal peer relationships. Erikson focused on the importance of being given recognition for producing things, and for work well done in the context of the teacher-child relationship. Industry is based in a sense of mastery over what the child can accomplish. Inferiority, on the other hand, arises out of a sense of inadequacy, either because the child's work does not seem to count or be appreciated by teachers and other adults in the child's life, or because the child compares himself or herself, or is compared to adults or older siblings, which results in standards that are impossible to meet. Erikson did not elaborate much on the importance of the interpersonal peer world for the development of industry. In passing, he described the importance of sharing and of developing the ability of working besides and with others (Erikson, 1959).

Identity-Diffusion is the stage of adolescence. According to Erikson (1959), the sense of sameness and continuity that has developed up to this point is questioned given the transformation the body experiences with puberty. This results in great vulnerability and great potential for the restructuring of early identifications into a mature sense of self. The challenge for the ego is:

"To maintain the most important ego defences against the vastly growing intensity of impulses...; to learn to consolidate the most important "conflict-free" achievements in line with work opportunities; and to resynthesize all childhood identifications in some unique way and yet in concordance with the roles offered by some wider section of society." (Erikson, 1968, p. 156).

This enormous task is accomplished in the context of a psychosocial moratorium, which permits the delay of adult commitments and the exploration of possibilities (Erikson, 1968).

The provision of this moratorium by society and its tolerance of adolescent explorations, including the temporal formation of group cliques that serve to assuage confusion, is what permits the adolescent to accomplish this difficult task. The counterpart of identity formation is identity diffusion which results in a disjointed sense of self and an inability to make productive commitments.

Intimacy-Isolation is the stage where the capacity for mature mutuality develops. Erikson believed that intimacy is not possible unless one has a sense of identity (Erikson, 1959). He is not talking here about the capacity for sexual attachment, but about the ego capacity to merge without losing itself, and the capacity to maintain intimacy commitments even when they require compromises and sacrifices. Isolation, on the other hand, is dominated by the terror of being engulfed by the other person and is based on a process of distantiation which Erikson defines as "the readiness to repudiate, to isolate, and, if necessary, to destroy those forces and people whose essence seems dangerous to one's own." (Erikson, 1959, p.101).

Generativity-Stagnation, is a stage importantly related to parenting. Erikson defines generativity as "the primary interest in establishing and guiding the next generation." (Erikson, 1959, p.103). However, he does not limit generativity to having children and to parenting but relates it to altruistic concerns and to the expression of creativity. Stagnation appears as self-absorption and self-indulgence in the midst of interpersonal impoverishment and obsession with pseudo-intimacy. Stagnant parents are ill-suited for the parenting guiding role with their children. Erikson believed that the reasons for stagnation in these parents are to be found in problematic early childhood resolutions: "...in faulty identifications with parents; in excessive

self-love based on a too strenuously self-made personality; and, finally... in the lack of some faith, some belief in the species..." (Erikson, 1959, p.103).

Integrity-Despair, marks the final stage of development. Integrity is the capacity to contemplate one's total life cycle with acceptance and with the understanding that one's life is and has been one's responsibility. In order to achieve this ego integration one must have "...taken care of things and people...(and) adapted to the triumphs and disappointments of being, by necessity, the originator of others and the generator of things and ideas.." (Erikson, 1959, p. 104). So in this way is integrity built on the adaptive resolutions of the previous stages. Despair takes place when the life cycle is not accepted and the time is too short to do anything about it. It encompasses a fear of death and a contempt for oneself.

## **Psychosocial Development Research**

Much of the research on Erikson's theory has focused on the Identity-Diffusion stage of development. As with attachment theory, research has multiplied as operationalizations of the theory have led to specific measurement methodology. Marcia (1966) developed a semi-structured interview to measure identity formation in adolescence. The interview operationalized Erikson's theory in terms of two fundamental dimensions for identity formation: exploration and commitment. These two dimensions were then assessed in relation to the areas occupational choice and ideology formation. Another area related to sexuality and beliefs about sex roles was included later in order to study women's identity more accurately (Marcia and Friedman, 1970; Bilsker, Schiedel, and Marcia, 1988).

Identity studies have consistently produced four distinct resolution styles referred to in the literature as identity statuses (see Marcia, Waterman, Matteson, Archer, and Orlofsky, 1993 for a review). Identity achievement is defined in terms of high exploration and commitment, and implies the development of a self-made identity based on one's unique potentials and unique experiences. Moratorium, believed to represent a transition to identity achievement, is characterized by high exploration and low commitment. Foreclosure is an identity resolution characterized by low exploration and high commitment. For this status, identity is not developed out of an understanding and integration of one's individuality, but is typically formed around parental expectations. The fourth status, Diffusion, is characterized by low exploration and low commitment. A person with this type of identity moves through life without much purpose or much commitment to anything.



The four identity statuses have been validated in a substantial number of studies. Marcia et al.'s (1993) comprehensive review of the area shows that the statuses discriminate among different personality variables in predictable ways. For example, identity achieved males show higher self-esteem, higher moral development, more cognitive flexibility, and a more internalized locus of control. Moratorium is a status characterized by higher anxiety, but is closer to achievement than to the other statuses on a number of the other variables. Foreclosures are found to be more rigid, conservative, and more authoritarian than achievements. They have a more external locus of control and under stress they perform poorly, while their performance is comparable to that of achievements in normal circumstances. Diffusions seem to be the lower functioning status, characterized by low self-esteem, high impulsivity, external locus of control, withdrawal under stress, and low moral reasoning among others.

According to Marcia et al. (1993), the statuses do not operate similarly for men and women. It appears that achievement and moratorium are the highest functioning pair in males while for women the highest functioning statuses are achievement and foreclosure. Thus it appears that the foreclosed identity is a more adaptive solution for women than it is for men. Marcia et al. (1993) discuss several possibilities as to why this might be so.

Methodology parallel to the identity status interview has been developed for the three developmental stages of adulthood, intimacy, generativity, and integrity. Intimacy has been studied using criteria related to extent of involvement, commitment, and depth and quality of relationships. The five different statuses of stage resolution obtained with these dimensions have been validated in a number of studies (see Marcia et al., 1993 for a review). Generativity

has been studied using the dimensions of inclusivity and tolerance, which result in four statuses. The generative individual is high in both dimensions and the stagnant is low in both. The intermediate stages, pseudogenerative and conventional differ in terms of the tolerance dimension (Bradley, 1992). Integrity has been studied with the dimensions of conscious commitment and continuity from beliefs to actions. The statuses obtained with this method represent the two extremes, one high in both dimensions (integrated status), the other low in both (despairing status), and a middle ground of partial integration (the nonexploratory and the pseudointegrated statuses). The initial validating studies for these statuses conducted by Hearn (1993) show promising results.

Theoretical expectations regarding the time of ascendancy of specific stages have been confirmed in some studies. Ciaccio (1971) conducted a study with 5, 8 and 11 year old children using a projective measure. Evidence for time-specific ascendancy of the different stages at different ages was found. For example, issues related to initiative and industry were more relevant for younger children while identity issues only started to increase in relevance in the 11 year olds. Waterman (1993) in a review of the area of identity indicates that identity formation has been shown to have a crucial time during the college years (18 to 21 years of age). Once identity is formed, it remains relatively stable (Marcia, 1976). Stability, however, is not the same for all identity statuses: the moratorium stage is highly unstable, with a rate of 100% change over 6 years, while the other statuses together show stability of 70%. The findings are compatible with the theory given that moratorium is conceived as a transitional state for identity formation and that identity, once formed is hypothesized to be stable but not fixed (Marcia, 1976, Marcia et al., 1993).

Identity has been found to relate to the subsequent stage of intimacy in the way expected by the theory, but only in the case of male subjects. For example, Marcia (1976), using a sample of male college students found a correspondence of high identity with high intimacy, and low identity with low intimacy. As well, the subjects who changed from lower to higher identity status over 6 years also had high current intimacy scores, and the subjects who changed from high to low identity had current low intimacy scores. For women, as we mentioned earlier, the relationship between identity and intimacy is not so straightforward. Schiedel and Marcia (1985) found that while identity did not show gender differences in their college sample, women had higher intimacy scores than men. When the effect of age was examined, intimacy was independent of age for women, while in the males intimacy increased with age. As well, while for males high identity seemed to be a prerequisite for high intimacy, for females low identity and high intimacy were concurrent in about 1/3 of the sample. Thus identity and intimacy do not appear to be as differentiated stage-wise in women as compared to men. Bilsker et al. (1988) found that out of the three areas explored in identity interviews, occupational, ideological, and interpersonal, the ideological contributed significantly more to personality formation in men and the interpersonal area contributed significantly more to the formation of women's identity. This preference for the interpersonal area in women perhaps is what contributes to the early development of intimacy in women.

Using a questionnaire methodology, McAdams and Aubin (1992) found contradictory results in relation to ascendancy of generativity during middle age. They used a new questionnaire measure, the Loyola Generativity Scale (LGS) in two different studies. The first study included 149 community adults (ages 19 to 68) and 165 college students. Age was

significantly positively related to generativity when the samples were combined, giving support to stage-ascendancy expectations. When the samples were analyzed separately, the college sample rated lower in generativity than the community sample. Unexpectedly, however, college women rated higher in generativity than college men and men who had had children rated higher in generativity compared with men who had never had children. A second study with 79 subjects (ages 25 to 74) did not replicate the relationship of generativity to age and did not produce gender differences. Thus the results of this study did not support Erikson's theory regarding stage ascendancy. However, the authors cautioned about making general conclusions given that the sample had not been selected to test age-stage hypotheses *per se*.

Simultaneous comparisons of more than three or four stages have often been conducted using questionnaire methodology. Domino and Affonso (1990) developed the Inventory of Psychosocial Balance (IPB) to measure all eight psychosocial stages. The measure was developed on a sample of 528 subjects (ages 15 to 71), factor analysed, and tested for validity on a number of studies reported in the same article. One of the studies reported focused on the sequencing of the developmental stages on four different age groups, adolescents, young adults, middle age adults, and elderly adults. It was hypothesized, first, that the scores for all the scales would tend to increase with age, as ego integration theoretically increases. Second, for each age group, the stages that are theoretically past ascendancy would intercorrelate higher with each other compared with stages for which ascendancy is yet to come. The first hypothesis was confirmed for all scales except for Industry and Generativity. For the second hypothesis the results are not conclusive. All the stages correlated significantly with each other, regardless of whether they had reached ascendancy or not. However, the

correlations of the still unresolved stages with the rest were lower than the intercorrelations of the theoretically resolved stages. These differences, while minimal, were statistically significant.

Ochse and Plug (1986) obtained similar results with their questionnaire of psychosocial development. Four age groups (15-19, 20-24, 25-39, 40-60) of over 400 subjects each were included in the study. The hypothesis of increased ego complexity with age was measured in terms of average interscale correlations at each age. It was expected that increased complexity would show in higher interscale correlations as age increased. This hypothesis held for the white women in the sample but was not supported for white men nor for black men and women. Another prediction was that stages for which ascendancy is theoretically past should show high intercorrelations, and that unresolved stages should correlate lower with the rest. As in the study by Domino above, it was found that all the stages were highly correlated regardless of their ascendancy status. Thus neither the IPB nor the Ochse and Plug measure give clear support to the epigenetic stage sequence theory. However, they give some support to the idea of progressive developmental integration and complexity. In fact, the measures may be more adequate for measuring a general ego development factor rather than for discriminating among stages.

In order to test the epigenetic theory properly, longitudinal studies starting in infancy and progressing into adulthood would be necessary. This has not been done. However, there is an adulthood longitudinal study covering a 22 year time span. Whitbourne, Zuschlag, Elliot, and Waterman (1992) measured psychosocial development using the Inventory of Psychosocial Development (IPD) developed by Constantinople (1969). The subjects in the study completed the IPD at three different times between the ages of 20 and 42. Several cohorts for each age

level were used to allow for crosssectional comparisons as well. Results showed, as in the other studies above, that all the scales representing the different stages were significantly correlated with each other. When the age variable was longitudinally examined in relation to resolved versus unresolved stages, there was a greater increase with age for the first four stages than for the adult stages of intimacy and generativity. The epigenetic hypothesis predicted the opposite pattern, with the stages supposed to be in ascendancy in relation to the subject's age (intimacy and generativity) showing the greatest increase in resolution. Based on these results, the authors questioned the validity of the general epigenetic principle and suggested that the ascendancy of any stage might take place at any time, and that this ascendancy might depend on ideographic bio-psycho-social factors rather than on normative epigenetic development.

Further analyses showed that age had a strong effect regardless of whether the analysis was longitudinal, crosssectional, or sequential. There was an increase in the scores of each stage with age with the exception of integrity, which showed a sharp decrease as age increased. The authors discussed this finding in relation to industry, which showed a remarkable increase as integrity decreased. They suggested that perhaps cultural pressures emphasizing performance and material gains favoured industry over the contemplative pursuits of integrity.

An important shortcoming of the study by Whitbourne et al. (1992), as well as of other studies using adult questionnaire measures is that they do not measure stage resolutions in childhood. Rather, they give an indication of related ego developments in adulthood. In the diagram shown in Appendix J, questionnaire measures can be described as measuring the vertical line relating all stages to each other at a particular age, rather than the diagonal developmental sequence. Thus, they seem more appropriate for the study of overall ego

development at particular adult ages, than for the study of the validity of the overall epigenetic sequence of development.

Given that the epigenetic theory has not received strong support thus far, some authors have proposed a process-status rather than a stage theory for identity (Waterman and Archer, 1992). This process-status approach makes specific hypotheses regarding the form, the function, and the process of identity along the life span. For example, it is expected that identity will become more realistic, complex, and elaborate with age, that it would interact with life circumstances, and that the process, which is assumed to start with identity diffusion for most people, will move towards exploration and commitment with increased age. While Waterman and Archer (1992) seem to propose abandoning the concept of stage all together, there is perhaps room for integration of the two concepts. In fact, Erikson (1959) talks about a life-long process for each of the stages he describes in his theory, with stages being defined only as moments of greater relevancy for particular developmental tasks, given certain temporal configuration of organismic and social circumstances.

In conclusion, substantial evidence supporting the validity of different adulthood stages of development, as described in Erikson's theory, has accumulated over the years. The descriptive and predictive power of specific stage resolutions provide a rich description of personality developmental processes in adulthood and have an immediate application in terms of therapeutic interventions (see Archer, 1994). However, underlying assumptions of the theory, such as the epigenetic principle, have not been satisfactorily validated due to the lack of methodology to assess development during childhood, and the lack of life-span longitudinal studies. The existing studies show both expected and unexpected but explainable results in

terms of the sequencing of the stages. There is evidence both for the life-long relevancy of each stage and for the specific age-relevance of some stages. There is also evidence for a core factor of ego development underlying Erikson's developmental stages. Taken all together, the findings are compatible with and partially validate the basic theory.



## **Psychosocial Development and Child Maltreatment**

Erikson's theory has not been systematically or widely applied to the study of child maltreatment. There are a number of studies that have examined overall ego development in the context of maltreatment. While these do not make direct reference to Erikson's theory, they are nevertheless using the same basic assumptions about psychological structure. A few studies have specifically referred to Erikson's theory but have measured it loosely. The studies that have used a clear operationalization of the theory have exclusively focused on the stage of identity. Finally, the available studies have differed in terms of whether they have examined the impact of maltreatment on ego development (that is, as a dependent variable) or whether they have examined ego variables as independent variables in the context of resiliency to maltreatment.

One example of the dependent variable approach is the longitudinal study conducted by Dubow, Huesmann, and Eron (1987). Parenting and behavioural factors had been measured for the sample of 398 participants at age 8, with behavioural factors measured again at age 19. At age 30, the Loewinger ego development measure was administered. The parenting variables at age 8 were obtained from interviews with the parents and included rejection, authoritarian punishment, and nurturance, together with family background and other SES variables. It was found that family background and parenting variables at age 8 influenced ego development more in females than in males at age 30, with the exception of authoritarian punishment which had a significant negative impact on male ego development. However, the stronger predictors of adult ego development were male non-aggressive behaviour and female prosocial behaviour at ages 8 and 19. The authors do not mention what the relationship was between parenting

variables and non-aggressive and prosocial behaviour at ages 8 and 19 were. As well, because early ego development was not measured, the question of how parenting influenced early ego development could not be examined. Therefore, the results leave open the question of whether parenting practices influence adult ego development via the impact of those practices on early ego development which in turn results in specific behaviours in the child.

A study by Cicchetti et al. (1993) is a good example of the independent variable approach. They examined a sample of 206 maltreated and non-maltreated low SES children using a measure of ego resiliency (capacity to modify ego control in relation to environmental factors) and ego control (ability to modulate and monitor feelings and impulses). As expected, they found that ego resiliency was associated with adaptive functioning both in maltreated and non-maltreated children. Ego control was also found to relate to adaptive functioning. However, ego overcontrol was considered maladaptive because it indicated rigidity and excessive control of feelings. A surprising but interesting finding was that for the maltreated children, ego overcontrol was, in fact, associated with adaptive functioning while in children with no maltreatment backgrounds ego overcontrol was maladaptive. Thus it appeared that in order to function well, the maltreated children had to use ego overcontrol as a coping mechanism.

The studies that have loosely referred to Erikson's theory have typically used samples of adolescents. Beardslee (1989) used the construct "self-understanding", which he related to Erikson's identity, in a study of resiliency. In three separate studies using qualitative methodology, self-understanding appeared to be the mechanism mediating resiliency. One of the studies was conducted with adolescents whose parents had serious mental illnesses. The

parenting aspects of these mentally ill people or their partners was not examined in the study thus we cannot be very clear about the impact this had on the development of their children. However, 15 out of 18 adolescents were judged to be coping well with their lives and the parent's illnesses. By age 19 these young people were in intimate and rewarding relationships, had high self understanding -which they claimed they had had for some time-, seemed realistic, were not overwhelmed by negative situations, and were high achievers and problem solvers. Perhaps these youngsters' situation promoted early identity resolution and high ego development. However, these adolescents were described as being very involved in the managing of the parent's illness, and some of them had actually been responsible for taking the parent to hospital in the first place. One wonders what freedom for identity exploration a youngster with this heavy responsibility can have, and what kind of ego control, perhaps ego overcontrol, one needs in order to cope.

This issue of overcontrol shows again in a study by Brooks (1985). This author studied sexual abuse in relation to Erikson's stage of identity in teenage girls living in a residential centre for emotionally disturbed adolescents. Identity was loosely defined as "a search for Truth" and only qualitatively examined in unstructured interviews. Out of 16 sexually abused girls, 10 showed high levels of symptoms (Brief Symptom Inventory) compared to a group of 10 non-sexually abused girls from the same residential centre. Interestingly, the remaining six abused girls showed a pattern of symptom underreporting, particularly in the areas of anxiety, which were well under norm scores. Mistrust of others was the only acknowledged problem variable. These results were interpreted as suggestive of a process of symptom overcontrol and denial. No clear statements were made regarding identity in this group, but it was implied that

the girls in this group did not engage in a search for "Truth". The girls in the distressed group appeared conflicted about identity issues regarding career and work, but particularly about their sexual identity: they seemed to deny their womanliness, and avoided any mention of female body processes. The authors suggested that the adolescent need for the search of an identity produced struggles between internal good- and bad-objects in these girls and precluded the resolution of identity issues.

Werner (1993) used a semistructured interview to assess identity, intimacy, and generativity in subjects that had participated on a longitudinal study since birth. The sample had been exposed to a variety of stresses over time, including perinatal stress, poverty, parental pathology and alcoholism, and family disruptions. About one third ( $n=201$ ) of the sample were considered at risk because of the severity of this background. When assessed at age 30, the majority of the high-risk sample was not functioning very well. These non-resilient people showed a range of problems from criminality to mental health problems. Many were unable to hold jobs for very long, had a poor self-concept, and had conflictive marriages and high rates of divorce. Some of these people had converted to fundamentalist religions in an attempt to cope. However, a significant number of men and women (72) from the high risk sample were functioning well and were successful in their lives. They were generally competent and committed to their careers, had strong commitments to intimacy, and displayed high generativity in their approach to parenting. That is, they were caring parents while respecting the children's individuality and autonomy. Interestingly, these subjects appeared to be paying a price for their successful coping. They were characterized by a certain aloofness in their interpersonal interactions and a persistent need to avoid members of their families of origin.

among the women, the tension resulting from their style of balancing marriage, children, and careers showed in psychosomatic symptoms like migraines and backaches. These characteristics, as we saw in the studies above, seem to reflect a process of overcontrol or dismissing control in these resilient people. Because this study was part of a very comprehensive longitudinal study, there were much data available to examine precursors of adult resiliency. The resilient adults had been autonomous toddlers, had shown signs of initiative and sociability, had had many interests, and had used their skills well as children. In adolescence they had shown a positive self-concept and had had an internal locus of control. Many of these characteristics are reminiscent of psychosocial developmental factors and could be easily related to Erikson's theory.

Studies that have used Marcia's (1966) identity measure have consistently found a relationship between rejecting and unavailable parenting and poor identity resolution resulting in diffusion (see Marcia, 1994-a for a review). Josselson (1988) interviewed 60 female college students while in college, and again several years later, in order to develop detailed portraits of the four identity statuses described in the literature. The women who were functioning the worst, a subset of the women in the identity status of diffusion, reported early severe psychological trauma and emotional neglect.

Scalzo (1991) studied identity in college women (ages 21 to 56) who had experienced childhood maltreatment and other trauma. A significant number of the women (49%) reported having experienced sexual abuse. In most cases, these women had also experienced physical, emotional abuse, and other traumatic events during childhood. Another significant group of women (41% of the sample) had not experienced sexual abuse but reported a number of other

traumatic experiences. Only ten women reported no childhood trauma. Results showed no clear differences in identity status between the group that had experienced sexual abuse plus other trauma and the group that had only experienced non-sexual trauma. The data were grouped into two high (Achievement/Moratorium) versus low (Foreclosure/Diffusion) identity categories. With this grouping, 90% of the women reporting no abuse, 66% of the women in the non-sexual trauma group, and 40% of the women in the groups including sexual abuse were placed in the low identity category. Thus the results do not appear congruent with expectations of higher identity in non-maltreated compared with maltreated women. However, as we shall see next, this situation might be related to the perhaps unwarranted expectation that Moratorium is a high identity status and Foreclosure a low identity status in women.

Findings in identity research with women have consistently shown an association between adaptive functioning and foreclosure, and between low functioning and the moratorium status (see Marcia et al., 1993, for a comprehensive review). Given these findings, I regrouped the frequency data from Scalzo's study. Thus Achievement/Foreclosure were grouped as representing a high adaptation dimension and Diffusion/Moratorium as the low adaptation dimension. With this grouping the frequency pattern became a bit more meaningful. Only 20% (2/10) of the women who had not reported any trauma were in the low adaptive statuses, compared with 68% (28/41) of the women in the non-sexual abuse group and 57% (28/49) in the sexual plus other abuse group.

In conclusion, there is some evidence that dysfunctional parenting styles, childhood trauma, and childhood abuse may impact identity resolution later in life. There is also evidence that lack of early supports might be related to inadequate ego development. Much of the

literature studying ego development and maltreatment factors have looked at this development as a factor in resiliency, rather than as a dependent variable of maltreatment impact. Thus much needs to be done in order to understand the impact that traumatic environments might have on psychosocial development, and how early stage resolutions in these environments might contribute to later resiliency or vulnerability in the individual.

## CHAPTER 5

### ATTACHMENT, PSYCHOSOCIAL DEVELOPMENT, AND TRAUMA: THEORETICAL INTEGRATION AND RESEARCH

As we discussed in chapter 2, the study of child maltreatment is becoming more sophisticated both in terms of research design and in terms of the theoretical models that are being used to direct hypotheses and organize the data. The organizational model proposed by Cicchetti and Howes (1991) combines concepts of attachment and concepts of psychosocial development. As well, the theory of trauma proposed by Horowitz (1992) and the theory of abuse impact proposed by Herman (1992) use concepts of ego development and attachment. However, the two theories do not seem compatible in terms of their basic assumptions regarding instinctual motivation and developmental processes. In this section we will examine some of the apparent incompatibilities of the two theories and suggest ways in which they can be integrated for the study of trauma impact. As well we will examine specific research that has used concepts from the two theories together.

Libido theory presents us with a classical contradiction in terms of the study of maltreatment which arises out of Freud's abandonment of the seduction hypothesis (See Herman, 1992, for a discussion of this issue). As we saw in chapter 2, Bowlby's theory moved away from assumptions of imaginary libidinal wishes to return to assumptions regarding the effects of actual life events. It is interesting to read Bowlby's comments regarding why he chose to study loss instead of child maltreatment:

"It was, indeed, largely because the adverse behavior of parents toward their children was such a taboo subject in analytic circles when I was starting my professional work that I decided to focus my research on the effects on children of



real-life events of another sort, namely separation and loss.” (Bowlby, 1984, p. 10).

It could be argued that because Erikson’s theory is based on libidinal assumptions, it would be contradictory to use it to study child maltreatment. However, Erikson’s theory is not a classical theory of psychoanalysis. The main difference is that Erikson includes in his theory assumptions regarding ego developmental potentialities that are independent of libidinal conflictual forces. This is a more current version of psychoanalysis typical of the ego psychoanalytic movement (see Greenberg and Mitchell, 1983 for an in depth discussion). The other important difference is that Erikson’s theory is to a large extent a relational theory (see Marcia, 1994-b for a discussion of this topic). While Erikson is trying to integrate instinctual biological forces with independent ego development and with relational and social influences, often the thrust of his theory focuses on the interpersonal realm. His description of the maternal sensitivity he sees as crucial for the successful negotiation of the stage of trust (Erikson, 1959) is not very different from the maternal sensitivity and maternal responsiveness that is believed crucial for the formation of a secure attachment (Ainsworth et al., 1978). Another good example is Erikson’s description of the impact of abusive or coercive parenting in relation to the negotiation of the stage of autonomy (see chapter 4).

While both Erikson’s and Bowlby’s theories have a crucial focus on the relational world, they both hold biological assumptions that appear contradictory. As we saw in chapter 2, Bowlby’s theory of instinct is more current in terms of biological knowledge than libidinal instinctual theory. There is no reason why Erikson’s instinctual theory could

not be brought up to date as well, and presented in terms of biologically adapted behavioral systems. In fact, his ego developmental theory appears more compatible with the epigenetic ascendancy of behavioral systems than with the classical idea of libidinal urges based on tissue needs. A behavioral system can be seen as a rudimentary psychological structure that has biologically evolved in a particular biological context and is now ready for interactive maturation and development in the context of a particular individual's life. This theory of behavioral models seems to have the elements that Erikson includes in his theory.

If psychological theories are going to make use of biological theories, then an update of these theories needs to take place with advances in the biological sciences. Therefore, while attachment theory is more biologically current than libidinal theory, it is also somewhat dated in relation to new ethological concepts, for example, the concept of inclusive fitness described in chapter 3. By adding this concept to attachment theory we have a system that explains more than the normal aspects of presumably adaptive parent-child bliss, and includes elements of parent-child and sibling conflicts which reflect more of what libidinal theory tried to capture.

Neuroanatomical and neurophysiological knowledge can also help to update psychological theory. Current knowledge regarding limbic system function supports the basic idea of behavioral systems. Physiological states (including hunger, thirst, pain, etc.) are embedded in a context of inborn rudimentary biological adaptations which mature and develop in the context of learning and which are then controlled by superimposed volitional systems (see Lamendella, 1970 for a detailed description of how limbic

subsystems operate). There is no hierarchy within the limbic system giving primacy to some kind of behavioral system over another, even though they may mature at different rates. That is, systems related to attachment, reproduction, fighting, feeding and flight or fight behaviors are controlled at the same limbic levels of organization.

Thus it appears that the priority of one behavioral system over another at a particular time may have more to do with the circumstances than with a hierarchy of priorities. For example, under situations of fright the attachment system would have priority, under circumstances of starvation this system would take momentary priority, etc. This, in fact, has been proposed by Bowlby (1988) and by Ainsworth et al. (1978). However, attachment theorists have not developed the theory of behavioral systems beyond attachment. I suggest that a more comprehensive view of development can be obtained if we combine the theory of the attachment behavioral system with Erikson's theory of maturation, which seems to bring other important behavioral systems into the picture as their time of maturity arises.

There is another important issue, however, that needs to be taken into consideration, and which relates to the idea of developmental stages versus the idea of developmental lines. Some proponents of attachment theory see these two ideas as irreconcilable (West and Sheldon-Keller, 1994). Bowlby (1988) specifically criticized the theory of libidinal stages of development and proposed the use of the concept of developmental lines as an alternative. The concept of developmental lines allows for the study of a life-long interaction between development and the environment. While Erikson's epigenetic theory assumes sequential, distinguishable stages, his theory is also compatible with the concept of developmental lines.

As we saw in chapter 4, Erikson emphasized the life-long progression of the different developmental tasks, before, during, and after their maturational ascendancy. As well, he believed that environmental influences, and, even resolutions of later stages, could transform previous adaptations. The assumed interplay of attachment and environment through life is not theoretically different from the assumed interplay of, for example, trust or identity, with life experiences over time. In a way, attachment theory is not that different from psychosocial developmental stage assumptions. The attachment behavioural system exists since birth in some rudimentary form. However, its period of "ascendancy" does not arise until certain maturational conditions are met, namely the development of the capacity for object constancy. It is not until this time that the psychological structures defined as working models are formed and become responsible for carrying certain expectations that are imposed on the environment and that account for the stability of the early attachment "resolution". Looking at it this way, the two theories appear compatible and complementary.

In examining research that includes both psychosocial and attachment concepts, particularly in the context of trauma, we need to have some hypotheses about how the attachment system and psychosocial development would interact. There are two issues here, one is related to when in the life course a particular structure appears. The other is related to whether particular life circumstances affect the temporal primacy of a particular behavioural system over another. Trust, attachment and autonomy overlap developmentally in terms of the timing of their initial formation and can be assumed to be basic cornerstones of the personality. Trauma that is concurrent with the formation of these early structures is likely to affect not only how these structures develop but can also give priority to one behavioural system over another.

Theoretically, the attachment behavioural system would be chronically activated under these circumstances. In fact, this assumption of the theory is what led Ainsworth to devise the strange situation as a situation that would be at least mildly stressful for the child. Bowlby (1988) believed that many different situations including hunger, pain, fatigue, illness, losses, and frightening events could activate the attachment system. Once activated, it interfered with other behaviours, for example, exploration of the environment. It is not difficult to imagine that a chronic activation of attachment, for example in maltreatment situations, would have a chronic impact on exploration, which, in turn would interfere with the accomplishment of normal developmental tasks, thus impacting ego development. As both attachment and psychosocial theories hypothesize, the psychological structures formed under these conditions would continue to affect the person's development unless some important reorganization of these structures took place. If chronic stressful or traumatic circumstances continued, the attachment system would be expected to stay chronically activated, possibly interfering with further development of ego structure. In turn, a weak ego structure would make it impossible to integrate and work through traumatic experiences (Horowitz, 1992). This lack of resolution of trauma would continue to activate the attachment system and so on.

Some studies with adults have examined the hypothesis regarding the activation of the attachment system under stress. Simpson, Rholes, and Nelligan (1992) experimentally manipulated stress by creating a situation in which one member of a couple was made to anticipate exposure to an unpleasant laboratory situation. The interaction of the couples was then monitored. They found that relatively high distress was necessary to activate support seeking in secure people and secure partners gave support in the proportion it was needed. The

avoidant subjects were able to seek support when their distress was low, but not when distress was high. As well, avoidant partners were able to give support when the other person showed little distress, but became less supportive when the partner displayed high distress. Therefore, the typical attachment pattern of the avoidant attachment style tends to show more clearly under situations of stress. The pattern was not so clear for the anxious/ambivalent style.

Mikulincer, Florian, and Weller (1993) studied the impact of the Gulf War on adults living in Israel using Horowitz's (1990) theory of trauma and attachment theory. It was hypothesized that people with a secure attachment style would show fewer intrusion/avoidance and other stress symptoms and use support seeking strategies for coping compared with the insecure styles. Ambivalent persons were hypothesized to experience cycling of intrusion and avoidance and to have an emotion-focused coping style. Avoidant persons were expected to show primarily avoidance symptoms and to use distancing strategies for coping. These strategies were expected to be more significantly activated in situations of greater danger (exposure to missile attacks). The results generally supported the hypothesis. Differences between the attachment styles in terms of war-related avoidance was independent of the proximity of threat. Intrusive experiences, on the other hand, differentiated the attachment styles only in high threat situations. Coping styles (support seeking, emotion-focus, distancing) differentiated attachment styles across situations with one exception: Distancing strategies differentiated the avoidant style from the others only in situations of high threat. These general results have been confirmed in another study using concurrent measures during combat training in Israel (Mikulincer and Florian, 1995).

Because the issue of differential activation of attachment under different stressful conditions is a potential confounding factor when is not taken into consideration, it may account for some unexpected results in attachment classification in the literature. It may also account for unexpected findings in the literature that has examined both attachment and identity development. For example, a meta-analysis of 28 studies (Rice, 1990) showed that the association of attachment with identity and adjustment was not stable but tended to wax and wane during development. In another study, identity appeared as more stable than attachment over a two year period (Kroger and Haslett 1986). Furthermore, the theoretical expectation that attachment was a precursor of identity was not confirmed, as identity was found to predict attachment two years later, and not the other way around. As we have suggested above, it appears difficult to interpret these results without an estimate of the degree of activation of the attachment system. Furthermore, the studies mentioned use different operationalizations of both attachment and identity. Given that the relationships among the different measures of the same constructs are not clearly established, it is not advisable to draw general conclusions from the results.

In another study of attachment and identity in women, MacKinnon, (1993) found a significant relationship between attachment security and identity commitment. Ninety five percent of the secure women in the sample were either in the achieved or the foreclosed identity statuses. As we saw earlier, these statuses have been found to relate to more adaptive functioning in women. Eighty eight percent of the women uncommitted in identity were found to have an insecure attachment style. The association of attachment and identity was much more difficult to interpret when inspecting specific insecure attachment styles. Child

maltreatment was not the focus of MacKinnon's study. However, a qualitative analysis of the interviews pointed to an association of child maltreatment and fearful attachment. The association between maltreatment and identity status was not as clear, as these maltreated and fearfully attached women were represented in all identity statuses. In a way, this is not surprising, giving that it is expected that the attachment system would be the most directly affected by maltreatment. However, it was also found that all the fearful women (8/8) who were identity achieved had experienced child maltreatment. This would indicate that identity formation can be adaptively resolved in women with childhood maltreatment histories even in the presence of insecure attachment. The compensating factor emerging from MacKinnon's study appears to have been the cognitive sophistication of these identity achieved women.

As we saw in the review sections on attachment, ego development and child maltreatment, early trauma is related to adult insecure attachment and to inadequate ego development in predictable ways, but perhaps only in the context of unresolved trauma. The picture is complicated by the fact that both attachment and ego development can act as protective factors as well as be impacted by trauma. Without studying individual lives in some detail, it is impossible to clarify the issues. We would need to know how early the trauma occurred, how pervasive and chronic it was, whether there were opportunities of forming a secure attachment with someone or not, whether the attachment system was indeed chronically activated and interfered with ego development, whether later factors served to worsen or improve the situation of stress, and so on. The closest we come to this kind of detail is in the longitudinal studies that have used the organizational approach (for example, Egeland and Farber, 1984; Egeland and Erickson, 1987; Erickson et al., 1989). However, these studies have



not consistently looked at the interaction of attachment, trauma, and psychosocial development. Much needs to be done to clarify the impact of child maltreatment on development.

## CHAPTER 6

### THE PRESENT STUDY

The purpose of the present study was multifold. First, it tested hypotheses based on the theoretical integration proposed above. Namely, that childhood maltreatment has traumatic effects which impact development, and that in a context of trauma, behavioral systems related to safety take precedence to and interfere with the development of other behavioral systems. Secondly, it examined the relationship among different kinds of maltreatment experiences, attachment, psychosocial development and symptomatology. Finally, it explored the issue of resiliency and recovery from early traumatic experiences in the context of women's lives.

Only women were included in the study for several reasons. As we have seen, there is enough evidence in the literature to indicate that women's and men's developmental paths are not equivalent. As well, there are differences in the types of maltreatment experienced, in the impact of these experiences, and in retrospective recollection of early experiences. Thus separate analyses would have been needed which would have doubled the number of participants. Furthermore, we wanted to have a sufficient number of participants with a background of child sexual abuse without specially soliciting for this. Because the proportion of sexual abuse experiences is estimated higher in women than in men, it would have been impossible to have equivalent samples on this variable.

Women in their thirties and forties were selected for the study in an attempt to include the developmental stage of generativity, given its theoretical importance for the

parenting of the next generation. Parenting is a particularly important issue in people who have a history of abuse given the possibility of transmission of abuse and/or maladaptive attachment patterns.

The measures selected covered parenting, maltreatment, attachment, psychosocial development, trauma impact, and social support variables. Parenting and maltreatment variables were measured in two ways: the Early Childrearing Questionnaire (Perris et al., 1980), an adult retrospective measure regarding parenting received in childhood; and a non-standardized childhood trauma questionnaire which covers experiences ranging from dysfunctional family variables, losses, and divorce, to sexual, physical and emotional abuse. Attachment was measured with two questionnaires of adult romantic attachment, the Relationship Questionnaire and the Relationship Scales Questionnaire (Bartholomew and Horowitz, 1991). Psychosocial Development was measured with the questionnaire developed by Ochse and Plug (1986), which covers all stages of development from trust to generativity. Trauma impact was assessed with two measures, the Trauma Symptoms Checklist, and the Impact of Events Scale. The Trauma Symptom Checklist was developed by Briere and Runtz (1989) to assess symptomatology related to abuse trauma, including symptoms related to PTSD. The Impact of Events Scale (Horowitz et al., 1979) is a more specific measure of intrusive and avoidant symptoms which characterize traumatic reactions and PTSD. Social support was measured with the Social Support Questionnaire (Sarason, Levine, Basham, and Sarason, 1983) which differentiates between the size of social networks and satisfaction with the support received from those networks. A second measure of social support, the Emotional Support Circle, adapted for

this study from current measures of social networks, was used to assess childhood networks.

Theoretical assumptions regarding the interrelationships between childhood experiences, attachment, psychosocial development, trauma impact, and social support, were tested using structural equation analyses. Other hypotheses were tested using correlations, ANOVAs, t-tests, and  $\chi^2$  tests.

### **Hypotheses Tested**

1. There will be a positive relationship between reported child maltreatment and trauma symptoms, and a negative relationship between reported child maltreatment and positive attachment models, high psychosocial development, and size of and satisfaction with social networks.
2. Attachment will mediate the relationship between early maltreatment variables, psychosocial development, and social support.
3. Attachment, psychosocial development, and social support will mediate the relationship between reported maltreatment and trauma impact symptom variables.
4. Potentially protective variables of parental warmth and early support network will be positively correlated with attachment and psychosocial development, and negatively correlated with trauma impact symptoms.

5. A sample subgroup of women reporting both sexual abuse and other types of abuse together will show worse outcomes than a subgroup of women who reported only non-sexual abuse, and a subgroup of women who reported no abuse.
6. The subgroup of women who report sexual and/or other types of abuse will show a higher proportion of fearful attachment style compared with women who do not report abuse.
7. The fearful attachment style will be related to worse outcomes in terms of psychosocial development, trauma impact symptoms and social support network, compared with the other attachment styles.

## METHODS

### Participants

The participants were 96 women between the ages of 30 and 50 with two exceptions: one woman was 24, another 55. The recruitment was done through advertising in local newspapers, a university newspaper, community centers, and women's centers. The advertising asked for women participants between the ages of 30 and 50 for a project involving parenting, life events, and relationships. A raffle of \$200 for the participants was also advertised. The 96 women are the ones who completed the questionnaire out of a sample of 150 women who contacted the researchers and received the questionnaire but did not return it. Time demands was the main reason given by the women who declined to participate and could be contacted. Appendix J shows the information and consent forms the participants received with their questionnaires.

Of the 96 participants, 9% had lower than grade 12 education, 19% had completed up to grade 12, 34% had one to three years of college, and 36% had completed four or more years of college education. These figures, although higher than those provided by the 1986 census for women over 25, were similar to those found in MacKinnon's (1993) sample (7%, 14%, 37%, and 42% respectively). Sixty percent of the women were in a current romantic relationship and 50% had children. About 78% of the sample had received some form of counseling or psychotherapy during their lives.

## Measures

### Early Childrearing Questionnaire (EMBU)

The EMBU (acronym from the original Swedish title) was developed by Perris, Jacobson, Lindstrom, von Knorring, and Perris. (1980) to assess adult retrospective accounts of childhood experiences with parents. It covers a very wide range of parental childrearing behaviors for both mothers and fathers. The 81 parenting items are scored on a four-point frequency scale ranging from "item never happened" to "item always happened" (see Appendix A). Originally the items were organized along 14 theoretical scales: Abusive, Depriving, Punitive, Shaming, Rejecting, Overprotective, Overinvolved, Tolerant, Affectionate, Performance Oriented, Guilt Engendering, Stimulating, Favouring Siblings, and Favouring Patient. These scales were in part supported by factor analyses with a sample of 152 subjects. However, higher order principal component analyses produced three factors for father and four for mother (Perris et al., 1980).

Arrindell, Emmelkamp, Brilman, and Monsma (1983) studied the EMBU with a larger sample (N=841) and found four factors for both mothers and fathers: Rejection, including items from the scales Abusive, Depriving, Punitive, Shaming, Rejecting, Tolerant, Guilt Engendering, and Favouring Siblings; Emotional Warmth, including items from the scales Affectionate and Stimulating; Overprotection, including items from the scales Overprotective, Overinvolved, Performance Oriented, Guilt Engendering, Shaming, and Tolerant; and Favouring, including items from the scales Favouring Siblings and Favouring Subject. These new factor scales have high internal consistency (Cronbach's alpha between 0.67 and 0.98) across samples of normal and mentally ill subjects. The

factor structure found by Arrindell et al. (1983) has also been consistently reproduced across translation versions of the questionnaire (Arrindell and van der Ende, 1988; Ross, Campbell, and Clayter, 1982). Of all the scales and factors of the EMBU, only the factors Rejection and Emotional Warmth were used in the present study.

The theoretical assumption of the EMBU is that dysfunctional parenting practices have an effect on children's subsequent adulthood psychopathology. Research has found that the scale discriminates between normal samples and different kinds of psychopathology. As well, the EMBU shows stability after remission of symptoms in depressed subjects, thus it does not appear to be related to mood states (Gerlsma, Emmelkamp, and Arrindell, 1990). Concurrent validity studies indicate that the EMBU correlates positively with other instruments measuring perceptions of early experiences (Perris, 1988) and that this is not related to demographic variables or to social desirability (Arrindell et al. 1983).

The validity of the questionnaire in terms of actual parental behavior is an issue that relates to the validity of retrospective measures in general. I reviewed two current studies on the issue in chapter 2. One approach that has been taken to validate the EMBU has consisted of comparing results to reports by the parents themselves or by other family members. However, this approach has produced inconclusive results (Gerlsma et al., 1990). One could argue that this approach to validity is not satisfactory given that accounts by parents and other relatives are also retrospective and vulnerable to recall bias. There are no prospective studies with the EMBU to date, but EMBU researchers have drawn from prospective studies conducted with a similar measure, the Parental Bonding



Instrument (PBI), to support the idea that retrospective reports about parenting reflect the actual parenting received (Arrindell et al., 1983). Furthermore, Perris (1988) has argued that recollection of early parenting experiences is directed by cognitive schemas that have developed because of having these experiences. Therefore the study of these recollections has validity on its own right.

While the argument regarding the use of retrospective reports is not resolved, the EMBU appears to be a reliable and valid measure regarding perceptions of parenting received. Its widespread use and its comprehensive coverage make it a reasonable choice for this study.

#### Relationship Questionnaire (RQ) and Relationship Scales Questionnaire (RSQ)

These two measures were derived by Bartholomew and Horowitz (1991) from Hazan and Shaver (1987) self-report measures of adult romantic attachment. The RQ consists of four paragraphs each describing a different adult attachment prototype: secure, dismissing, preoccupied, and fearful (see Appendix B). Subjects rate how similar they think they are to each of the prototype descriptions on a seven-point scale. The ratings are then used to find the subject's scores along two dimensions: models of self and models of others. The model of self score is obtained by adding the ratings of the two prototypes defined as having positive models of self and subtracting the sum of the other two prototypes scores. The model of others score is obtained by adding the ratings of the two prototypes with positive models of others and subtracting the sum of scores of the other two types. The four quadrants of the two dimensions thus define the four prototypes.

The RSQ is a 30 item questionnaire which includes 17 questions directly derived from the prototype descriptions of the RQ and 13 questions representing scales of behaviors related to attachment (Griffin and Bartholomew, 1994). The items are rated by the participants along a five-point scale ranging from “not at all like me”, to “very much like me” (see Appendix C). Five items are related to the secure and dismissing prototypes and four to the preoccupied and fearful prototypes. The means obtained for each prototype are used in the same manner as the RQ scales to find the self and other model dimensions scores.

Griffin and Bartholomew (1994) have shown that both the RQ and the RSQ have convergent validity with interview measures of attachment. Convergent validity coefficients range from .22 to .50 for the four attachment style classifications and from .43 to .48 for the model of self and the model of others dimensions. The correlations found between adjacent attachment patterns as well as those between the two model dimensions are very low, confirming that they measure different factors. The RQ and the RSQ dimensional scores have been compared to the five factor model of personality scales using structural equation analysis (Griffin and Bartholomew, 1994). The convergent validity of the two measures was .58 for the model of self dimension and .57 for the model of other dimension. Discriminant validity was supported by the fact that the personality scales predicted only a portion of the variance in the attachment dimensions (.48 for the self-model dimension and .27 for the other-model dimension).

As we have seen, the RQ and the RSQ perform as adequate measures of attachment. However, as self-report measures they are less accurate than ratings based on

interview measures. Bartholomew (1993) indicated that defensiveness or self-representation biases can operate more blatantly in self reports. Attachment interviews can get around this problem to some extent by examining not just the content of the interview but process variables as well. This problem has been demonstrated, for example, by the fact that the avoidant style found by Hazan and Shaver (1987) with their self-report measure is a different one from the avoidant style found with the Adult Attachment Interview. The Self report measure seems to miss the defensive nature of the AAI avoidant type. Therefore, conclusions drawn from the measurement of attachment with the RQ and the RSQ will need to keep this shortcoming of self-reports measures in mind.

#### The Psychosocial Development Questionnaire

The Psychosocial Development Questionnaire was developed by Ochse and Plug (1986) for the measurement of seven of the stages of development hypothesized by Erikson (1959) in his theory of personality development. The questionnaire includes 93 items divided into seven scales representing the developmental stages from trust-mistrust to generativity-stagnation, plus a social desirability scale (see Appendix D). The items are rated along a 4-point scale ranging from item “never applies” to item “applies very often”. Scores on each of the seven scales indicate the extent to which a particular developmental crisis has been mastered.

A factor analysis of the questionnaire items conducted by Ochse and Plug (1986) with 459 subjects resulted in seven factors. While these factors did not validate each of the seven stages independently, the results were not in contradiction with Erikson’s overall theory of development. The authors had hypothesized that there would be an important

underlying common factor representing the theoretical assumption that the resolution of each stage is influenced by the resolution of the previous stages. The first factor, representing 53% of the variance was interpreted as a validation of this expectation. Two factors were found to correspond directly to the intimacy and generativity scales, thus validating these two scales. The remaining factors did not correspond well with the other scales. The authors argued that this was not surprising given that the adult stages were being measured at the time of their ascendancy in relevance, while the other stages had been processed at an earlier time.

Predictive validity was studied in terms of the association of current stage resolution and psychological well being. Hypotheses were confirmed in a sample of white women: Well being correlated the highest with identity in an adolescent group, with intimacy in women between ages 24-29, and with generativity in women 25-39. Results did not confirm the hypotheses with samples of men and of black women. Other gender differences were also found, the most significant being that women tended to enter intimacy earlier than men. This result is not surprising since it has been found in other studies of psychosocial development in women (Marcia et al., 1993).

As we also saw in the literature review section, correlations among the scales of this questionnaire do not differentiate between theoretically resolved and not yet resolved stages: most of the scales tend to show positive moderate to large correlations with the others. This, together with the common factor found in factor analysis, supports the use of this questionnaire as a current measure of overall psychosocial development at a particular age, rather than as a measure of specific earlier stage resolutions.

### Trauma Symptoms Checklist (TSC)

The TSC was developed by Briere and Runtz (1989) to measure adult symptomatology that has been associated with childhood abuse. The original questionnaire of 33 items was derived from items that were believed related to abuse impact. The 33-item measure was later expanded to 40 items (see Appendix E) in order to add a new scale and to improve the reliability of one of the existing scales (Elliott and Briere, 1991). The 40 items are grouped into five scales: Dissociation, Anxiety, Depression, Sleep Problems, and Sexual Problems. There is also a Sexual Abuse Trauma Index composed of selected items from the other scales. The items are scored along a 4-point scale ranging from 0 (symptom never occurs) to 3 (symptom occurs very often), covering the time period of the previous six months.

The reliability of the TSC is adequate, with an internal consistency Alpha of .69 for the scales and Alpha .90 for the total questionnaire (Elliott and Briere, 1991). Validity studies have focused on the ability of the scale to discriminate between abused and non-abused subjects. Both the TSC-33 and the TSC-40 have consistently discriminated between sexually abused and nonabused subjects across studies including clinical and non-clinical male and female samples (Briere, Evans, Runtz, and Wall, 1988; Briere and Runtz, 1989; Elliott and Briere, 1991). They also discriminate between physically abused and non-abused subjects and are particularly powerful predictors for the combination of physical-sexual abuse (Elliott and Briere, 1991).

### Impact of Events Scale (IES)

The IES was developed by Horowitz, Wilner, and Alvarez (1979) to assess current subjective stress related to particular life events. Two trauma response sets, intrusion and avoidance, were first derived from the evaluation of psychotherapy interviews, and then used as scales in the questionnaire. The IES includes 15 items organized into those two scales (see Appendix F). Items are scored along a 4-point scale measuring the frequency of occurrence of a particular questionnaire item over the previous week. The items are related to a particular stressful event described by the respondent. This event does not need to have happened during the previous seven days.

The IES was originally studied with a sample of 66 subjects who were suffering from stress syndromes. The stressful events reported by the participants included bereavement, illness, accidents, and violence. The time of occurrence of the stressful events varied between one and 136 weeks. Twenty items were at first included in the scale but were reduced to 15 after cluster analyses were conducted. The internal consistency of the revised scales was Alpha .78 for intrusion and Alpha .82 for avoidance. The correlation between the two scales was .42. A subsample of 32 participants completed the IES before and after psychotherapy related to the reported stressful events. Clinical and subjective reports of improvement paralleled symptom reduction in the IES.

Zilberg, Weiss, and Horowitz (1982) studied the IES with a clinical and a control sample. The clinical sample included outpatients needing treatment for stress syndromes. Factor analysis confirmed the two scales and internal consistency was high with Alpha .79 to Alpha .92 over six different conditions (three different measurement times and two

groups). Reliability across time ranged from .86 to .90. Predictive validity was supported by the ability of the scale to distinguish between the clinical and the non-clinical samples even when they had experienced the same event. It was also able to detect clinical improvement over time. The correlation between the two scales was higher in this study than in the previous one. In five of the six conditions the correlations ranged from .57 to .78. The one exception was for the clinical sample before treatment where the correlation between the scales was only .15. Because of this differentiation between the groups, the authors suggest the use of both scales even though the correlations are so high for some groups.

According to Zilberg, Weiss, and Horowitz (1982), the fact that the two scales correlate lower in subjects suffering from an acute trauma syndrome, compared with subjects experiencing a normal stress response, is congruent with the trauma theory proposed by Horowitz (see Horowitz 1990 and Horowitz et al., 1993 for detailed accounts of this theory). This theory proposes that a person coping normally with stress will tolerate a certain amount of intrusive symptoms, just enough to begin processing and integrating the consequences of the event. A person suffering from a stress syndrome, on the other hand, will tend to fluctuate back and forth from intolerant intrusion to drastic avoidant states.

#### Social Support Questionnaire (SSQ)

The SSQ was developed by Sarason et al. (1983) to measure perceived social support. The measure evolved from factor analytic studies of a large number of items related to social support. The final measure contained 27 items each rated on two scales,

one related to numbers of supports reported for the particular item (up to a maximum of nine people), the other rating support satisfaction on a six-point scale. Further factor analysis was used in the development of a short version of the SSQ (Sarason, Sarason, Shearin, and Pierce, 1987), which includes the six items that loaded the highest on each of the two factors (number and satisfaction). This short version (Appendix G) was used in the current study.

The SSQ has been extensively studied (Sarason et al., 1983; Sarason, Shearin, Pierce, and Sarason, 1987; Sarason, Pierce, and Shearin, 1991). The long form has shown good psychometric properties with an internal consistency of Alpha .97 and Alpha .94 for the number (N) and satisfaction (S) scales respectively. Four-week interval test re-test correlations are high, .90 for the N scale and .83 for the S scale. Factor analysis has confirmed the two scales with one factor explaining 82% of the variance in the N scale and the other explaining 72% of the variance in the S scale. The correlation between the two scales is .34, low enough to retain them as separate constructs.

The SSQ validity has been examined in a number of studies. Sarason et al. (1983) found that the SSQ was not biased by social desirability and that it was related to personality and symptom variables in predicted ways. For example, the N scale was related to extroversion, the S scale was related to neuroticism, and both scales were related to depression and anxiety. Sarason, Shearin, et al. (1987) demonstrated that the SSQ was appropriately correlated to three other questionnaire measures of social support. As well, SSQ scores were congruent with results using an interview methodology. The SSQ was



also found to correlate with variables related to parenting experienced, and with personality variables of social anxiety, shyness, and loneliness.

The short form of the SSQ (Sarason, Sarason, et al., 1987) has been found to be practically equivalent to the longer version of the questionnaire. The six items of the short version were selected in terms of their high loadings on the N and S scales. When compared to the long version, the short SSQ had similar internal stability and correlated in parallel with all the personality and individual differences variables that had been previously studied with the long version. The authors concluded that the short-form of the SSQ is an acceptable substitute for the long version.

#### Emotional Support Circle (ESC)

This measure is an adaptation of an interview procedure designed by Josselson (1992) to explore relationships, and the social support convoy developed by Kahn and Antonucci (1980). Josselson used Relational Space Maps with one circle representing the self, and other circles representing other people. The participant's task was to draw the circles representing the people in their lives, placing them in relative nearness or distance to the self circle in order to represent emotional closeness. The maps were then examined and qualitatively discussed during an interview. The convoy measure is similar except that it includes concentric circles representing specific dimensions of closeness. The dimensions are defined in the following way: level 1, for persons "so close that it's hard to imagine life without them"; level 2, for persons "not quite as close but who are still very important"; level 3, for persons "close enough and important enough that they should still be placed in the network".

Both measures have been used to study the change in support networks at different periods of the subject's lives. Because they include the naming of specific relationships, they can be used to examine how these relationships change over time in terms of their relevance for the subject. The convoy method, in particular has been used in a number of empirical studies of the life span with samples from 18 to 95 years of age (Antonucci, 1994; Levitt, 1991; Levitt, Coffman, Guacci-Franco, and Loveless, 1994).

The ESC measure used for this study was similar to the convoy diagram, but contained four levels of closeness. In addition, closeness to the self was defined in specific terms of perceived support. The convoy diagram and the level definitions can be seen in Appendix H. Participants were asked to complete the measure three times, one regarding the support system of their childhood, another for adolescence, and a third one for their current life. The information was then examined in terms of numbers of supports at different levels, and qualitatively, in terms of who was placed where at which time period.

#### Childhood Trauma Questionnaire

This questionnaire was developed for the present study from the Child Maltreatment Interview Schedule (Briere, 1992). The questions explore various potentially traumatic family of origin experiences including separations, parental divorce, marital violence, deaths, alcoholism, and physical, emotional and sexual abuse factors (see Appendix I). Both frequencies of events and subjective severity scales are included in the questionnaire. Three five-point subjective severity scales for sexual, physical, and emotional abuse were the basis for abuse grouping in this study. The other items were

summarized in a trauma composite score. The questionnaire also included space for qualitative comments.

### **Procedures**

The procedures in this study followed the research ethic guidelines outlined by the SFU Ethics Committee. Informed consent was obtained from the participants, who were told they could withdraw from the study at any time if they so wished (see Appendix J). All the information obtained was treated in a confidential manner, and a debriefing and summary of the results was sent to the participants after the project was completed.

Women interested in the study initiated phone contact in response to the project advertisements. Basic information about the study was given over the phone, and if the caller was interested in participating, further detailed information, consent forms, and the study questionnaire were mailed to them. The completed forms and questionnaires were then mailed by the participants to the researcher. After return of the completed questionnaire, the person's name was included for participation on a raffle for a \$200 prize.

One of the questions in the mailed package asked whether the participant would be interested in being interviewed for the project. It was explained that only a few of the participants would be selected for the interview, and that these would be included in a second raffle for another \$200 prize. Twelve women were interviewed by a research assistant in their homes. The interviews were structured by a few guiding questions focused on how they had seen themselves change over the years, what had facilitated the

changes, and what their lives were like currently. Interviews took an average of 1.5 hours each and were audiotaped with the consent of the participant. They were not rated along any specific quantitative dimensions but were used descriptively and are presented as qualitative comments in the discussion section.

### **Statistical analyses**

The data obtained from the questionnaires were analyzed in a number of ways. Several structural equation model analyses were conducted using the LISREL-8 program (Joreskog and Sorbom, 1993). A structural equation analysis is a statistical method that combines factor analysis and path analysis techniques (Kline 1991). It requires that an a priori model stipulate how the measurement variables and the latent variables are related to each other. This model is then compared with the actual data and a test of fit is performed. Maximum likelihood methods of estimation were used for the present study. These estimates, while, in principle, requiring large samples and normally distributed variables, have been found to be fairly robust even when these requirements are violated and generally perform better than other methods such as generalized least square estimates (West, Finch, and Curran, 1995).

A large variety of methods have been devised for the testing of the model fit to the data. The original method involves a  $\chi^2$  test for the residuals left in the data after the model variance has been accounted for. Thus the smaller the  $\chi^2$  the better the model fit. Several problems have been reported in the literature with regard to this way of testing

model fit, one of the main ones being the dependency of this test on sample size (Hu and Bentler, 1995). As well, if the observed variables depart from normality and the sample size is relatively small (less than 250), the  $\chi^2$  test of fit tends to reject too many models even when the fit to the data is good (West et al., 1995). Given these limitations, some authors have suggested that a model not be rejected unless the  $\chi^2$  is more than two to three times the degrees of freedom in the model (Hayduk, 1987).

Another alternative is to include other indices of fit that have been developed as alternatives to the  $\chi^2$  test of fit. There are two primary kinds of fit indices, absolute and comparative or incremental. The absolute fit indices are analogous to the  $R^2$  of multivariate analyses and represent the proportion of variance that is accounted for by the model. Incremental fit indices use a different approach: they compare the model to a hypothesized null model. That is, they make a statement as to the advantage of explaining the data with the model versus explaining the data with no model at all. Given that different indices have different advantages and disadvantages, and given that no index has been found superior over the others across situations, authors in the field have recommended the reporting of several indices for a more complete evaluation of a model (Hoyle and Panter, 1995).

For this study I chose, in addition to the more general  $\chi^2$  test, indices from both the absolute and the incremental categories. Within these categories, I chose indices that have been found to generally perform well for small samples with non-normal data: the Goodness of Fit Index (GFI), the Adjusted Goodness of Fit Index (AGFI), the Incremental Fit Index (IFI), and the Comparative Fit Index (CFI).

The GFI and the AGFI are absolute fit indices, with the AGFI representing an adjustment for model complexity that makes it a better estimate of the population parameter (Tanaka, 1993). The GFI is considered one of the best absolute indices available, but it needs to be interpreted with caution when the sample size is small, the observed variables are non-normal, and the latent variables are not independent. Under these conditions, the generally recommended value of .90 for good model fit might not be appropriate and lower values could possibly be considered acceptable (Hu and Bentler, 1995).

The IFI and the CFI are relatively new incremental indices that have been found to perform well with small samples. When the samples are non-normal they tend to underestimate the model but only slightly (for example, an underestimate of 3 to 4% for measured variables with skewness=3 and kurtosis=21). Other incremental indices in the literature have been found to underestimate the model more severely under the same conditions. In fact, the IFI and the CFI have been found to perform better than absolute fit indices (Hu & Bentler, 1995). As well, the CFI performs better than other indices when the latent variables are dependent. Generally the accepted value for good model fit for the IFI and the CFI is .90, or smaller if the departure from normality is very significant, the sample small, and the latent variables are not independent.

Another way to assess model fit is by a descriptive examination of the residuals left after the model has been accounted for. Hu and Bentler (1995) recommend examining the average discrepancy between the observed correlations and the estimated correlations. A way to do this is with the Standardized Root Mean Square Residual (SRMR). A value of

.10 or less indicates a marginal discrepancy between the correlations, regardless of whether the  $\chi^2$  is significant. On the other hand, if the discrepancy were much larger, it would be logical to assume that the model was wrong.

Finally, another factor that needs to be taken into account when evaluating a model is that unless the observed variables are close to normality, the standard errors for the specific parameters tend to be underestimated. In cases with skewness of 3 and kurtosis of 21, this underestimation could be of 25% or more. The consequence of this is that the specific parameters in the model could be abnormally inflated. A partial solution is to adjust the significance level for the parameters to below .05 (West et al., 1995).

In addition to the Structural Equation Analysis, a number of other statistical analyses were performed, including Correlations, ANOVAs, t-Tests, and  $\chi^2$  tests, when appropriate. All these tests were performed with the SPSS (1990) statistical program. Given the large number of correlations used in the study only significance levels of 0.01 or higher were considered. For the other statistical analyses the standard 0.05 significance level was used.

## CHAPTER 7

### RESULTS

#### Characteristics of the Sample

Table 1 shows sample data regarding age and education variables for the whole sample. Twenty eight percent of the participants had grade 12 education or less, 34% had one to three years of college, and 36% had completed four or more years of college education. Table 2 shows the sample percentages regarding different kinds of childhood trauma reported. There was a sizable overlap among the different trauma and abuse categories. Of 24 women who rated themselves as not abused, 12 had significant other traumas in their childhood. Of 33 women who reported sexual abuse, all but two also reported emotional, physical abuse, or both. All the 42 women who reported physical abuse also reported emotional, sexual abuse, or both. Of 69 women who reported emotional abuse, only 17 did not also report other forms of abuse.

**Table 1**

Characteristics of sample: Age and years of education (N=96)

	<u>M</u>	<u>SD</u>	<u>Range</u>
Age	38.18	6.18	24-55 <sup>a</sup>
Education	14.70	2.97	6-22

<sup>a</sup> All women with the exception of two were between the ages of 30 and 50.



**Table 2****Characteristics of sample: Childhood Stressful Factors (N=96)**

	(%)	n
Sexual Abuse	34	33
Physical Abuse	44	42
Emotional abuse	72	69
Alcoholism in Parent	42	40
Divorce of Parents	31	30
Death of Parent	5	5
Marital Violence	29	28
Raised away from Parents	9	9

**Correlations Among Variables used in Structural Analyses**

Table 3 shows the correlations found among variables used in the structural equation models described in the next section. In this table, summary scores for the psychosocial development questionnaire, the TSC, and the IES, are used instead of the specific scales. As it can be seen in the table, most of the variables are highly and significantly correlated with each other in predicted ways. One exception is attachment model of others, as measured by the RQ, which does not significantly correlate with maltreatment variables other than emotional abuse. When model of others is measured with the RSQ the variable is significantly correlated with all maltreatment variables with the exception of physical abuse.

Table 3

Correlation Matrix for abuse and outcome variables (N=96)

	1	2	3	4	5	6	7	8	9	10	11
1. Emotional Abuse	--	.59**	.58**	.55**	-.36**	-.31**	-.42**	-.35**	-.37**	.47**	.49**
2. Physical Abuse	--	--	.54**	.60**	-.39**	-.30*	-.21	-.15	-.35**	.45**	.42**
3. Rejecting Father	--	--	--	.52**	-.33**	-.33**	-.30*	-.22	-.41**	.44**	.37*
4. Rejecting Mother	--	--	--	--	-.48**	-.34**	-.29*	-.21	-.41**	.48**	.43*
5. Model of Self (RSQ)	--	--	--	--	--	.76**	.30*	.27*	.59**	-.55**	-.44**
6. Model of Self (RQ)	--	--	--	--	--	--	.27*	.22	.61**	-.52**	-.39**
7. Model of Others (RSQ)	--	--	--	--	--	--	--	.74**	.39**	-.43**	-.36**
8. Model of Others (RQ)	--	--	--	--	--	--	--	--	.41**	-.40**	-.25
9. Psychosoc. Development	--	--	--	--	--	--	--	--	--	-.69**	-.50**
10. General Symptoms	--	--	--	--	--	--	--	--	--	--	.64**
11. Trauma Impact	--	--	--	--	--	--	--	--	--	--	--

Significance levels: \* = 0.01 \*\* = 0.001

Correlations including the specific scales of the psychosocial development, the TSC and the IES measures are displayed in Tables 4-7. The psychosocial development scales are highly correlated with each other thus suggesting that there is a sizable common factor underlying the scales. This is also the case for the symptom scales measured by the TSC and the IES. The psychosocial development scales are generally related to maltreatment variables and symptom variables in expected ways. The two exceptions are Initiative and Generativity which show weaker correlations with other outcome variables and do not correlate significantly with maltreatment variables. The pattern of correlations of the symptom scales is congruent with expectations.

**Table 4**  
**Correlation Matrix for the Psychosocial Development Scales (N=96)**

	Trust	Auton.	Init.	Indus.	Ident.	Intim.	Gener.
Trust	--	.61**	.49**	.71**	.66**	.58**	.51**
Autonomy		--	.51**	.69**	.76**	.66**	.44**
Initiative			--	.71**	.58**	.40**	.39**
Industry				--	.82**	.63**	.53**
Identity					--	.70**	.53**
Intimacy						--	.45**
Generativity							--

Significance levels: \* = 0.01 \*\* = 0.001

**Table 5**

Correlations Among the Psychosocial Development scales, Abuse Variables, and Other Outcome Variables (N=96)

Abuse and Outcome Variables	Trust	Auton.	Init.	Indus.	Ident.	Intim.	Gener.
Emotional Abuse	-.31*	-.35**	-.10	-.30*	-.44**	-.35**	-.09
Physical Abuse	-.25	-.40**	-.16	-.30*	-.34**	-.38**	-.11
Rejecting Father	-.39**	-.33**	-.19	-.36**	-.43**	-.42**	-.08
Rejecting Mother	-.38**	-.45**	-.16	-.33**	-.39**	-.44**	-.15
Self-Model (RSQ)	.45**	.57**	.30*	.54**	.58**	.51**	.32*
Self-Model (RQ)	.48**	.56**	.32**	.59**	.59**	.52**	.34**
Other-Model (RSQ)	.36**	.26	.04	.25	.37**	.51**	.37**
Other-Model (RQ)	.26*	.26	.18	.30*	.41**	.54**	.30*
Dissociation	-.48**	-.62**	-.23	-.54**	-.56**	-.53**	-.29*
Anxiety	-.47**	-.66**	-.30*	-.50**	-.56**	-.53**	-.23
Depression	-.56**	-.74**	-.39**	-.64**	-.67**	-.61**	-.32**
Sleep Problems	-.40**	-.53**	-.28*	-.41**	-.44**	-.40**	-.17
Sexual Problems	-.40**	-.51**	-.26*	-.50**	-.51**	-.46**	-.19
Subjective Impact	-.37**	-.47**	-.20	-.49**	-.52**	-.42**	-.26

Significance levels: \* = 0.01 \*\* = 0.001

**Table 6**  
**Correlations Among Symptom Scales (N=96)**

	Diss.	Anxiety	Depr.	Sleep Problems	Sexual Problems	Subject. Impact
Dissociation	--	.72**	.71**	.56**	.59**	.52**
Anxiety		--	.75**	.75**	.58**	.57**
Depression			--	.73**	.71**	.58**
Sleep Problems				--	.42**	.50**
Sexual Problems					--	.52**
Subjective Impact						--

Significance levels: \* = 0.01 \*\* = 0.001

**Table 7**

Correlations Among the Symptom Scales, Abuse Variables, and Other Outcome Variables (N=96)

Abuse and Outcome Variables	Diss.	Anxiety	Depress.	Sleep Problems	Sexual Problems	Subject. Impact
Emotional Abuse	.36**	.39**	.43**	.40**	.35**	.49**
Physical Abuse	.35**	.37**	.39**	.27*	.40**	.42**
Rejecting Father	.28*	.43**	.41**	.38**	.36**	.37**
Rejecting Mother	.35**	.45**	.40**	.39**	.36**	.43**
Self-Model (RSQ)	-.39**	-.42**	-.54**	-.34**	-.50**	-.44**
Self-Model (RQ)	-.30*	-.42**	-.56**	-.31*	-.46**	-.39**
Other-Model (RSQ)	-.40**	-.31*	-.36**	-.27*	-.33**	-.36**
Other-Model (RQ)	-.37**	-.27*	-.36**	-.23	-.31*	-.25

Significance levels: \* = 0.01 \*\* = 0.001

The variable sexual abuse was not entered in the structural analysis given that its correlation pattern was different than expected. It significantly correlated with the other abuse variables (.30,  $P \leq .01$  with physical abuse, .38  $P \leq .001$  with emotional abuse, .36,  $p \leq .001$  with rejection by father, and .26  $p \leq .01$  with rejection by mother), but, contrary to expectations, it did not correlate with either attachment or psychosocial development. The correlation with symptoms as measured by the TSC was .23 ( $p \leq .03$ ) and did not reach the

minimal significance level set for the correlations (.01). Furthermore, none of the individual symptom scales, not even the sexual problems scale, were significantly correlated with sexual abuse. However, for the IES total scores the correlation was significant (.27  $p \leq .01$ ). Interestingly, of the two IES scales, intrusion and avoidance, only the avoidance scale was significantly correlated with sexual abuse (.30  $p \leq .01$ ).

Another reason for not including this variable in the structural equation was that, even though it was correlated with the other abuse variables, it clearly formed a different factor. This made sense given that, in contrast to the other maltreatment variables, sexual abuse was not perpetrated by a parent in a significant number of cases. Thus it appeared that sexual abuse did not belong with a latent variable measuring dysfunctional parenting.

## **Structural Equation Analyses**

### **Model 1**

The first model tested included variables related to dysfunctional early parenting, attachment, psychosocial development, trauma symptoms, and support networks. Six latent variables were hypothesized, one corresponding to parenting variables and labeled “Dysfunctional Parenting”. Two attachment latent variables were labeled “Model of Self” and “Model of Others”. A fourth latent variable represented a hypothesized underlying factor in Erikson’s developmental model and was labeled “Psychosocial Development”. The fifth variable was labeled “Trauma Impact”; the last variable was “Social Support”.

The latent variable Dysfunctional Parenting was measured by the EMBU scales of father and mother rejection, and by subjective severity ratings on physical abuse and

emotional abuse obtained from the trauma questionnaire. As it was indicated above, the variable sexual abuse was not included in the dysfunctional parenting latent variable because in some cases the abuse had not occurred in the family. It was not included as a separate factor either given that sexual abuse did not correlate with the outcome variables of interest. Model of Self and Model of Others were measured with the corresponding dimensions of self and others obtained with the RQ and the RSQ. Psychosocial Development was measured with the seven developmental stages scales from the psychosocial development questionnaire. Trauma Impact was measured with the five symptom scales from the TSC and the total score of the IES. Finally, Social Support was measured with the two scales from the SSQ.

The LISREL-8 program used for the analysis does not standardize the parameters in the measurement model thus making interpretation difficult. For this reason, the relationship between the measures and the latent variables is displayed in terms of percentage of variance in the measurement variables that contributes to the common factor, or latent variable. As we can see in Table 8, generally most of the variance in the measurement variables is accounted for by the corresponding latent variable. There are a few exceptions. The latent variable Social Support only accounts for 27% of the variance in the measured social support number scale of the SSQ. Generativity is the next variable not so well accounted for by its corresponding latent variable (32% of its variance), followed by initiative (41% of its variance). Nevertheless, the parameters relating these measurement variables to their corresponding latent variables were statistically significant, as were all the other measurement model parameters.



**Table 8**

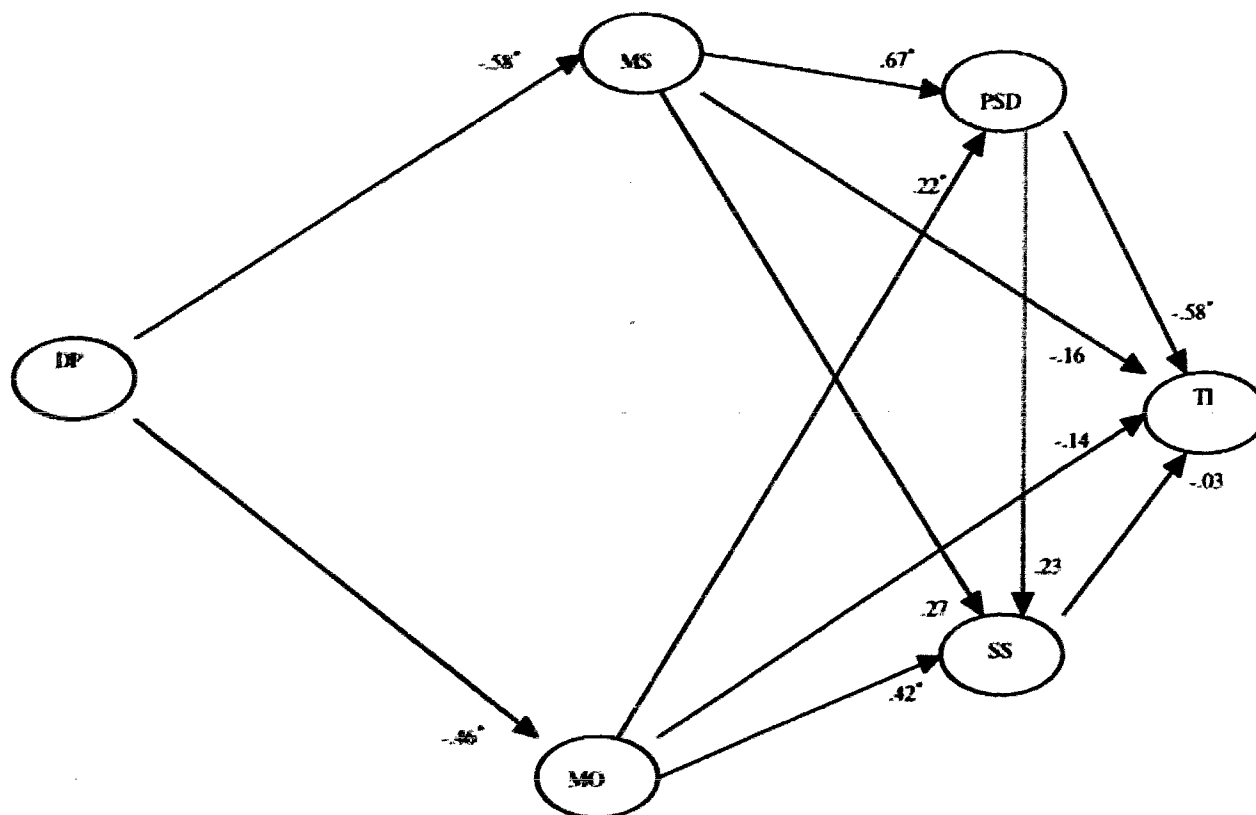
Measurement Model: Percentage of variance in the measurement variables accounted for by the latent variables

	Dysfunctional parenting	Model of Self	Model of Others	Psycho social devel.	Trauma impact	Social support
Emotional abuse	.60					
Physical abuse	.57					
Rejection father	.52					
Rejection mother	.56					
RSQ-self		.76				
RQ-self		.73				
RSQ-other			.83			
RQ-other			.65			
Trust				.57		
Autonomy				.68		
Initiative				.41		
Industry				.79		
Identity				.83		
Intimacy				.58		
Generativ.				.32		
Dissociat.					.61	
Anxiety					.71	
Depress.					.85	
Sleep p.					.55	
Sexual P.					.51	
IES					.44	
Soc. Supp. Number						.27
Soc. Supp. Satisfact.						.91

The structural model analysis is displayed in Figure 1. Each path displays the standardized parameter of association, with the direction of association indicated by the corresponding arrow. Out of the total number of possible paths, only the paths hypothesized in the theoretical model are displayed. The  $\chi^2$  test for the model as well as the other indexes of fit can be seen on the first line of Table 9. The  $\chi^2$  value obtained is relatively large and significant which indicates that a sizable amount of variance in the data is not explained by the model. However, as we saw in the methods section, some authors consider a  $\chi^2$  of no more than two or three times the degrees of freedom as indicative of a moderate fit (Hayduck, 1987). As we can see in the table, the  $\chi^2$  for this model is less than twice the degree of freedom.

The other indexes of fit also indicate moderate and even good fit, the more so for the indexes more appropriate for small samples with non-normal observed variables (the IFI and the CFI). Our observed variables range in skewness from .08 to 1.41 and in kurtosis from .07 to 2.1, all in absolute values, so departures from normality are not very large. The SRMR is .079, which indicates that the observed and the calculated correlations are not overly discrepant.

**Figure 1**  
**Structural Equation Analysis: Model 1**



DP=Dysfunctional Parenting; MS=Model of Self; MO=Model of Others;  
 PSD=Psychosocial Development; TI=Trauma Symptoms; SS=Social Support. Asterisks  
 indicate statistical significance

Several of the specific path parameters in the model are not statistically significant. These are the paths between Model of Self and Trauma Impact, Model of Self and Social Support, Psychosocial Development and Social Support, Social Support and Trauma Impact, and between Model of Others and Trauma Impact. The paths from Dysfunctional Parenting to both attachment models are significant ( $P \leq .01$ ). There are significant paths from Model of Self to Psychosocial Development, and from Psychosocial Development to Trauma Impact ( $P \leq .01$ ). As well, the path from Model of Others to Social Support is significant at the .01 level. The path from Model of Others to Psychosocial Development, is significant at the .05 level.

It has become customary in the structural equation analysis literature to conduct post-hoc analysis with modified models. While conclusions regarding post-hoc analyses cannot be generalized, the procedure can be used to generate new hypotheses for testing on other samples. New models are usually specified from an examination of the modification indexes provided by the LISREL-8 program, which indicate what change in  $\chi^2$  might be expected by adding particular new paths. I conducted a post-hoc analysis with a modified model with an additional path between Dysfunctional Parenting and Trauma Impact. The comparison between the new structural model and the original one is presented in Table 9. The improvement of fit of a modified model is measured by the change in the overall fit  $\chi^2$ . As we can see in the table, there was a very small, marginally significant improvement of fit by adding the new path to the model. In this new model the path from Psychosocial Development to Trauma Impact is relatively stronger (parameter, -

.57,  $P \leq .01$ ) compared with the new direct path from Dysfunctional Parenting to Trauma Impact (parameter, 0.27,  $P \leq .05$ ).

**Table 9**

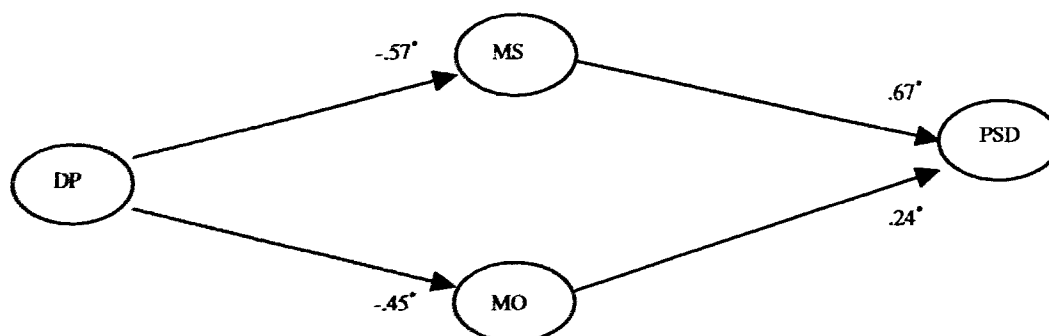
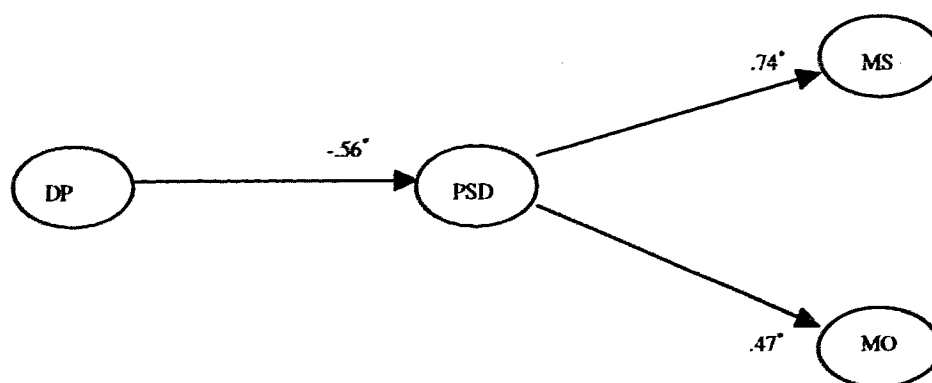
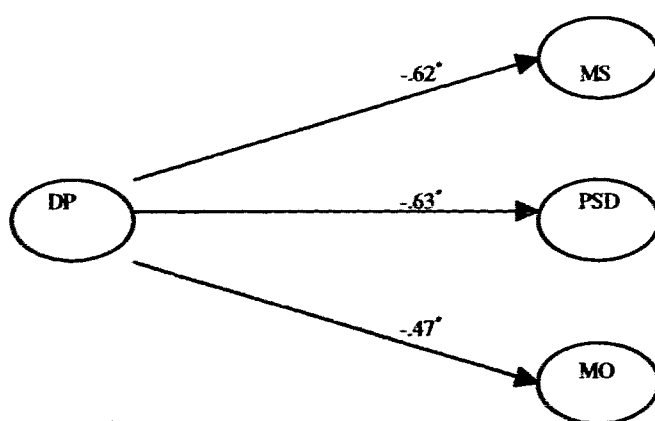
**Structural Equation Theoretical Model 1 and Modified Post-hoc Model: Fit Parameters and Model Comparison**

	$\chi^2$	DF	GFI	AGFI	SRMS	CFI	IFI	$\chi^2_{diff}$
Model 1	332 P <.000	219	.78	.73	.079	.92	.92	
Modified	326 P <.000	218	.79	.73	.072	.92	.92	
Comparison of models								5.11 P <.05

**Models 2,3,4**

Three simpler models were used for the assessment of different theoretical possibilities regarding the relationships among dysfunctional parenting, attachment, and psychosocial development (see Figure 2). Model 2 was congruent with the larger Model 1 theoretically, and thus predicts that there is an impact of dysfunctional parenting on psychosocial development, and that this impact is mediated by attachment models of self

and others. Model 3 implies a different alternative: it assumes that psychosocial development mediates the impact of dysfunctional parenting on attachment models. Finally, Model 4 assumes that there is no mediation and that attachment models and psychosocial development both are directly impacted by dysfunctional parenting. The measurement models use the same corresponding variables used in Model 1. These three new models are depicted in Figure 2. Table 10 shows the selected tests of fit and the  $\chi^2$  change related to the model comparisons. As we can see, the fits of Model 2 and Model 3 to the data are not very different from each other. Their  $\chi^2$  's are similar in magnitude and while there is a numerical increase of the statistic from Model 2 to Model 3, this difference is not significant. Model 4, the non-mediation model, appears to fit the data the worst, as shown by a highly significant increase in  $\chi^2$  when compared to Model 2.

**Figure 2****Structural Model 2****Structural Model 3****Structural Model 4**

DP=Dysfunctional Parenting; MS=Model of Self; MO=Model of Others;  
 PSD=Psychosocial Development. Asterisks indicate statistical significance.

**Table 10****Structural Equation Theoretical Models 2, 3, 4, and their Comparisons**

	$\chi^2$	DF	GFI	AGFI	SRMS	CFI	IFI	$\chi^2_{diff}$
Model 2	140	86	.84	.78	.075	.94	.94	
	P < .000							
Model 3	143	87	.83	.77	.078	.93	.94	
	P < .000							
Model 4	167	87	.82	.75	.11	.91	.91	
	P < .000							
Comparison 2, 3								3.06 NS
Comparison 2, 4								27.35 P < .005

**Potentially Protective Factors and Outcome Variables**

Two variables from the EMBU, mother's warmth and father's warmth, and an early support network variable from the ESC (number of close supports during childhood and adolescence) were examined as possible protective factors. Table 11 shows the correlations of these variables and the outcome variables total psychosocial development score, symptoms total score (TSC), model of self (RSQ), and model of others (RSQ). As we can see in the table, the early support network variable did not correlate with either psychosocial development or any of the attachment variables, and only correlated moderately with total symptoms. All the other variables were significantly correlated except for father's warmth with attachment model of others.



**Table 11****Correlations between protective factors and outcome variables**

	Psychosoc. Develop.	Symptoms (TSC)	Model of Self	Model of Others
Warmth father	.42**	-.40**	.35**	.24
Warmth mother	.41**	-.42**	.42**	.32**
Early Support	.19	-.28*	.18	.19

Significance levels: \* = 0.01 \*\* = 0.001

**Group comparisons: Type of abuse**

Three groups were formed in relation to type of abuse reported. As it was indicated earlier, there was a significant overlap of abuse categories. Because the pattern of correlations found for the sexual abuse variable was different from expected, a specific group for women who had reported sexual abuse, regardless of their abuse status on other variables, was formed ( $n=33$ ). The rest of the sample was divided in two groups: women who reported no abuse ( $n=24$ ; some of these women reported other childhood stressors), and women who reported abuse other than sexual abuse ( $n=39$ ; emotional and/or physical abuse). Group means for RSQ model of self and other, total psychosocial score, and total TSC symptom scores are displayed in Table 12. ANOVAs involving a total of 3 group comparisons for each dependent variable were conducted (see Table 12). The sexual-abuse group and the other-abuse group are significantly different from the no-abuse group on all the dependent measures with only one exception. The differences are in the expected direction indicating better adjustment in the no-abuse group compared to either

of the abuse groups. The exception is that the sexual-abuse group does not differ from the no-abuse group in attachment model of self. Comparisons between the sexual-abuse and the other-abuse groups show no significant differences in any of the dependent variables.

**Table 12**

ANOVA analyses: Outcome variables and abuse group comparisons

Dependent Variables	No abuse (group a)	Sexual and Other abuse (group b)	Other abuse (group c)	Compar. a-b	Compar. a-c	Compar. b-c
Model of Self	1.50	.74	.24	F=2.4 ns.	F=10**	F=1.4 ns.
Model of Others	.74	.95	.77	F=11**	F=9**	F=.15 ns.
Psychosocial Develop.	157	131	137	F=10**	F=8**	F=.49 ns.
Intrusion Avoidance (IES)	5.4	24.5	18.3	F=21***	F=9.7**	F=2 ns.
Symptoms (TSC)	20	35	31	F=11***	F=6.7**	F=1.03 ns.

Note:  $df=1$  for all comparisons. Group a,  $n=24$ ; Group b,  $n=33$ ; Group c,  $n=39$ ;  
Significance levels: \*\* = 0.01 \*\*\* = 0.001

The IES, a measure of trauma coping style, was administered twice (see Appendix F), once in relation to the most stressful childhood event, and once in relation to the most stressful adulthood event the participant could remember. Thus the common element in both cases was subjective severity, while the specific events could vary in any way. The group comparisons for the scales and the total scores of the IES in relation to the

childhood and the adulthood events are displayed in Table 13. As the table shows, the general pattern is of higher intrusion and avoidance in both abuse groups compared with the no-abuse group, both for childhood and adulthood stressful events. The only exception is the comparison of the sexual-abuse and no-abuse groups in relation to intrusive symptoms related to the adulthood event, which is not statistically significant. As in the analyses described in Table 12, the comparison between the two abuse groups shows no significant differences for any of the outcome variables.

**Table 13**

ANOVA analyses: Intrusion and Avoidance variables (IES) and abuse group comparisons

Dependent Variables	No abuse (group a)	Sexual and Other abuse (group b)	Other abuse (group c)	Compar. a-b	Compar. a-c	Compar. b-c
Intrusion (childhood event)	2.3	9.5	8.4	$F=14.7^{***}$	$F=8.6^{**}$	$F=.3$ ns.
Avoidance (childhood event)	3.2	14.9	9.8	$F=21^{***}$	$F=8.5^{**}$	$F=3.4$ ns.
Childhood: Intrusion + Avoidance	5.4	24.5	18.3	$F=21^{***}$	$F=9.7^{**}$	$F=2$ ns.
Intrusion (adulthood event)	7.0	11.8	14.2	$F=3.4$ ns.	$F=6.7^*$	$F=.8$ ns.
Avoidance (adulthood event)	5.4	12.8	14.7	$F=7.9^{**}$	$F=12.7^{***}$	$F=.5$ ns.
Adulthood: Intrusion + Avoidance	12.3	24.6	28.9	$F=6.9^*$	$F=11.2^{***}$	$F=.8$ ns.

Note:  $df=1$  for all comparisons. Group a,  $n=24$ ; Group b,  $n=33$ ; Group c,  $n=39$ ;  
Significance levels: \* = 0.05 \*\* = 0.01 \*\*\* = 0.001

### A closer look at Attachment

The participants were classified into specific attachment styles according to the highest prototype rating they had given themselves on the RQ. The participants that scored two prototypes equally high ( $n = 23$ ) were not included in the classification. The proportion of attachment styles for the reduced sample ( $n=73$ ) was 36 % secure, 11 % preoccupied, 22 % dismissing, and 32 % fearful. Table 14 shows the percentages for each abuse group. As it can be seen, the main differences appear in the secure and fearful categories, with a higher proportion of secure women in the no-abuse group and a higher proportion of fearful women in the sexual abuse and other-abuse groups.

**Table 14**  
Proportion of attachment styles in each abuse group

	Secure	Preoccupied	Dismissing	Fearful
<b>No-abuse</b>	59 % (10/17)	6 % (1/17)	29 % (5/17)	6 % (1/17)
<b>Sexual-abuse</b>	35 % (9/26)	4 % (1/26)	19 % (5/26)	42 % (11/26)
<b>Other-abuse</b>	23 % (7/30)	20 % (6/30)	20 % (6/30)	37 % (11/30)

$\chi^2 = 13$   $df=6$   $P=.04$  (Cramer's V = 0.299)

A series of ANOVAs were conducted to compare the four attachment categories to outcome variables. Table 15 displays attachment style and the outcome variables total psychosocial development score, total symptoms score (TSC), intrusion and avoidance (IES), and social support satisfaction. Social support network size was not significantly different across the attachment styles, therefore it was not included in the table. As we can see, the three outcome measures in the table show a pattern of better psychosocial development, fewer symptoms, and more satisfaction with social supports in the secure women. Of the insecure categories, the dismissing has a pattern of scores that suggest that they tend to do better than the other two insecure styles. The fearful style seems to be the least adaptive. The only variable that did not significantly differentiate the groups was intrusion (IES).

**Table 15**

**ANOVA analyses: Outcome variables by attachment style**

Outcome Variables	Secure <u>M</u>	Preocc. <u>M</u>	Dismiss. <u>M</u>	Fearful <u>M</u>	ANOVA <u>df</u> = 3
Psychosocial Development	157	127	146	117	<u>F</u> = 12.5**
Symptoms (TSC)	19	33	27	38	<u>F</u> = 7**
Intrusion (IES)	5	10	4	9	<u>F</u> = 1.7
Avoidance (IES)	5	13	8	16	<u>F</u> = 5.5*
Social Support Satisfaction	6	5	5	4	<u>F</u> = 8.6**

Significance levels: \* = 0.01 \*\* = 0.001

### **Post-hoc comparisons: Vulnerability and Resiliency**

It was one of the purposes of the study to explore the issue of resiliency in a flexible manner, by looking at the data in a more ideographic way. A group of 24 women with the most severe abuse ratings in the sample was chosen for this exploration. All the women in this group had reported more than one kind of abuse, one of which was rated 4 or 5 on a scale with maximum severity 5. A close examination of the outcome measures indicated that five of the women in this group were doing particularly poorly in relation to the rest of the group (see Appendix L for individual histogram patterns). A group of five other women who were doing better than the group average was selected for comparisons. Given the small  $n$  in these groups the power for tests of significance was very low. Thus, even though tests of significance were computed, the aim was to descriptively explore overall score patterns rather than focusing on statistical inference. Table 16 shows outcome differences for the two selected groups. As it can be seen, the contrast between the groups was quite remarkable on the selection variables, thus leaving little doubt that they are functioning very differently.

**Table 16**

Outcome Variables Means: Groups (n=5 each) selected from the severe abuse group in terms of maximum outcome contrast

Outcome Variables	Group a: Outcome worse than average	Group b: Outcome better than average	t (df=8)
	<u>M</u>	<u>M</u>	
Models of Self (RSQ)	-2.30	1.65	2.74 *
Models of Others (RSQ)	-2.74	1.17	2.92 *
Psychosocial Development	75.20	169.60	9.24 ***
Symptoms (TSC)	83.00	23.00	12.59 ***
Stress Impact (IES)	51.80	16.20	4.31 **

Significance levels: \* = 0.05 \*\* = 0.01 \*\*\* = 0.001

As done previously, the RQ attachment prototype scores were used to assign the women to attachment categories. Six of the ten women in these two groups scored two attachment prototypes equally high so they could not receive a unequivocal classification. Nevertheless, the results are interesting. All the women in the lower functioning group gave the fearful prototype, either alone or together with another style, the highest endorsement, while none of the women in the higher functioning group did. On the other hand, four out of five women in the higher functioning group included the secure

prototype in their highest category. The fifth woman endorsed the preoccupied prototype. It is also interesting to note that when two prototypes and not just one had been endorsed together, it tended to be preoccupied and fearful in the lower functioning group and dismissing and secure in the higher functioning group.

In addition to the scores described above, the participants were asked to fill out the RQ a second time, describing how they saw themselves in the past (see Appendix B). The comparison of RQ “now” and “before” scores indicated a different pattern of changes for the two groups. In the lower functioning group, the changes endorsed were within insecure attachment styles or combinations of these styles, with the fearful prototype receiving the highest endorsement for the two points in time. In the better functioning group, the changes reported indicated a movement from a greater endorsement of the preoccupied style “before” to a greater endorsement of the secure and the dismissive prototypes “now”. Interestingly, in this group, only one woman endorsed the fearful style, and that was in the “before” rating, and in combination with preoccupied. In summary, whether the participants described themselves as they were now or as they had been in the past, the lower functioning group endorsed the fearful style most frequently. In contrast, the higher functioning group showed a change in endorsement from preoccupied to a combination of secure and dismissing.

Abusive and traumatic factors were examined next to see if these could explain some of the outcome differences. Table 17 shows means and t-tests for no-abuse traumatic factors and rejection by father and mother. As it can be seen, the less functional group scores are generally higher.



**Table 17**

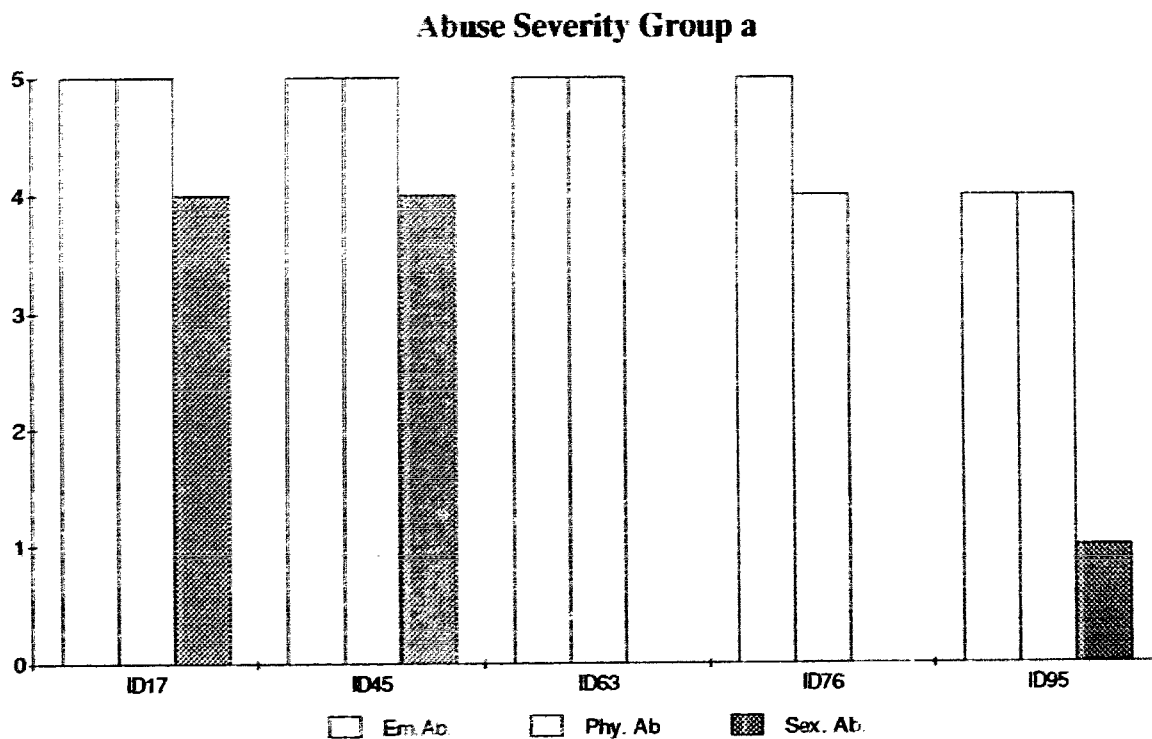
**Abuse Variables Means: Groups (n=5 each) selected from the severe abuse group in terms of maximum outcome contrast**

Abuse Variables	Group a: Outcome worse than average	Group b: Outcome better than average	t (df=8)
	<u>M</u>	<u>M</u>	
Traumatic Factors	7.4	4.6	3.1*
Rejection (Father)	81.0	52.6	2.7 *
Rejection (Mother)	80.4	60.6	1.4 ns

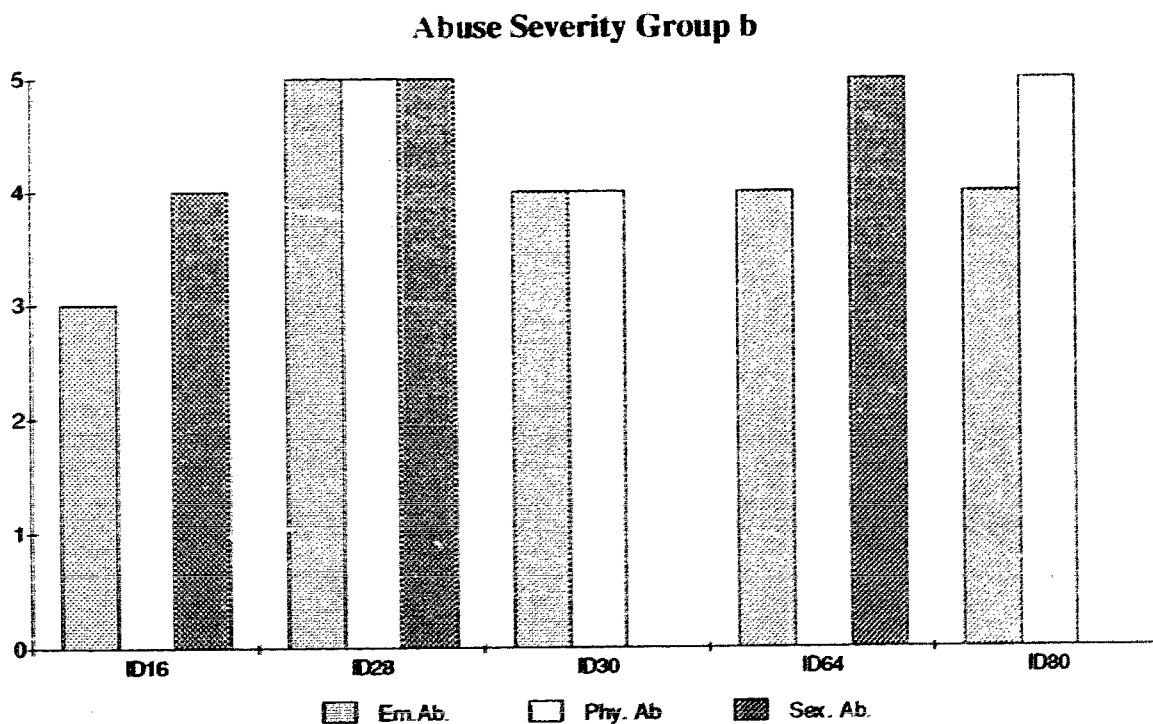
Significance level: \* = 0.05

The subjective abuse ratings also show a pattern of higher scores for the less functional group. The ratings for individual women (identified by ID codes) for each group are depicted in Figures 3 and 4. As we can see, only one woman from the more functional group (group b) reports experiencing the three types of abuse while three women from the more dysfunctional group (group a) do. Two women in the more functional group did not consider themselves emotionally abused. All the women in the less functional group did. Both emotional and physical abuse ratings appear particularly consistently high in the less functional group compared with the other group

**Figure 3: Subjective abuse ratings: lower functioning group**



**Figure 4: Subjective abuse severity ratings: higher functioning group**



Demographic factors and potentially protecting factors were also examined. The two groups were marginally different in age: three women were in their forties in the lower functioning group compared with only one in the other group. The remaining women were in their thirties. The group averages in education years were not very different, the lower functioning group with 11.4 and the higher functioning group with 12.8 years. The ranges, however, indicated less homogeneity, with the lower functioning group ranging from 6 to 18 years while the other group ranged from 10 to 15. Forty percent of the women in each group were in a current relationship and all had children with the exception of one woman in the lower functioning group. All ten women had been in therapy. However, the majority of women in the two groups indicated in the questionnaire that either therapy had not been useful, or that it had been useful to a limited extent only.

The potentially protective factors examined were warmth of father and mother (EMBU), childhood and adolescence social network (ESC), and adulthood social network (SSQ). T-tests for these variables can be seen in Table 18. Differences in parental warmth did not reach significance, neither did social support network in adolescence. However, the pattern of scores were all in the expected direction, higher for the better functioning group. Childhood and adulthood social support network differences did reach significance.

A further exploration of support networks was then conducted by examining the circles of support (ESC) for each of the 10 women. Table 19 shows the progression of close supports from childhood through adolescence and into adulthood for each of the 10 women. Close supports in the table were defined as level one, closest to the self in the

circles of support. The description of this level in the questionnaire instructions is as follows: "On this level you can place the people emotionally closest to you. Specifically, these are the people you have been able to count on for emotional support and comfort most of the time when you needed or wanted it" (see Appendix H for the description of the other levels). Given this definition, it is interesting that three of the five women in the lower functioning group include their children as their source of support, thus suggesting the possibility of a role reversal. None of the women in the higher functioning group included their children as their source of support. The other interesting difference in the table is the fact that four out of five women in the lower functioning group did not see anyone as supportive in their childhood. On the other hand, all the women in the second group included someone at this level, an adult in most cases.

**Table 18**

Potential Moderator Variables Means: Groups (n=5 each) selected from the severe abuse group in terms of maximum outcome contrast

Moderator Variables	Group a: Outcome worse than average M	Group b: Outcome better than average M	t (df=8)
Father's Warmth in Childhood	24.0	34.2	1.36 ns.
Mother's Warmth in Childhood	26.2	33.2	0.74 ns
Childhood Support Network	1.0	4.2	4.82**
Adolescence Support Network	1.8	2.4	0.42 ns.
Adulthood Support Network (size of network)	1.1	4.6	3.97**
Adulthood Support Network (satisfaction )	3.2	5.3	2.95*

Significance levels: \* = 0.05 \*\* = 0.01

**Table 19****Close support for specific subjects at three points in time**

<b>Group a</b>	<b>Childhood</b>	<b>Adolescence</b>	<b>Adulthood</b>
ID17	No one	No one	Daughter
ID45	Father	No one	Daughters
ID63	No one	Friend	Friends
ID76	No one	No one	No one
ID95	No one	Friend	Friend Children

<b>Group b</b>	<b>Childhood</b>	<b>Adolescence</b>	<b>Adulthood</b>
ID16	Aunt	No one	Friend
ID28	Grandmother	No one	Friend
ID30	Mother Friends	Friends	Friends Husband Mother
ID64	Friends	Friends	Friends
ID80	Mother Sister	Sister Grandmother	Sisters Friends

In summary, the exploration of the data in relation to these two groups of women did reveal some interesting results though they were not entirely unexpected. The women who were doing worse seemed to have had harder lives and higher abuse levels. The women who were doing better seemed to have had more substantial support in their childhood and had more substantial and more appropriate support systems in their adulthood.

## CHAPTER 8

### DISCUSSION

#### **The Sample**

The sample in the study was a self-selected group of women who were motivated enough to complete a long questionnaire including some very personal questions. Given the large number of participants who had been in some form of psychotherapy, it is possible that this was a group of women particularly interested in exploring their past and current difficulties: They might have seen the study as another opportunity to do this exploration.

The proportion of women in the sample who reported sexual abuse in their childhood is high (34%) but not abnormally higher than prevalence figures in the literature. Briere (1992) reports abuse prevalence estimates of 20-30% for sexual abuse in women, while other studies have reported figures of up to 54% (Ater-Reid et al., 1986). About 44% of the women in our sample indicated that they had been physically abused. This contrasts with college samples which have found figures of up to 20%. However, this is not surprising given that college students are likely a high functioning group of people who may have had more protected childhoods. The figures for emotional abuse are particularly high in our sample: 72%. We do not have specific figures to which to compare this proportion. The percentage makes sense, however, if we consider the high prevalence of sexual and physical abuse reports in the sample, and that emotional or psychological abuse is believed to underlay the other types of abuse. As well, our ratings of severity

included mild cases that might not be considered as abuse in the literature but that served the research purposes of finding a wide range of parenting practices.

### **The Psychosocial Development Scales**

All the variables used in the structural equation models were generally correlated in the expected directions and the intercorrelations were relatively high. The overall correlation matrix will be discussed in terms of the structural equation results later, but a few comments about the psychosocial development scales are pertinent here. The intercorrelations among the scales are very high, which is not surprising given previous literature findings (Ochse & Plug, 1986). This can be construed to mean low discrimination power of the scales for different constructs. However, scale discrimination was not important for this study. As Ochse and Plug (1986) have pointed out, Erikson's theory assumes that a particular stage of development will be highly related to previous stage resolutions. Furthermore, previous stage resolutions are likely to evolve and mature even after their critical period. Thus as the person ages a progressive integration of all the stages reflecting overall ego development should take place. This idea of overall ego development was the variable of importance for this study.

Our sample of women in their thirties and forties is, theoretically, in the process of resolving generativity and thus lower correlations between this scale and the other scales should be expected. Contrary to this expectation, the results showed that generativity was significantly correlated with the other scales. However, there was a trend showing slightly lower correlations for generativity compared to the correlations seen for the other scales.

Furthermore, when examining the relationship of generativity with maltreatment and with outcome variables, the patterns of the correlations do not follow the pattern seen for the other psychosocial scales. This differential pattern could be interpreted as indicative that generativity is in a state of being processed by the women in the sample. A similar abnormal pattern, however, was found for the scale related to initiative. No specific hypotheses and no previous results seem to explain this pattern, thus it is probably a sample-specific pattern.

## **Structural Equation Models**

### The measurement model

Given the high proportion of variance in the measurement variables accounted for by their corresponding latent variables, and the fact that all the parameters between measurement and latent variables are significant, it can be concluded that the measurement model is adequate. We need to take into account, however, that the latent variable Social Support appears to be primarily a measure of social support satisfaction rather than a measure of size of social network. This is not too surprising given that the two scales on the SSQ have been found to overlap only slightly in other studies (Sarason et al., 1987) and, here, both could not be expected to contribute highly to a common factor.

Results regarding the relatively lower contribution of generativity to the psychosocial development latent variable compared with the other psychosocial scales is not surprising. As discussed above, because generativity is hypothetically a stage in



process for the women in the sample, this variable is expected to contribute less to the underlying ego development factor reflected in the corresponding latent variable.

### Structural Model 1

The overall fit of the general model is moderate. While the  $\chi^2$  related to the variance unexplained by the model is statistically significant, its size is not unreasonable given the total degrees of freedom in the model. As noted in the methods section, some authors have argued that models with a  $\chi^2$  no larger than two or three times the degrees of freedom should be considered a reasonable fit for the data (Hayduk, 1987). In our case, the  $\chi^2$  is less than two times the degrees of freedom. Another issue is that maximum likelihood estimators have been found to produce  $\chi^2$  values that are too large when the sample is small and the measurement variables are non-normal (West et al., 1995). The study's sample is considered small for SEM standards and, as reported in the results section, the observed variables show some departure from normality. Thus, the significant  $\chi^2$  obtained should not be used as a criterion for rejecting the model.

The indexes of fit used to test the model further show moderate to good fit. Perhaps the most adequate indexes to test this model are the IFI and the CFI given both sample size and non-normality issue (see methods section). Both of these indexes show a good fit for the model. The absolute fit represented by the GFI is not as good but can be considered adequate given that several factors (sample size, non-normality, dependence of latent variables) can be assumed to contribute to underestimate its value (see methods section). The AGFI shows a significant penalty for the model given its complexity and given that the sample size is small, so inferences to the population might be inaccurate.

Approached more descriptively, the model seems to fit to an acceptable level, as shown by the relatively small average difference (the SRMR) between the observed and the calculated correlations.

The specific path parameters show both expected and unexpected results. As expected, attachment variables appear to be significant mediators between reported maltreatment and psychosocial development, but the relationship is not absolute. Mediation implies that a variable constitutes the mechanism by which one variable impacts a third. What the proposed model implies is that child maltreatment has its impact on psychosocial development through its impact on attachment, which is the system related to security. As it was suggested in chapter 5, given a situation of maltreatment, the behavioral attachment system is assumed to be in a chronic state of activation. Under these conditions, the attachment system is hypothesized to take priority over the other behavioral systems that have been related to ego development, thus interfering with this development.

The parameters found for the paths involved in these assumptions appear to support a mediator role for the attachment model of self but not so much for the attachment model of others. Given the psychosocial nature of the model of ego development, I had expected a more balanced contribution of the two attachment working models. However, it is not unreasonable to consider that a model of self might have a greater impact on early ego development. Because ego development is believed to build on previous development, these early resolutions, already impacted by the attachment situation, will in turn impact other stage resolutions.

Another hypothesis in the proposed model was that both attachment and psychosocial development would mediate trauma impact. This was based upon the implied relationship of both attachment and psychosocial development to adaptive functioning. However, the results confirmed this role only for psychosocial development. It would seem that attachment, particularly the attachment model of self, mediated the impact of maltreatment on psychosocial development and that psychosocial development in turn mediated symptomatology. This is not out of line with Horowitz's (1992) theory of trauma where the assumption is that ego mechanisms are responsible for the ability to tolerate the emotional impact of trauma and thus permit the resolution (i.e., the healthy integration) of trauma experiences with the rest of the personality. In other words, the data suggest that the impact of child maltreatment on the attachment system might impede the development of ego mechanisms related to the ability to tolerate extreme emotional states which, in turn, interferes with trauma resolution and results in increased symptomatology.

The aspect of the model related to social supports showed mixed results. I had hypothesized that there would be an impact of reported child maltreatment on adult social support systems mediated by the attachment system. Results support this assumption for the attachment model of others but not the attachment model of self. I had not specifically hypothesized a differential influence of the two attachment schemas to social support, but the results are consistent with the theory. It makes logical sense that what kind of social network the adult has is based on how he or she sees others. This is particularly likely for our social support latent variable which seemed to be primarily based on social support

satisfaction. Sarason et al. (1991) proposed a relationship between attachment working models of self and others and perceived social support, but they did not differentiate between model of self and model of other. However, Griffin and Bartholomew (1994), using the same measures of attachment in this study, showed with a structural equation analysis that the attachment model of others had a very strong path to positive interpersonal orientation. The path from the attachment model of self to positive interpersonal orientation was null. It is reasonable to assume a relationship between a positive interpersonal orientation and perceived social support, so the results by Griffin and Bartholomew appear congruent with our findings.

Social support in adulthood was also expected to have an impact on trauma symptomatology. Surprisingly, given that social supports are generally considered in the literature to have a role in trauma impact, results did not confirm this hypothesis. An alternative possibility, consistent with the theories in the model and with the obtained data, is that social support is likely to have its greatest impact through early relationships that are formative for attachment models. However, once these models, particularly the attachment model of self is formed, they would have a significant impact of what kind of support system is developed in adulthood. Normative social experiences from this point on would not have much of an influence, by themselves, for changing established ways of coping.

The LISREL program we used for testing the proposed model provides suggestions for post-hoc adjustments of the model to the data. It indicated that out of the parameters that were considered fixed in the model, the freeing of the relationship between

maltreatment and symptomatology would produce a sizable decrease of the model fit  $\chi^2$ . In other words, the program indicated that the model might fit better if we were to consider a direct path impact of trauma on symptomatology as well as the mediated paths. We explored this possibility by testing a post-hoc model with the same parameters used in the original model plus a maltreatment-symptomatology path. The new path had a significant parameter of .27, while the path through psychosocial development remained strong (.57). The difference in the  $\chi^2$  between the models was small and only significant at the .05 level of probability. Most of the fit indexes remained the same between the models. A speculative way to interpret this result is that given a certain severity of trauma, lack of resolution resulting in symptomatology could become independent of ego development. In other words: any one would break if the trauma were intense enough.

#### Structural Models 2,3,4

Even if a model fits data adequately there are always alternative models that might fit the data equally well or better. Model 1 left room for alternative explanations regarding different relationships among the variables. Expecting that this would be the case, I defined two a priori models that could be presented as alternatives to the attachment-psychosocial development mediation assumptions of model 1. A simplified version of model 1 was used by excluding symptom and social support variables. The model implying the mediation of attachment between maltreatment and psychosocial development (model 2) was compared to a model implying the opposite, namely, that ego development mediates trauma impact on the attachment system (model 3), and a model implying no mediation (model 4). The results showed that the no mediation model fit the data

significantly worse than model 2. However, the difference between the two mediation models was not significant in terms of  $\chi^2$  change. The model placing attachment as the mediator variable shows a pattern of slightly better fitting indexes, but this is not surprising given that this model has an extra parameter in it. In principle, models with a larger number of parameters tend to fit the data better.

The results do not support the hypothesis that a model which gives attachment a mediating role between child maltreatment and ego development would fit the data better than a model with the opposite assumption. However, the model giving psychosocial development a leading role in the impact of attachment by maltreatment is clearly not superior either. A possible theoretical alternative that was not tested but that now appears likely to fit this kind of data, is a model in which attachment and psychosocial development are considered as mutually related and part of an ongoing process. In this model, trauma would have been seen as impacting the attachment system which would have impacted psychosocial development. At the same time, trauma would have been assumed to impact psychosocial development directly, and psychosocial development would have in turn impacted attachment. And so on. The present research design lacked the power to test these complex alternatives properly. Perhaps the best design would have included two groups of subjects, one with severe childhood maltreatment and other childhood trauma variables, the other with no maltreatment and no trauma in their childhoods. This would have made possible to assess better whether attachment takes the lead in situations believed to chronically activate this behavioral system but not in normal situations. The composition of the current sample did not permit this kind of analysis.

Until this can be tested, it is probably better to assume that attachment and ego development proceed in a reciprocally-enhancing fashion.

Finally, it can be argued that the number of subjects in the sample was insufficient for proper statistical inference using structural equation analysis. Sample size was particularly problematic in relation to the large number of parameters included in the models. In addition to the small number of subjects, the sample, as I discussed before, was a self-selected one. Thus, the generalizability of the results is questionable and the results should therefore be taken as descriptive of the sample in question.

### **Sexual abuse**

Given literature reports on the impact of sexual abuse, it was expected that sexual abuse would be correlated with adult developmental outcome variables. This was not the case for attachment dimensional variables, for psychosocial development total scores, or for the specific psychosocial development scales. It had also been expected that there would be a positive correlation between sexual abuse and trauma symptom variables. The correlation with the TSC, a measure specially designed to measure sexual abuse impact, did not reach the set level of significance. None of the specific symptom scales, and not even those particularly expected to relate to sexual abuse, the sexual problems scale, and the sexual abuse index, developed by Briere and Runtz (1989), correlated with sexual abuse in our sample. However the other symptom measure, the IES, showed some interesting results: its avoidant symptoms scale, but not its intrusive symptoms, correlated with sexual abuse. This pattern favoring avoidant symptoms was exclusive of sexual

abuse, as both physical and emotional abuse correlated significantly with both intrusion and avoidance. As it will be discussed below, this difference disappeared when the data was examined in terms of abuse groups and not just in terms of abuse ratings. This is probably due to the fact that the women who reported sexual abuse also reported other forms of abuse.

It is also possible that the pattern of higher avoidance symptoms related to the sexual abuse ratings is reflective of a consolidated avoidant style of coping which may result in denial of negative outcome variables. As we saw in the review section, some studies have found that a significant group of sexually abused women tend to underrate symptomatology (Brooks, 1985), and others have described a coping style that appears functional in terms of outcome variables, but that shows a reliance on ego over-control that has its costs (Cicchetti et al., 1993; Werner, 1993). This style of coping has been associated with the avoidant attachment style as well (Dozier & Kobak, 1992). While the majority of women who reported sexual abuse in our sample, and who primarily identified with one attachment prototype, endorsed either an avoidant-dismissing or an avoidant-fearful style (16/26 or 62 %), this does not explain the differential findings for the sexual abuse grouping: the women who reported non-sexual abuse also were overrepresented in the two avoidant categories (17/30 or 57%). Thus type of abuse does not seem to differentiate coping style.

It is unlikely that the non-significant findings with the sexual abuse variable were related to insufficient severity of abuse in the sample. While the variable used was an entirely subjective measure of severity, the ratings were close to normally distributed in the



33 women who reported sexual abuse. Two thirds of these women reported moderate or severe abuse, and these ratings were congruent with specific descriptions of the abuse experiences in the questionnaire. Abuse experiences ranged from mere touching or kissing, to repeated rape by different perpetrators. Most of the women reported abuse by a close family member, often a father, a stepfather, an uncle, or an older sibling. The majority of the women had been abused more than once, and a significant number had been abused frequently. However, the fact remains, that the sexual abuse variable used in the correlations was a completely subjective rating of severity that was not directly based on these specific abuse descriptions. It can be argued that self-reports of abuse severity can be affected by specific defensive processes that might compromise their accuracy in relation to the actual experience of abuse. Perhaps this explains the lack of correlation that was found between the sexual abuse variable and the outcome variables.

Interpretation is complicated by the fact that, with only two exceptions, all the women who reported sexual abuse also reported physical abuse, emotional abuse, or both. This finding is very common in the literature (Briere, 1992) and it is not surprising given that sexual abuse often takes place in the context of a dysfunctional family environment. In this sample, sexual abuse did not seem to add to the symptomatology and poor developmental outcome measures of women who had a number of trauma factors in their childhood. Scalzo (1991) found similar results with similar abuse groupings. It can therefore be suggested that psychological and sexual abuse cannot be separated, and that the impact of sexual abuse is perhaps due to the associated psychological abuse. This is a suggestion also supported by other authors in the field (Briere, 1992).

A final point is related to the combination of sexual and physical abuse. The literature has indicated that the association of physical and sexual abuse results in more symptom severity (Briere, 1992). The present results did not show this pattern. In fact, the group who had reported sexual and physical or emotional abuse did better on some outcome variables compared with the non-sexual abuse group. For example, the sexual abuse group did not differ in attachment model of self from the control group, while the non-sexual abuse group showed a less positive model of self than the control group. As I have indicated earlier, however, the use of entirely subjective severity ratings for the abuse variables could explain the discrepancy between these findings and other results reported in the literature.

### **Attachment styles**

The expectation that a higher proportion of women who reported childhood abuse would have a fearful style compared with women who reported no abuse was supported by the results. About 39 % of the women in the abused groups who identified with a particular prototype endorsed the fearful style. This contrasts with 6 % fearful style endorsement in the no-abuse group. This finding is generally consistent with the literature although the specific proportions vary. The relative proportion of the styles in the no-abuse group, 59% secure, 6% preoccupied, 29% dismissing, and 6% fearful is different from findings with college samples using interview measures. Bartholomew and Horowitz (1991) found a proportion of 49% secure, 12% preoccupied, 18% dismissing, and 21% fearful. The combined abuse groups also show different proportions to those of

Bartholomew and Horowitz: 29% secure, 13% preoccupied, 20% dismissing, and 39% fearful. The main difference here is in the proportions of the secure and the fearful styles. It appears that the hypothesis of an association of the fearful style and abuse is supported by the data.

For the sexual abuse group the proportions were 35% secure, 4% preoccupied, 19% dismissing and 42% fearful. Alexander (1993) found a proportion of 14% secure, 13% preoccupied, 16% dismissing and 58% fearful in a similar sample of women using the same measure. The proportions seem to indicate that our sample is perhaps higher functioning compared with Alexander's sample, conclusion that is also consistent with the low correlations among sexual abuse and symptom outcome described above.

The relationship between attachment styles and other outcome variables presented earlier in Table 14 shows an overall pattern in which the fearful style appears to be the most dysfunctional, followed closely by the preoccupied style. While tests of significance were not conducted for specific style comparisons, the women who endorsed a fearful style had consistently the lowest functional ratings (low psychosocial development, high symptoms, less satisfaction with their social supports). This is congruent with our expectations and with other literature findings (Alexander, 1993). There was a consistent progression towards better functioning from the fearful to the preoccupied, to the dismissing, to the secure style. This is in agreement with expectations regarding the descriptions of the four attachment prototypes (Bartholomew, 1990).

### **Trauma Coping Style**

Results with the Impact of Events Scale (Table 13) indicate that the two abuse groups show higher intrusion and avoidant symptoms compared with the no-abuse group. This is particularly true for the ratings related to the childhood traumatic event. It also holds true for avoidance in relation to the adulthood event. The exception is for the intrusion scale, but only for the comparison of the sexual-abuse and no-abuse group. In summary, no general characteristic pattern of intrusion or avoidance is found in the abuse groups, rather, both types of symptoms seem to be high regardless of the recency of the stressful event in question. This is congruent with Horowitz (1992) theory regarding dysfunctional stress syndromes, which hypothesizes that lack of resolution of trauma results in a rapidly fluctuating cycle of intrusion and avoidance.

Alexander (1993) has found a high proportion of both intrusive and avoidant symptoms in sexually abused women with a fearful attachment style. This pattern is also expected of people who are described as having unresolved trauma resulting in a disorganized/disoriented pattern of attachment (Main & Hesse, 1990). The current study could examine this issue only partially, given that not all the women in the sample could be classified into specific attachment patterns. The results (Table 15) indicate a pattern of higher avoidance in the women who endorse a fearful attachment style. The pattern is not as clear in relation to intrusion, as the preoccupied pattern is also high in intrusion. Therefore, the fearful style shows high intrusion and avoidance but this pattern does not appear to distinguish this attachment style from the preoccupied style.

Given the relatively low ego developmental scores of the women with fearful and preoccupied attachment styles, it is not surprising that the process of working through of trauma is not taking place smoothly. According to Horowitz (1992), the process of the working through of trauma experiences is dependent on the ego capacity to tolerate highly emotional experiences. The structural equation analysis results also support the idea that psychosocial development mediates symptomatology. Again perhaps it is attachment that impacts ego development, or perhaps attachment and psychosocial development interact with each other to produce the outcome.

#### **Exploratory data: vulnerability and resiliency**

As we saw in the results section, a sub-group of resilient women was selected from among those who had experienced severe abuse but who were doing better than average on attachment, psychosocial development, and symptom variables. This group was then compared to the group of women who were doing worse than average for these measures. Even though there were only five women in each of these groups, we found significant differences in the number of childhood traumatic factors, and the level of rejection by father. Other abuse variables were suggestive of greater severity of physical and emotional abuse in the more impacted sample. These women's childhood environments appear consistently highly dysfunctional, with no one to turn to for support or help. It appears, then, that the main explanation for the differential coping found in the two groups can be found in the severity and pervasiveness of childhood trauma and in the

lack of compensatory supports in the lives of the lower functioning women. This issue is discussed in more detail in the next section.

### **Narratives of trauma and coping**

It is very difficult to get a clear picture from quantitative data only of what the women in our sample experienced and how they have struggled in their lives. The quantitative approach necessarily obscures individual experiences and hides the rich complexity of lives. Many of the women in our sample provided ample qualitative comments in their questionnaires that cannot be ignored. As well, several of the participants from the severe abuse group were interviewed regarding their ways of coping and the factors that have improved their lives.

We saw earlier that five women in the sample were doing particularly poorly in terms of our outcome variables. I believe that the comments these women write describing their early experiences break down the intellectual safety that reading numbers provides the reader. The women's experiences become real and a distancing stance that, as Herman (1992) has suggested, tends to blame the victim for doing poorly, cannot be easily maintained. The following are three examples of written statements by the women in that group:

**"I was abandoned by my mother at age two years. From 2-5 years I remember various cold and wet homes. When I was 5 my father placed me out to board with a pervert and his mentally challenged wife. She beat me, emotionally, physically, mentally, and her husband used me for his sexual play toy for 10 years straight. I grew up to be promiscuous, drug addict, alcoholic, unable to trust anyone, love anyone. Neither can I respect authority. I have been in jail, I have tried to commit suicide. My sexual orientation is questionable. I want to physically hurt myself."**

“When my father was mad, drunk, or unhappy, he would threaten to shoot me, my sisters, and my mother. He would get out one of his many guns and line us up and make us stay there until he passed out or changed his mind, hitting and yelling the whole time... I was sexually abused several times by a stranger and by a relative... In my family me and my three sisters were not fed well at all as children. I spend most of my childhood being extremely hungry and I was very sick and thin. No one ever intervened or tried to help me or my sisters. Only one of my sisters was apprehended by child protection services. All the rest of us thought she was extremely lucky.”

“I remember receiving a brutal beating by my father who was sleeping off the effects of alcohol from the night before. I passed out from the beating, suffering swollen eyes and bruises... I was beaten daily... My parents were obsessed with achievement and with what the neighbors thought of us. My father beat me when I was five because I flunked “skipping” in kindergarten. He kept me awake until 11 PM, skipping around the living room, and slapped me when I cried out of exhaustion... I was sexually promiscuous from age 14 with men at least five years older than me... I’ve had a tough time figuring out what makes people happy, as I have no comprehension of the world.”

All the women with the most severe abuse ratings describe feeling terrorized in their childhoods. It is not impossible to imagine the terror after reading the descriptions above. It is also not surprising that these women are still struggling with their lives given the overwhelming nature and the pervasiveness of those early experiences.

Even though some of these women are not doing well in terms of our outcome measures, they often report that their lives have improved and have become more manageable. On the questionnaire these women wrote explanations for the change they had experienced, and then elaborated on these in the interviews. Three themes stand out: control, meaning, and children. The efforts to feel in control can be seen in the struggles of all these women. Control over their feelings and their remembering, and control in their lives and relationships. The struggle does not end because helplessness seems ever present

and ever recycling itself. Finding meaning in their lives, whether religious/spiritual meaning or an understanding that others have suffered similar experiences and that they are not alone, seems to have resulted in a sense of hope for some of the women. For others, finding meaning is a project for the future and just a dream for the present. They know only that they want to get to understand something: they are not sure what, not sure how. Having children is presented by some of the women as the motivation to pull their lives together and develop a new sense of responsibility. It carried them away from their own nightmares.

Life descriptions extracted from the interviews give an in depth understanding of how the themes of control, meaning, and motherhood intertwine in some of the women's lives. They show how these "solutions" benefit in some ways and hinder in others, when they become part of the problem instead of being part of the solution. Summaries of three interviews follow. The women's names have been changed for confidentiality reasons.

Susan is in her late thirties and describes being severely physically and emotionally abused as a child. On the ESC she indicated that she had no one who was supportive during her childhood. In her adolescence she had a supportive friend. She is not in a relationship, has no children, and lives alone with her cat. Susan identifies herself with the fearful and preoccupied attachment prototypes on the RQ, while she sees herself as having been both fearful and dismissing in the past. Susan completed grade 12 and has held a number of low skilled office jobs on temporary or par-time basis. She dislikes these jobs and wants to acquire some skills to get better jobs. But she is waiting for a free course or for someone who would offer to teach her. Susan wants to be an artist but



procrastinates and has no plans; it is more like a dream. She moves frequently: different apartments, different cities. She wishes to move now but cannot afford it.

The main struggle in Susan's life seems to be helplessness and a need to gain control over her feelings and over her life. During the interview she cries several times, and every one of these times, she explains that she does not feel comfortable feeling and showing those feelings, and that she is trying to control them. Things in Susan's life go well for a while then go bad, and she does not know what causes the changes. She is trying to understand. She is also trying to control her boundaries with her mother and sister. Susan is consumed with the trying and it is not working yet for her. She feels like a doormat, run over again and again. And she hides. Her home is her sanctuary; she does not invite others in; she cherishes her solitude, even her loneliness.

A woman friend and a group of, in her description, "new age" people, have recently inspired Susan. She has felt appreciated and marvels at the feeling. She has learned a new philosophy that tells her she can have control over her life and that she is a kind spirit, that she is OK. She has been with people who know how to open up and she wants to try to do this. Susan now has hope, but the struggle to both gain control and open up consumes her and tires her. She feels exhausted all the time. She is turned inwards trying to understand herself and has no time or energy to get involved with other things. The woman friend she admires, who has had an impact on Susan's life, is far away. This woman is all that Susan would like to be and feels she is not. She looks up to this friend and tries to emulate her. This friend is the basis for Susan's hope. Susan wants to learn to love herself the way this friend loves people. Her message to other women recovering

from trauma is that we are spirits born into a body and are OK even though everything on earth tells us that we are not OK. The key is loving oneself.

It seems as if Susan has an “attachment-intimacy” wish, an “identity” wish, a “generativity wish”, a “meaning” wish. But she is waiting for something to happen, to make it all real. Susan is struggling and is drifting. But perhaps her hope, her new meanings, her trying, will eventually anchor her into a more solid and connected life.

Linda is in her early forties. She placed herself in the severe range of childhood emotional, physical, and sexual abuse. In her childhood, her father was the only supportive person she included in the ESC, but he was also a source of unpredictable violence. In her adolescence she had no one by whom she felt supported. On the RQ she rated herself high in the fearful and preoccupied scales, both in terms of how she saw herself now and in the past. Linda is not in a current committed relationship but she has two teenage children whom she considers her source of support. She completed only up to grade 6 and is now a single mother on social assistance with no specific plans for supporting herself.

Linda is angry and lets the world know about it. The most positive change she sees in her life is stopping being a “doormat”. She says she is tired of trying and has decided “the hell with everybody”. She is angry at people in her life, and particularly her mother, whom she describes as “the bitch”. She is also angry at the social system that failed her and placed her in a correctional institution. She is a fierce campaigner against child abuse she sees or hears about. She takes abuse complaints and suspicions to social services, but she is not involved in any social organization. Her language reflects her angry, non-compromising attitude. She uses strong language liberally and has a very direct and

piercing style. Linda has a wide pattern of medical symptoms, many of them serious. She has undergone major surgery for different kinds of problems. She often is depressed and anxious and feels so insecure that she does not think she is capable of holding any type of job. She has a sense that she is going to die before she is 50, and has had this feeling most of her life.

Relationships have been and continue to be a problem for Linda. She is very critical of some of her ex-partners for being "boring" or "stupid". Other partners have been abusive and she has been beaten and seriously hurt on a number of occasions. She also fights back, both verbally and physically, when she senses herself or her children threatened. She describes punching men, and chasing them with a baseball bat. Linda is not sure that she can have a good relationship and is aware that she needs counselling. She dreams of the possibility of finding a supportive, non abusive, and financially secure man. She wants to be taken care of and wants to stop worrying about money and her future. Linda visits a woman who is in her seventies regularly as part of a volunteer program that increases her social assistance income. She says she would still do it if she was not getting paid because she likes this person and feels that they are both alone. She is very protective of "her" senior citizen and fights verbally with anyone who seems disrespectful of her friend. She has few other friends and her main source of support is her teenage daughters. She relates some specific examples of the advice and encouragement she receives from them. When she describes her daughters, she says that they have problems but she is proud that they have not had trouble with the police and that they have managed to avoid pregnancy. One of her daughters has been diagnosed with ADD.

Linda centres her accomplishments in life around her daughters and the senior citizen she visits. She thinks that everyone is in this life for a reason, but she is not yet sure what the reason for her life is. Whenever comments are made during the interview about her strength, Linda answers that she does not know where it comes from and changes the subject, usually to describe medical problems or unfulfilled wants. Linda appears immersed in a continuous struggle that takes the form of cycling anger and helplessness. On the more positive side, her coping has resulted in a direct style which can be refreshing and charming, a use of humour which transforms bleak scenarios, and a sense of injustice which channels her anger into some positive outcomes.

Elsie is in her early thirties and describes a history of severe physical and emotional abuse and mild sexual abuse. She feels that she had no one she could count on during her childhood, and only one friend during adolescence. As an adult, she can depend upon one friend; she also finds her young children are a source of support. Elsie scored herself highest on the fearful attachment dimension in relation to how she saw herself now and endorsed both the secure and the preoccupied prototypes for how she had been in the past. Elsie has three children, but is not in a current relationship. She is on social assistance and has no specific plans regarding employment. She completed grade 12 and would like to go back to school but has no definite education plans.

Elsie describes her children as the source of the biggest positive change in her life. She has dedicated her life to them and wonders what her life is going to be like now that they are all going to be in school. She has been in very violent relationships and now prefers her peace of mind to being involved with anyone. She is still afraid of one of her

ex-boyfriends and mistrustful of her ability to find and choose a non-violent man. She also knows that she is very vulnerable to rejection. She would rather hide at home than expose herself or her children to being rejected. Elsie is proud of the home space she has created for herself and her children: comfortable and safe; very different from the environment she grew up in. She spends most of her time at home, more so over the last three years as she has developed anxiety symptoms about going to public places like department stores and banks. Of her family and relatives, only one sister lives nearby and Elsie gets some support from her in terms of help with the children. The father of one of the children also gives occasional support. Her dedication to the children has isolated her from previous friends. She feels that her world is now very small.

Elsie sees her leaving her family at 18 as a big accomplishment and sounds proud of it. She worked in a secretarial job for some time. While things have fallen apart for her on a number of occasions, she has always been able to pull it together for the children. One example she gives is how she was able to end an addiction to cocaine as soon as she found out she was pregnant in her early twenties. It is important for her that her children receive better care than she received in her childhood and she feels proud of what she has accomplished so far. She has vague plans for going back to school and becoming a legal secretary, which is something that has interested her in the past.

Elsie does not sound angry, but she describes feeling angry with her mother for not protecting her from her father's extreme violence. There is a strong element of sadness and hurt in this anger, however, which clearly shows in the interview. She also sounds hurt and sad about the fact that no one helped during her childhood even when she and her

sisters often went to school with black eyes and bruises. Elsie sounds numb in relation to her father. She says she never cared about him, never tried to please him or to be accepted by him. She does not care about him now. In spite of this emotional distancing, memories of the violence and the abuse she experienced at her father's hands threaten to overwhelm her at times. Counselling has helped her to get in touch with feelings and parts of herself she had blocked out, but she is tired of exploring deep difficult experiences and feels she needs a break. When she starts to get scared or anxious, she tries to relax, smokes pot, isolates herself and listens to music, and getting lost in it.

Elsie appears to be sitting on the edge between avoidance and intrusion with regards to her childhood experiences and to the violence she has experienced as an adult. Although she thinks that she has been able to integrate some aspects of herself that had been previously lost, and although she thinks she is more in touch with her feelings now, she still believes that she has a lot more work to do. She is just not quite ready to do it and prefers to linger in the comfort and safety of her home and her protective/relaxing techniques.

These three life stories are in some ways different and in some ways similar. From an attachment perspective these women identify themselves to some extent with the fearful styles. However, Susan appears to be moving towards a greater interest in people, indicated by her additional endorsement of the preoccupied style, and by her description of the impact of her new friendships. Linda endorses both the fearful and the preoccupied prototypes, but while her description of herself has not changed from her ratings of how she was before, her life description gives a sense of a back-and-forth fluctuation between

fear and preoccupation. Elsie's attachment seems to be following the opposite direction compared with Susan. Elsie sees herself as moving from a style of preoccupation with relationships to a fearful protective style. Both her ratings on the attachment measure and her life description are congruent on this point.

Notwithstanding their different styles, these three women have found ways to soothe and protect themselves. At the same time, the coping they have developed seems to translate in a protective inactivity which impedes forward movement in their lives. They seem to be waiting for the world to become safe or for somebody to come and make it all right for them. They are angry, they are sad; they are disconnected; and they are lost in the injustice that has been done to them.

The ways in which these women are trying to cope with their lives are similar to those described by Morrow and Smith (1995). These authors interviewed 11 women in order to explore their ways of coping with childhood sexual abuse. Two types of strategies were found: strategies aimed at managing threatening feelings and strategies aimed at managing helplessness and lack of control. We have seen both types of strategies in the current study's sample. We also know that these strategies designed to control feelings, memories, reminders of past abuse, and other aspects of one's life are an integral part of trauma reactions (Horowitz, 1992).

The issue of control stands out for the women in our sample. In previous sections we have discussed how ego overcontrol and avoidant strategies seem to be behind apparent good functioning in the world. For the women who do not seem to function as well, the issue of helplessness and control appears a never-ending one. I have so far

specially discussed this issue in terms of attachment styles. However, the maintenance of control reflects issues of trust and autonomy as well. Erikson's descriptions (see chapter 4) of trust as the ability to receive what is given, and as the capacity to trust one's own impulses as well as others' intentions, appear particularly significant for the women in the sample. As well, Erikson's description of the autonomy struggle seems to be chronically perpetuated and at the top of their agenda, particularly for the maltreated women who seem to be doing poorly.

Other issues presented by these women also relate to stages of development. Initiative and Industry appear stalled in the lives of the women whose descriptions are presented above. Identity and meaning seem to be diffuse as well. The women are not sure who they are and are not sure what they want, beyond wanting something great (a good relationship) to happen to them. Some women are struggling to find meaning. Several of the twelve women interviewed referred to some kind of spiritual experience that is soothing and hope-endowing. For some women this has been a natural unfolding out of significant life experiences they have had as adults. For other women it seems to be an imposed meaning connected to a particular subculture, for example Alcoholic Anonymous or other religious or political subcultures.

The women who have children seem to have centered their lives around them, holding onto them for support, for relating, for meaning, for the purpose of countering what was done to them, for controlling the badness of the world, for keeping suicidal acts at bay. It seems a heavy responsibility for the children and one wonders how they might be managing their own developmental unfolding. Generativity comes to mind, as it appears



that some of the described attitudes to the children are consistent with Erikson's description of the non-generative parent. The self-absorption that is apparent in some of the women's descriptions of their lives, and that appears congruent with the self-protection of the fearful attachment style, also reflects a non-generative stance.

What seems apparent from this discussion is that the survival and coping strategies described by the majority of the severely abused women do not lead to happy well-adjusted lives. As the women in Morrow and Smith's (1995) sample, these women complain about not having the happiness, the peace of mind, and the relatedness they crave. They are unhappily or angrily waiting for something to change.

What is the way out for these women, and is there something we can learn from this study that may be of help? To address this question, I looked into the life experiences of the previously mentioned five severely maltreated women who appeared to be coping well with their lives. All these women seemed to have had some compensatory positive experiences in their childhoods or in adolescence. The interviews for two of these women, both with a secure attachment style are summarized next.

Both of these women had moved from preoccupied to secure attachment on the "before" and "now" ratings of the RQ. When compared to the average for their severity group, the two women were doing slightly better on psychosocial development and had less overall symptomatology. There were two major differences in the life histories of these women and the three whose interviews are described previously. First, the abuse histories were different. These two women had not been physically abused, and the overall dysfunctionality of their families did not seem as pervasive. Even though they both had

been sexually and emotionally abused, they seem to have had some other redeeming experiences. One woman had felt close to her mother, the other had had supportive friends during her childhood. Both describe an important positive turning point during their adolescence. One woman got married at 17 and the marriage developed into a supportive relationship that has lasted until the present time. The marriage permitted her to break away from her family and to explore herself with a freedom she had not felt before. The second woman was placed in a special program in highschool which promoted closeness and mutual support in the students, and which allowed them as a team group to have significant decision making control. The close relationships she was able to develop there have continued into her adult life. She is currently involved in a long-term supportive lesbian relationship. In addition to having current close relationships, both women describe having many close friendships. Their lives seem open and full, even though they are still dealing with abuse issues. Both women have been involved in productive therapy. One describes a therapy group that has become a source of meaning and support. The other describes deriving meaning from spirituality. Both women think that they have more work and more exploring to do, although their lives seem to be progressing relatively smoothly. One of the two women has children, but they do not seem to be the centre of her life; her support is coming from her husband and her friends, not from her children.

Is there something intrinsic about these women that has made the difference, and has resulted in better lives and better coping?. Or is it something about their environment that has made the difference?. The results do not answer this question because the women who are doing worse seem to have had worse childhood experiences. Had these

experiences been more comparable, perhaps we could have said more about this question. Nevertheless, it appears that having at least one non-abusive person to count on as a child or as an adolescence is a fundamental ingredient in the lives of the women who do not seem immobilized by traumatic childhood experiences. Other studies have found a connection between early supportive relationships and resiliency to maltreatment and trauma, and have also found that adult supportive relationships can break cycles of abuse (Egeland, Carlson & Sroufe, 1993). The picture, however, is very complex and the outcomes observed in maltreated samples in general are not very optimistic.

Another factor we explored in our sample was satisfaction with therapy. However, because the type of therapy received was not investigated, it is not possible to examine whether a particular type of therapy was more useful than another. Some women in the severe abuse group commented that therapy had been helpful, but a significant number of these women qualified the extent of the helpfulness. The commentaries by the women in the group that seemed most unresolved, indicated that they were less satisfied with their therapy experiences. In general, for the women who were doing comparatively better, therapy seemed to have been a factor but it was not presented as a central one. A few women who described therapy enthusiastically did not seem to be doing as well as would be expected in outcome measures. It seems that the question of the helpfulness of therapy remains largely unanswered.

### **Concluding remarks**

The strength of this study relies in its descriptive power rather than in its inferential power. As we saw earlier, the small sample size and sample characteristics limit the generalizability of the study results. As well, the fact that only self-reports and subjective ratings were used, can limit the generalizability of the results to actual experiences of child abuse. It could be argued that what the study measured was a general dysphoric factor in the women who were unhappy with their lives, and that this factor could account for their responses to the maltreatment variables. However, as Perris (1988) argues, this dysphoric factor can be interpreted as a generalized cognitive schema that has been formed in the context of actual childrearing experiences, and that it remains closely related to these experiences. The variables in this study are likely measuring different aspects of this general schema. However, alongside with Perris' argument, I believe that conclusions might be drawn regarding a formative dysfunctional early environment. On the other hand, conclusions regarding specific abuse experiences or specific types of abuse need to be interpreted with caution.

The results of this study support the hypothesis that, at least for this sample, subjective reports of early maltreatment and dysfunctional family environments are related to adult functioning and coping strategies in complex but predictable ways. It appears that trauma impact is mediated by psychological structures that are believed relatively stable over time. This would explain the persistence of coping strategies that seem to keep the women in the study from developing more satisfactory lives. The women who are doing better seem to have been able either to form better attachment or ego structures, or to

have changed early structures in the context of supportive relationships. Therapy might have helped some women, but its impact is not clear in many cases.

Since symptomatology appears directly related to psychological structures that have been formed in the context of trauma, a crucial question concerns the kinds of experiences that would be disconfirmatory enough for the existing structures to be transformed into more adaptive ones. This is a difficult problem to resolve, given that trauma resolution depends on having some adaptive structures in the first place, and that lack of trauma resolution interferes with the formation of more adaptive structures. The problem feeds itself. It does not help to know that the ability to receive support from the environment might also be mediated by these structures. We do not have a final answer for the problem, but some suggestions for treatment can be derived from the study.

First, it appears that a relational context is necessary for the formation and perhaps the transformation of psychological structures. Up to adolescence, transformation of previously formed psychological structures might take place in the context of positive supportive environments, as seemed to be the case for some of the women in our sample. After this time, change probably requires more drastic methods, or more women in the sample would have naturally moved into more positive resolutions. Perhaps therapy oriented towards the changing of these structures rather than therapy oriented towards changing symptomatology offers the greatest hope. Or perhaps transforming supportive environments beyond what is ordinary is required. Or both.

Professionals working in the area of trauma have often suggested a combination of both therapeutic and supportive social experiences, the latter structured as therapy groups,

or as circles of support (Courtois, 1988). Given the persistence and the apparent difficulty in changing already formed models, perhaps the more avenues to change employed the better. The nature of our findings suggest that not only attachment models of self and others, but also psychosocial resolutions need to be addressed in therapy if the person is going to contain traumatic emotions and integrate her experiences.

A next step in research would be to investigate whether these clinical assumptions are confirmed in actual treatment or not. As well, the relationship between the activation of the attachment system and the formation of ego structure needs to be investigated further. My hope is that this research project has contributed a small piece of understanding to the tremendous problem of child maltreatment: its effects and its transformation.

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**APPENDIX A**  
**Early Childrearing Questionnaire**

When filling out this section of the questionnaire it is essential that you try to remember your parent's behaviour towards you as you yourself experienced it. Please check for each question the alternative applicable to your own mother's and father's behaviour towards you. Certain questions are impossible to answer if you do not have a brother or sister, so please leave these questions unanswered. Please answer all the rest.

It can sometimes be difficult to remember in what way one's parents were alike and in what way they differed. Do therefore try, for each question, first to consider how your father and then how your mother behaved towards you.

F = Father    M = Mother

		No, never!	Yes, occa- sionally!	Yes, often!	Yes, always!	Don't fill in these squares!
1. Did you feel that your parents inter- fered with everything you did?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Did your parents show with words and gestures that they liked you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Were you spoilt by your parents in comparison with your sister(s) and/or brother(s)?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Did you feel that your parents liked you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Did your parents usually refuse to speak to you for a long time if you had done anything silly?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		No, never!	Yes, occa- sionally!	Yes, often!	Yes, always!	Don't fill in these squares!
6. Did it happen that your parents punished you even for small offences?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Did your parents try to influence you to become something "posh"?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Did it happen that you were disappointed with your parents because you didn't get something you wanted?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Do you think that either of your parents wished you had been different in any way?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Did your parents let you have things your sister(s) and/or brother(s) were not allowed to have?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Did you think your parents punished you justly?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you think that either of your parents was severe with you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. If you had done something foolish, could you then go to your parents and make everything right again by asking their forgiveness?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Did your parents always want to decide how you should be dressed or how you should look?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Did your parents usually lie to you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Did you feel that your parents liked your brother(s) and/or sister(s) more than they liked you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		No, never!	Yes, occa- sionally!	Yes, often!	Yes, always!	Don't fill in these squares!
17. Did your parents treat you unjustly (badly) in comparison with how they treated your sister(s) and/or your brother(s)?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Did it happen that either of your parents forbade you to do things other children were allowed to do because they were afraid that some- thing might happen to you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Did it happen that as a child you were beaten or scolded in the presence of others?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Did your parents usually care about what you did in the evenings?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. If things went badly for you, did you then feel that your parents tried to comfort and encourage you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Did your parents usually worry about your health unnecessarily?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Did it happen that your parents gave you more corporal punishment than you deserved?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Would your parents become angry if you didn't help at home with what you were asked to do?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Would your parents look sad or in any other way show that you had behaved badly so that you got real feelings of guilt?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Did your parents let you have things which your friends got, to the extent they could afford them?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Did you feel that it was difficult to approach your parents?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		No, never!	Yes, occa- sionally!	Yes, often!	Yes, always!	Don't fill in these squares!
28. Did it happen that your parents narrated something you had said or done in front of others so that you felt ashamed?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Did you feel that your parents liked you more than they liked your sister(s) and/or brother(s)?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Did your parents begrudge you things you needed?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Did your parents usually show that they were interested in your getting good marks?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. If you had a difficult task in front of you, did you then feel support from your parents?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Were you treated as the "black sheep" or "scapegoat" of the family?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Did it happen that your parents wished you had been like somebody else?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Would your parents say: You who are so big or you who are a boy/girl shouldn't act like that, should you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Did your parents usually criticize the friends you liked to frequent?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Did you feel your parents thought it was your fault when they were unhappy?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. Did your parents try to spur you to become the best?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. Would your parents demonstrate that they were fond of you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. Did you feel that your parents trusted you so that you were allowed to do things on your own?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



		No, never!	Yes, occa- sionally!	Yes, often!	Yes, always!	Don't fill in these squares!
41. Do you think that your parents respected your opinions?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42. If you had little secrets, did either of your parents want you to tell them about them?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43. Did you feel that your parents wanted to be together with you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. Do you think your parents were mean and grudging towards you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
45. Did your parents use expressions like: "If you do that you will make me sad"?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46. When you came home, did you then always have to account for what you had been doing, to your parents?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47. Do you think that your parents tried to make your adolescence stimulating, interesting and instructive (for instance by giving you good books, arranging for you to go on camps, taking you to clubs)?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48. Did your parents praise you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49. Would your parents use expressions like: "Is this the thanks we get for having done so much for you and for having sacrificed to much for your sake"?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50. Did it happen that your parents wouldn't let you have things you needed, based on the principle that you shouldn't become spoil?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51. Did it happen that you got a bad conscience towards your parents because you behaved in a way they did not desire?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		No, never!	Yes, occa- sionally!	Yes, often	Yes, always!	Don't fill in these squares!
52. Do you think that your parents put high demands on you when it came to school marks, sport performances or similar things?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
53. Did your parents usually ignore it if you behaved carelessly or in a similar way?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
54. Could you seek comfort from your parents if you were sad?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
55. Did it happen that you were punished by your parents without having done anything?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56. Did your parents allow you to do the same things as your friends did?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57. Did your parents often say that they did not approve of your behaviour at home?	F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
58. Did it happen that your parents tried to press more food upon you than you could manage?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
59. Did your parents usually criticise you and tell you how lazy and useless you were in front of others?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
60. Did your parents usually take an interest in what kind of friends you frequented?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61. Were you the one, of your sister(s) and/or brother(s), whom your parents blamed if anything had happened?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
62. Did your parents accept you as you were?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63. Were your parents usually abrupt towards you?	F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
64. Would your parents punish you hard, even for trifles?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		No, never!	Yes, occa- sionally!	Yes, often!	Yes, always!	Don't fill in these squares!
65. Did it happen that your parents beat you for no reason?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66. Did it happen that you wished your parents would worry less about what you were doing?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
67. Did your parents usually engage themselves in your interests and hobbies?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68. Did you usually get beaten by your parents?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69. Were you usually allowed to go where you liked without your parents caring too much?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70. Did your parents put decisive limits for what you were and were not allowed to do - to which they then adhered rigorously?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71. Did your parents treat you in such a way that you felt ashamed?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
72. Did your parents let your sister(s) and/or brother(s) have things which you were not allowed to get?	F	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
73. Do you think that your parents' anxiety that something might happen to you was exaggerated?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
74. Did you feel that warmth and tenderness existed between you and your parents?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
75. Did your parents respect the fact that you had other opinions than they had?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
76. Did it happen that your parents were sour or angry with you without letting you know the cause?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
77. Did it happen that your parents let you go to bed without food?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

		No, never!	Yes, occa- sionally!	Yes, often!	Yes, always!	Don't fill in these squares!
78. Did you feel that your parents were proud when you succeeded in something you had undertaken?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
79. Did your parents usually favour you in relation to your sister(s) and/or brother(s)?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
80. Did your parents take your part against your sister(s) and/or brother(s) even if you were the guilty one?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
81. Did your parents usually hug you?	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	M	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I am of the opinion that my parents, with regard to my upbringing, have been:

- Extremely consistent with almost unswerving principles!
- Consistent most of the time!
- Fairly inconsistent!
- Extremely inconsistent, could change principles from time to time!

I am of the opinion that my parents, with regard to my upbringing, have been:

- Very severe, I was close to being terrorized!
- Severe on the whole!
- Not particularly severe!
- Not at all severe, I was allowed to do as I pleased!

**APPENDIX B**  
**Relationship Questionnaire**

Please read the following paragraphs and rate yourself in terms of how much you think you are the type of person described in each of them.

1. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

Not at all like me	Very much like me
1   2   3   4   5   6   7	

2. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

Not at all like me	Very much like me
1   2   3   4   5   6   7	

3. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

Not at all like me	Very much like me
1   2   3   4   5   6   7	

4. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

Not at all like me	Very much like me
1   2   3   4   5   6   7	

Do you think that you are different now from how you used to be?

Yes \_\_\_ No \_\_\_

If yes, when did you change? \_\_\_\_\_

What do you think facilitated the changes? \_\_\_\_\_

---

**Please rate yourself again in terms of how you were before you changed. How much were you the type of person described in each paragraph?**

1. I wanted to be completely emotionally intimate with others, but I often found that others were reluctant to get as close as I liked. I was uncomfortable being without close relationships, but I sometimes worried that others didn't value me as much as I valued them.

Not at all like I was	Very much like I was
1   2   3   4   5   6   7	1   2   3   4   5   6   7

2. It was easy for me to become emotionally close to others. I was comfortable depending on them and having them depend on me. I didn't worry about being alone or having others not accept me.

Not at all like I was	Very much like I was
1   2   3   4   5   6   7	1   2   3   4   5   6   7

3. I was comfortable without close emotional relationships. It was very important to me to feel independent and self-sufficient, and I preferred not to depend on others or have others depend on me.

Not at all like I was	Very much like I was
1   2   3   4   5   6   7	1   2   3   4   5   6   7

4. I was uncomfortable getting close to others. I wanted emotionally close relationships, but I found it difficult to trust others completely, or to depend on them. I worried that I would be hurt if I allowed myself to become too close to others.

Not at all like I was	Very much like I was
1   2   3   4   5   6   7	1   2   3   4   5   6   7

**APPENDIX C**  
**Relationship Scales Questionnaire**

Please read each of the following statements and rate the extent to which it describes your feelings about romantic relationships. Think about all of your romantic relationships, past, and present, and respond in terms of how you generally feel in these relationships.

	Not at all like me	Very much like me
1. I find it difficult to depend on other people.	1 2 3 4 5	
2. It is very important to me to feel independent.	1 2 3 4 5	
3. I find it easy to get emotionally close to others.	1 2 3 4 5	
4. I want to merge completely with another person.	1 2 3 4 5	
5. I worry that I will be hurt if I allow myself to become too close to others.	1 2 3 4 5	
6. I am comfortable without close emotional relationships.	1 2 3 4 5	
7. I am not sure that I can always depend on others to be there when I need them.	1 2 3 4 5	
8. I want to be completely emotionally intimate with others.	1 2 3 4 5	
9. I worry about being alone.	1 2 3 4 5	
10. I am comfortable depending on other people.	1 2 3 4 5	
11. I often worry that romantic partners don't really love me.	1 2 3 4 5	
12. I find it difficult to trust others completely.	1 2 3 4 5	
13. I worry about others getting too close to me.	1 2 3 4 5	
14. I want emotionally close relationships.	1 2 3 4 5	
15. I am comfortable having other people depend on me	1 2 3 4 5	
16. I worry that others don't value me as much as I value them.	1 2 3 4 5	
17. People are never there when you need them.	1 2 3 4 5	
18. My desire to merge completely sometimes scares people away.	1 2 3 4 5	
19. It is very important for me to feel self-sufficient.	1 2 3 4 5	
20. I am nervous when anyone gets too close to me.	1 2 3 4 5	
21. I often worry that romantic partners won't want to stay with me.	1 2 3 4 5	
22. I prefer not to have other people depend on me.	1 2 3 4 5	
23. I worry about being abandoned.	1 2 3 4 5	
24. I am somewhat uncomfortable being close to others.	1 2 3 4 5	
25. I find that others are reluctant to get as close as I would like.	1 2 3 4 5	
26. I prefer not to depend on others.	1 2 3 4 5	
27. I know that others will be there when I need them.	1 2 3 4 5	
28. I worry about having others not accept me.	1 2 3 4 5	
29. Romantic partners often want me to be closer than I feel comfortable being.	1 2 3 4 5	
30. I find it relatively easy to get close to others	1 2 3 4 5	

**APPENDIX D**  
**Psychosocial Development Questionnaire**

For the questions in this section, please indicate how often each of the statements applies to you by checking the appropriate number on the scale.

- 0** = The statement **never** applies to you.  
**1** = The statement **only occasionally or seldom** applies to you.  
**2** = The statement applies to you **fairly often**.  
**3** = The statement applies to you **very often**.

- |  |         |
|--|---------|
| 1. I feel pessimistic about the future of humankind.   | 0 1 2 3 |
| 2. I have a feeling that I would like to "sink through the floor"<br>or become invisible to those around me.             | 0 1 2 3 |
| 3. I hide the fact that I have made a mistake.   | 0 1 2 3 |
| 4. I feel guilty when I am enjoying myself.  | 0 1 2 3 |
| 5. I make the best of my abilities.  | 0 1 2 3 |
| 6. I wonder what sort of person I really am.   | 0 1 2 3 |
| 7. I feel that no-one has ever known the real me.  | 0 1 2 3 |
| 8. I feel that, in the long run, children are more a burden than a pleasure.   | 0 1 2 3 |
| 9. I am completely honest with everybody.  | 0 1 2 3 |
| 10. People seem to change their opinion of me.   | 0 1 2 3 |
| 11. I feel I will achieve what I want in life.   | 0 1 2 3 |
| 12. When people try to persuade me to do something I<br>don't want to, I refuse.   | 0 1 2 3 |
| 13. I compare myself favourably with someone else.   | 0 1 2 3 |
| 14. I am prepared to take a risk to get what I want.   | 0 1 2 3 |
| 15. When people look at something I have done, I feel embarrassed<br>by the thought that they could have done it better. | 0 1 2 3 |
| 16. I feel certain about what I should do with my life.  | 0 1 2 3 |
| 17. I have a feeling of complete "togetherness" with someone.  | 0 1 2 3 |
| 18. Young people forget what one has done for them.  | 0 1 2 3 |
| 19. I am equally polite to everybody.  | 0 1 2 3 |
| 20. I feel uncertain as to whether something is morally right or wrong.  | 0 1 2 3 |
| 21. When I am looking forward to an event, I expect something to go<br>wrong and spoil it.                               | 0 1 2 3 |
| 22. After I have made a decision I feel I have made a mistake.   | 0 1 2 3 |
| 23. I take a dislike to someone.   | 0 1 2 3 |
| 24. I feel hesitant to try out a new way of doing something.   | 0 1 2 3 |
| 25. I lack the energy to get started on something I intended to do.  | 0 1 2 3 |
| 26. Most people seem to agree about what sort of person I am.  | 0 1 2 3 |
| 27. I feel it is better to remain free than to become committed to<br>marriage for life.                                 | 0 1 2 3 |
| 28. I feel that I have done nothing that will survive after I die.   | 0 1 2 3 |



- |   |   |   |   |   |
|---|---|---|---|---|
| 29. I am able to like people who are unkind to me.                                      | 0 | 1 | 2 | 3 |
| 30. I feel my way of life suits me.   | 0 | 1 | 2 | 3 |
| 31. I feel people distrust me.  | 0 | 1 | 2 | 3 |
| 32. I am unnecessarily apologetic.  | 0 | 1 | 2 | 3 |
| 33. I criticize someone behind his or her back.   | 0 | 1 | 2 | 3 |
| 34. When I compete with others I try hard to win.                                       | 0 | 1 | 2 | 3 |
| 35. I get a great deal of pleasure from working.  | 0 | 1 | 2 | 3 |
| 36. My worth is recognized by others.   | 0 | 1 | 2 | 3 |
| 37. I share my private thoughts with someone.   | 0 | 1 | 2 | 3 |
| 38. I help people to improve themselves.  | 0 | 1 | 2 | 3 |
| 39. I feel that someone is less worthy than I am.                                       | 0 | 1 | 2 | 3 |
| 40. I feel freer to be my real self when I am away from those who<br>know me very well. | 0 | 1 | 2 | 3 |
| 41. I feel the world's major problems can be solved.                                    | 0 | 1 | 2 | 3 |
| 42. I feel someone will find out something bad about me.                                | 0 | 1 | 2 | 3 |
| 43. I have kind thoughts about everybody.   | 0 | 1 | 2 | 3 |
| 44. I am confident in carrying out my plans to a successful conclusion.                 | 0 | 1 | 2 | 3 |
| 45. I lose interest in something and leave it unfinished.                               | 0 | 1 | 2 | 3 |
| 46. I feel that what I am doing in life is not really worthwhile.                       | 0 | 1 | 2 | 3 |
| 47. I feel as though I am alone in the world.   | 0 | 1 | 2 | 3 |
| 48. I enjoy caring for young children.  | 0 | 1 | 2 | 3 |
| 49. I am pleased when people get into the trouble they deserve.                         | 0 | 1 | 2 | 3 |
| 50. I feel I fit in well in the community in which I live.                              | 0 | 1 | 2 | 3 |
| 51. I feel low spirited (depressed).  | 0 | 1 | 2 | 3 |
| 52. I worry that my friends will find fault with me.                                    | 0 | 1 | 2 | 3 |
| 53. I see only the good in people.  | 0 | 1 | 2 | 3 |
| 54. I am curious or inquisitive.  | 0 | 1 | 2 | 3 |
| 55. I feel too incompetent to do what I would really like to do in life.                | 0 | 1 | 2 | 3 |
| 56. I feel proud to be the sort of person I am.   | 0 | 1 | 2 | 3 |
| 57. Someone shares my joys and sorrows.   | 0 | 1 | 2 | 3 |
| 58. I feel my life is being wasted.   | 0 | 1 | 2 | 3 |
| 59. I feel jealous when someone succeeds where I have failed.                           | 0 | 1 | 2 | 3 |
| 60. People seem to see me very differently from the way I see myself.                   | 0 | 1 | 2 | 3 |
| 61. I am filled with admiration for mankind.  | 0 | 1 | 2 | 3 |
| 62. I feel frustrated if my daily routine is disturbed.                                 | 0 | 1 | 2 | 3 |
| 63. I consider others before myself when making a decision.                             | 0 | 1 | 2 | 3 |
| 64. I make exciting plans for the future.   | 0 | 1 | 2 | 3 |
| 65. I feel the thrill of doing something really well.                                   | 0 | 1 | 2 | 3 |
| 66. I feel left out.  | 0 | 1 | 2 | 3 |
| 67. I feel nobody really cares about me.  | 0 | 1 | 2 | 3 |
| 68. I enjoy guiding young people.   | 0 | 1 | 2 | 3 |
| 69. I tell a lie when I want to get out of something.                                   | 0 | 1 | 2 | 3 |
| 70. People seem to disapprove of me.  | 0 | 1 | 2 | 3 |
| 71. I feel there is something lacking in my life.                                       | 0 | 1 | 2 | 3 |
| 72. People think I am lazy.   | 0 | 1 | 2 | 3 |

- |   |         |
|---|---------|
| 73. I am glad when people point out my faults.                            | 0 1 2 3 |
| 74. I feel what happens to me is the result of what I have done.          | 0 1 2 3 |
| 75. I avoid doing something difficult because I feel I would fail.        | 0 1 2 3 |
| 76. I change my ideas about what I want from life.                        | 0 1 2 3 |
| 77. When I have difficulty in getting something right, I give up.         | 0 1 2 3 |
| 78. I have a good influence on people.                                    | 0 1 2 3 |
| 79. I exaggerate when I describe someone's faults.                        | 0 1 2 3 |
| 80. I am unsure as to how people feel about me.                           | 0 1 2 3 |
| 81. People can be trusted.  | 0 1 2 3 |
| 82. When I disagree with someone I tell them.                             | 0 1 2 3 |
| 83. I try to impress people.  | 0 1 2 3 |
| 84. I enjoy competing.  | 0 1 2 3 |
| 85. I feel competent.   | 0 1 2 3 |
| 86. My feelings about myself change.                                      | 0 1 2 3 |
| 87. I feel embarrassed when people tell me about their personal problems. | 0 1 2 3 |
| 88. I do something of lasting value.                                      | 0 1 2 3 |
| 89. I have a sense of accomplishment.                                     | 0 1 2 3 |
| 90. I feel I am putting on an act or doing something for effect.          | 0 1 2 3 |
| 91. I feel optimistic about my future.                                    | 0 1 2 3 |
| 92. I take great care of myself.  | 0 1 2 3 |
| 93. I feel proud to be a member of the society in which I live.           | 0 1 2 3 |

## APPENDIX E

### Trauma Symptom Checklist

Please indicate how often you have experienced the following in the last two months.

0 = Never      1 = Occasionally      2 = Fairly often      3 = Very often

- |  |         |
|--|---------|
| 1) Headaches   | 0 1 2 3 |
| 2) Insomnia (trouble getting to sleep)                         | 0 1 2 3 |
| 3) Weight loss (without dieting)                               | 0 1 2 3 |
| 4) Stomach problems  | 0 1 2 3 |
| 5) Sexual problems   | 0 1 2 3 |
| 6) Feeling isolated from others                                | 0 1 2 3 |
| 7) Flashbacks (sudden, vivid memories)                         | 0 1 2 3 |
| 8) Low sex drive   | 0 1 2 3 |
| 10) Anxiety attacks  | 0 1 2 3 |
| 11) Sexual overactivity  | 0 1 2 3 |
| 12) Loneliness   | 0 1 2 3 |
| 13) Nightmares   | 0 1 2 3 |
| 14) "Spacing out" (going away in your mind)                    | 0 1 2 3 |
| 15) Sadness  | 0 1 2 3 |
| 16) Dizziness  | 0 1 2 3 |
| 17) Not feeling satisfied with your sex life                   | 0 1 2 3 |
| 18) Trouble controlling temper                                 | 0 1 2 3 |
| 19) Waking up early in the morning and can't go back to sleep. | 0 1 2 3 |
| 20) Uncontrollable crying                                      | 0 1 2 3 |
| 21) Fear of men  | 0 1 2 3 |
| 22) Not feeling rested in the morning                          | 0 1 2 3 |
| 23) Having sex that you didn't enjoy                           | 0 1 2 3 |
| 24) Trouble getting along with others                          | 0 1 2 3 |
| 25) Memory problems  | 0 1 2 3 |
| 26) Desire to physically hurt yourself                         | 0 1 2 3 |
| 27) Fear of women  | 0 1 2 3 |
| 28) Waking up in the middle of the night                       | 0 1 2 3 |
| 29) Bad thoughts or feelings during sex                        | 0 1 2 3 |
| 30) Passing out  | 0 1 2 3 |
| 31) Feelings that things are "unreal"                          | 0 1 2 3 |
| 32) Unnecessary or over-frequent washing                       | 0 1 2 3 |
| 33) Feelings of inferiority                                    | 0 1 2 3 |
| 34) Feeling tense all the time                                 | 0 1 2 3 |
| 35) Being confused about your sexual feelings                  | 0 1 2 3 |
| 36) Desire to physically hurt others                           | 0 1 2 3 |
| 37) Feelings of guilt  | 0 1 2 3 |
| 38) Feelings that you are not always in your body              | 0 1 2 3 |
| 39) Having trouble breathing                                   | 0 1 2 3 |
| 40) Sexual feelings when you shouldn't have them               | 0 1 2 3 |

**APPENDIX F**  
**Impact of Events Scale**

Please answer the following questions in relation to the most stressful event that happened to you **during your childhood**.

On \_\_\_\_\_ (dates)

You experienced (describe life event) \_\_\_\_\_

Stressfulness of event: Mild  Medium  Severe

Below is a list of comments made by people after stressful life events. **Please check each item, indicating how frequently these comments were true for you DURING THE PAST SEVEN DAYS. Remember, this is in relation to the event you described above.**

	Not at all	Rarely	Some times	Often
1. I thought about it when I didn't mean to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I avoided letting myself get upset when I thought about it or was reminded of it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I tried to remove it from memory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I had trouble falling asleep or staying asleep, because of pictures or thoughts about it that came into my mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I had waves of strong feelings about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I had dreams about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I stayed away from reminders of it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I felt as if it hadn't happened or it wasn't real.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I tried not to talk about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Pictures about it popped into my mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other things kept making me think about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I tried not to think about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Any reminder brought back feelings about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. My feelings about it were kind of numb.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please answer the following questions in relation to the most stressful event that has happened to you in your adult years.

On \_\_\_\_\_ (dates)

You experienced (describe life event) \_\_\_\_\_

Stressfulness of event: Mild  Medium  Severe

Below is a list of comments made by people after stressful life events. Please check each item, indicating how frequently these comments were true for you DURING THE PAST SEVEN DAYS. Remember, this is in relation to the event you described above.

	Not at all	Rarely	Some times	Often
1. I thought about it when I didn't mean to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I avoided letting myself get upset when I thought about it or was reminded of it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I tried to remove it from memory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I had trouble falling asleep or staying asleep, because of pictures or thoughts about it that came into my mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I had waves of strong feelings about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I had dreams about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I stayed away from reminders of it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I felt as if it hadn't happened or it wasn't real.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I tried not to talk about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Pictures about it popped into my mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Other things kept making me think about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I was aware that I still had a lot of feelings about it, but I didn't deal with them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I tried not to think about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Any reminder brought back feelings about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. My feelings about it were kind of numb.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## APPENDIX G

### Social Support Questionnaire

The following questions ask about people in your environment who provide you with help or support. Each question has two parts. For the first part, list all the people you know, excluding yourself, whom you can count on for support or help in the manner described. Give the persons' initials, and their relationship to you (see example). Do not list more than one person next to each of the numbers beneath the question.

For the second part, circle how satisfied you are with the overall support you have. If you have had no support for a question, check the words "No one", but still rate your level of satisfaction. Do not list more than nine persons per question.

#### EXAMPLE:

Who do you know whom you can trust with information that could get you in trouble?

No one	1) T.N. (brother)	4) T.N. (father)	7)
	2) L.M. (friend)	5) L.M. (employer)	8)
	3) R.S. (friend)	6)	9)

#### PLEASE ANSWER:

1. Whom can you really count on to be dependable when you need help?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

6	5	4	3	2	1
Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied

2. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

6	5	4	3	2	1
Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied

3. Who accepts you totally, including your worst and your best points?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

6	5	4	3	2	1
Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied

4. Whom can you really count on to care about you, regardless of what is happening to you?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

6	5	4	3	2	1
Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied

5. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

6	5	4	3	2	1
Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied

6. Whom can you count on to console you when you are very upset?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How satisfied?

6	5	4	3	2	1
Very satisfied	Fairly satisfied	A little satisfied	A little dissatisfied	Fairly dissatisfied	Very dissatisfied

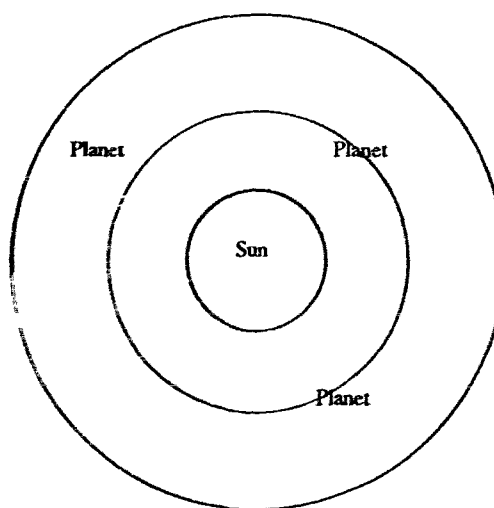
## APPENDIX H

### Emotional Support Circles

The following are several diagrams on which we want you to represent the important people in your life. You can include parents, siblings, relatives, friends, therapists, teachers, etc. If you turn to the next page, you will see a series of concentric circles, the smaller of which is labelled "self". Each subsequent circle represents a different level of closeness to you. On these different levels you will represent people in your life by placing small circles labelled with the kind of relationship the particular person holds to you (for example, "sibling"). The four levels are defined as follows:

- Level 1** On this level you can place the people emotionally closest to you. Specifically, these are the people you have been able to count on for emotional support and comfort most of the time when you needed or wanted it.
- Level 2** Place here the people who were a bit further from you emotionally. You were able to count on them for emotional support and comfort some of the time but not as often as you needed or wanted it.
- Level 3** The people included in this level would have been further yet emotionally from you. You could count on them for emotional support and comfort only occasionally, and definitely not as often as you needed or wanted it.
- Level 4** Place on this level people who were in your life but who were emotionally the furthest from you. You did not count on these people for emotional support.

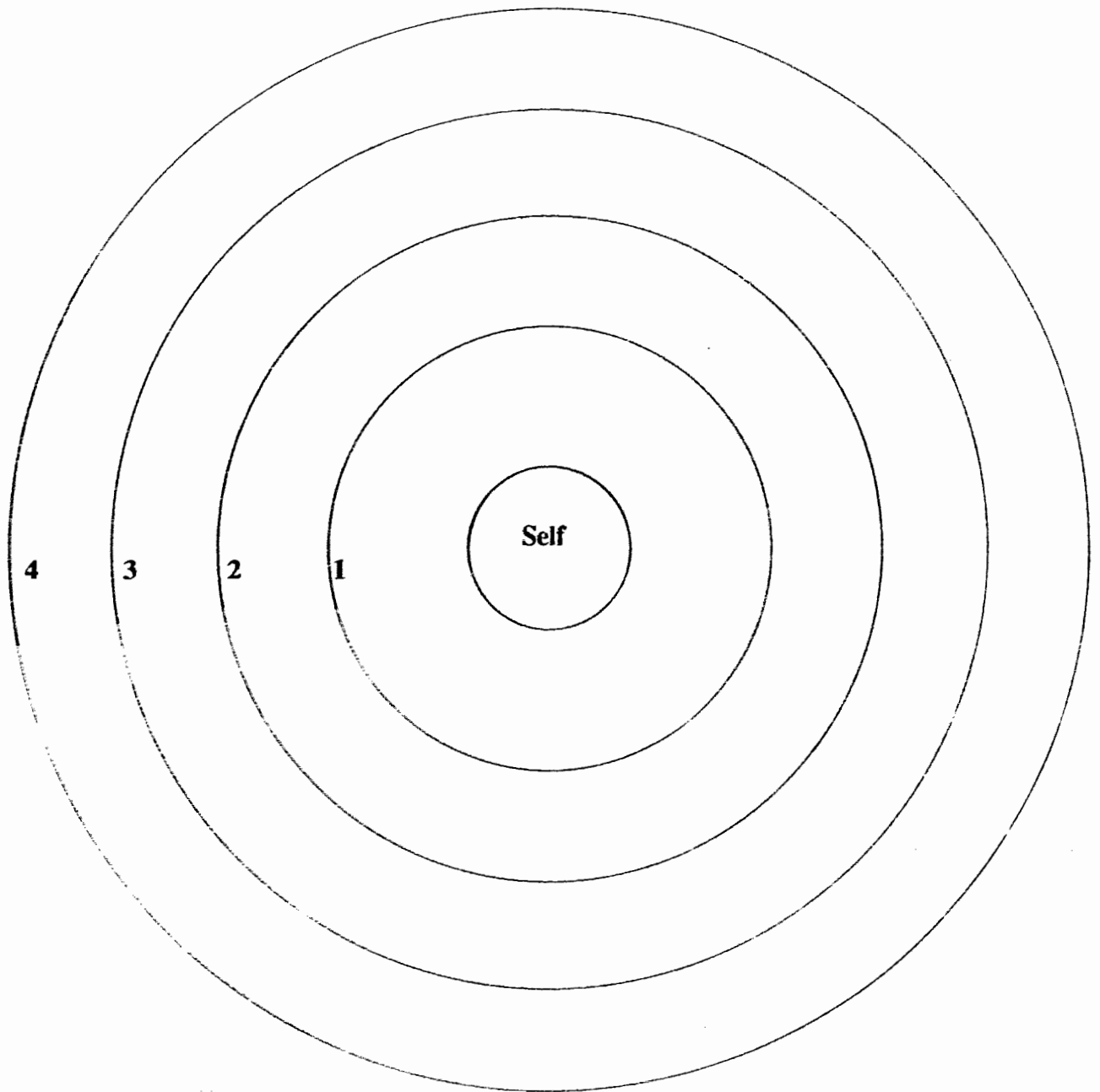
Using the planets as an example, the diagram would look like this:





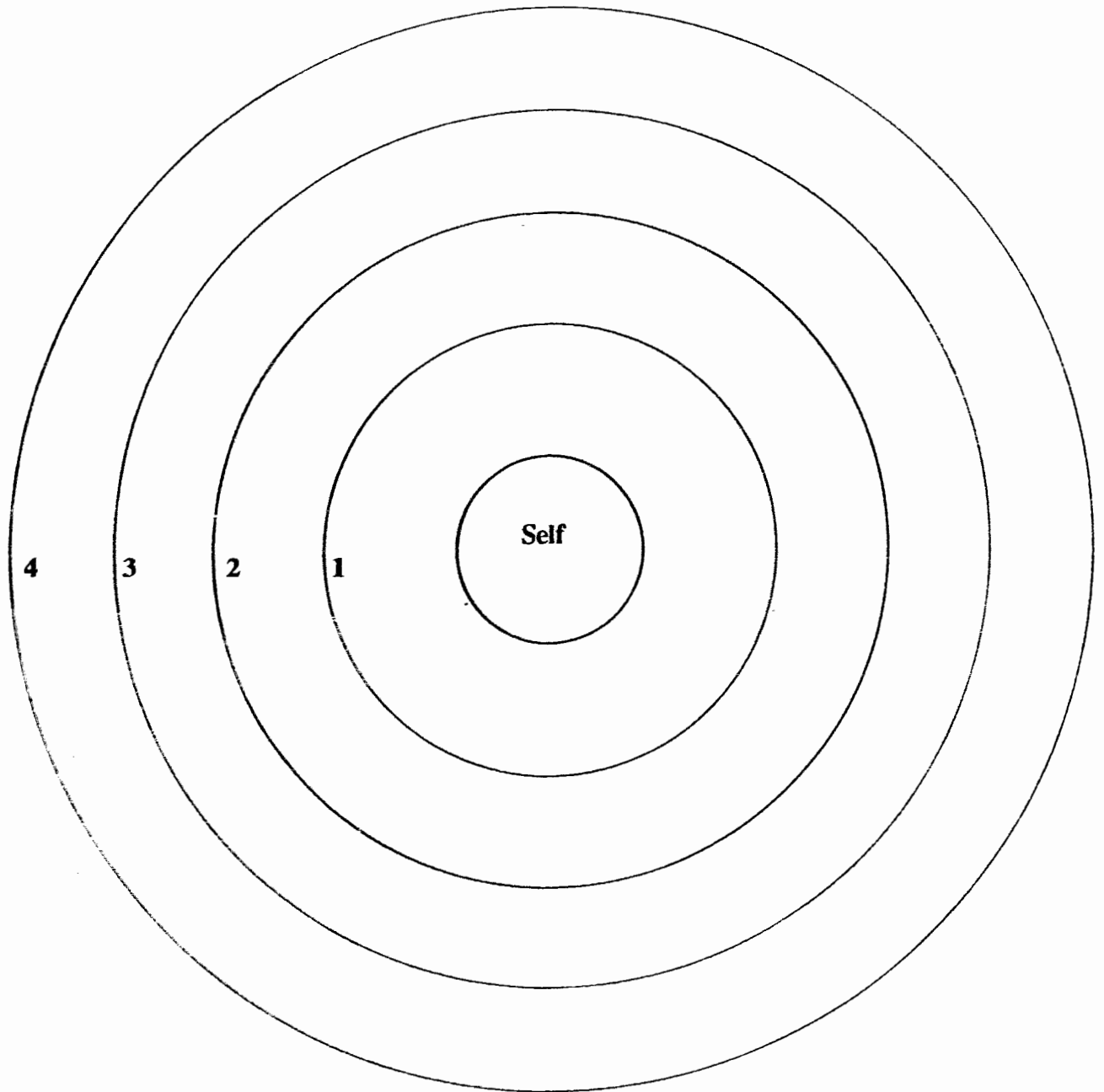
## CHILDHOOD

Please, think about the people who were in your life before you were 12. Then place them on the diagram according to the 4 levels described in the previous page. Think about how it was for you during all those years from 0-12.



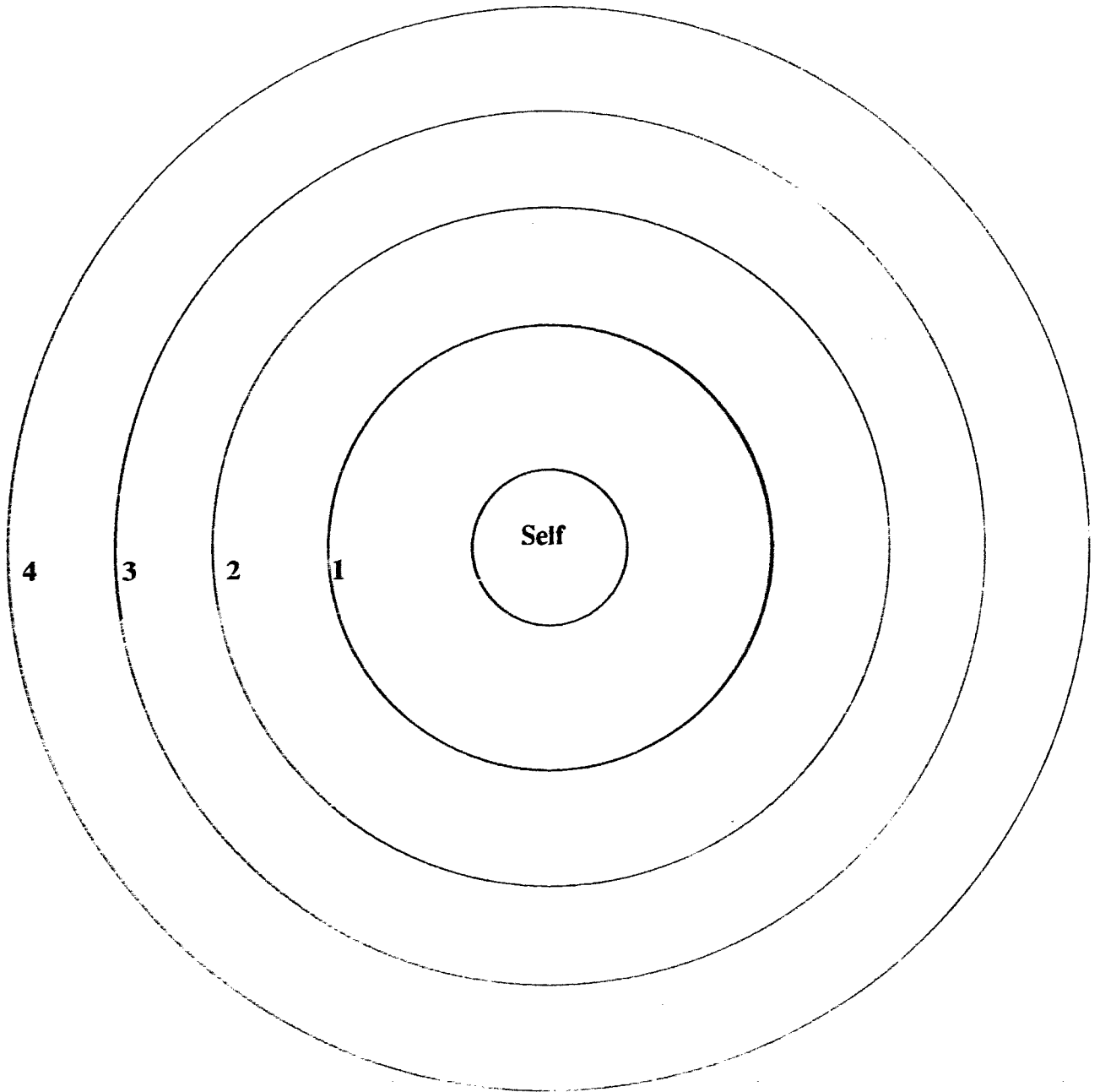
**ADOLESCENCE**

Please, think about the people who were in your life when you were a teenager. Then place them on the diagram below according to the 4 levels described before. Think about how it was for you during that time, between ages 13-16.



## PRESENT TIME

Please, think about the people who are now in your life and place them on the diagram according to the 4 levels described before. Think about how it is for you with these people now, regardless of how you felt about them in the past if you knew them earlier.



**APPENDIX I**  
**Childhood Trauma Questionnaire**

Please circle the correct answer(s), or fill in the blank, for the following questions:

1. For the majority of your childhood, who raised you?

- a. Both biological parents
- b. Mother and step-father
- c. Father and step-mother
- d. Mother alone
- e. Father alone
- f. Foster parents
- g. Adoptive parents
- h. Other (specify) \_\_\_\_\_

2. Up until the age of 17, did your parents (or guardians) separated or divorced?

Yes                      No                      Not applicable

If "Yes", how old were you when this happened? \_\_\_\_\_

If this happened more than once, how many times? \_\_\_\_\_

3. Did you experience the death of a parent or guardian before the age of 16?

Yes                      No

If "Yes", who was this?

- a. Biological father
- b. Biological mother
- c. Step-father
- d. Step-mother
- e. Other (specify) \_\_\_\_\_

How old were you when it happened? \_\_\_\_\_

4. Before you were 17, did any of your parents or guardians have a drinking problem?      Yes                      No

If "Yes", who was it? (you may circle more than one)

- a. Biological father
- b. Biological mother
- c. Step-father
- d. Step-mother
- e. Other (specify) \_\_\_\_\_

Did this problem:

- a. Have no serious consequences for you or your family
- b. Cause some disruptions in your family life
- c. Cause major disruptions
- d. Cause violence
- e. Cause separations
- f. Cause violence and separations

5. Before you were 17, did you ever see one of your parents or guardians hit or beat up your other parent? Yes No  
If "Yes", how many times can you recall this happening? \_\_\_\_\_

Were the beatings:

- a. Mild
- b. Severe
- c. So severe that the victim needed medical assistance

6. Before you were 17, did a parent or guardian ever hit you or beat you up?  
Yes No

If "Yes", did this treatment ever:

- a. Bruise you or cut you (If yes, number of times:\_\_\_\_\_)
- b. Required medical attention (If yes, number of times:\_\_\_\_\_)
- c. Required that you be taken away from home (If yes, number of times:\_\_\_\_\_)

Do you consider that you were physically abused by a parent or guardian before you were 16? Yes No

7. Before you were 17, did a parent or other adult who was in charge of your care ever:

1) Lock you in a room, closet, or other small space?

Yes No If "Yes", how many times? \_\_\_\_\_

2) Tie you up or chain you to something?

Yes No If "Yes", how many times? \_\_\_\_\_



9. To the best of your knowledge, would you say that you were sexually abused as a child (before age 17)?

Yes                      No

If "Yes", how severe was the sexual abuse? (check one)    1   2   3   4   5

10. Would you say that you were physically abused as a child (before age 17)?

Yes                      No

If "Yes", how severe was the physical abuse? (check one)    1   2   3   4   5

11. Would you say that you were emotionally abused as a child (before age 17)?

Yes                      No

If "Yes", how severe was the emotional abuse? (check one)    1   2   3   4   5

Any further information you want to share:

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## APPENDIX J

### Consent Form

**Note:** the University and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of subjects. This form and the information it contains are given to you for your own protection and full understanding of the procedures, risks, and benefits involved. Your signature on this form will signify that you have received and adequate opportunity to consider the information in the document, and that you voluntarily agree to participate in the project.

Having been asked by Dolores Escudero or Willow Goddu to participate in a psychology research project, I have read the information to participants specified in the questionnaire package titled: "Parenting, Life Events, and Relationships project". I understand the procedures to be used on this project and the personal risks to me in taking part.

I understand that I may withdraw my participation in this project at any time.

I also understand that I may register any complaint I might have about the project with the chief researcher, Dolores Escudero, or with Dr. Ron Roesch, Director Clinical Psychology Program, Simon Fraser University.

I agree to participate by completing the questionnaire package named above.

NAME (please print) \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

SIGNATURE \_\_\_\_\_ WITNESS \_\_\_\_\_

DATE \_\_\_\_\_



### **Information for participants**

If you become a participant in the parenting, life events, and relationships study, you will be asked to fill out a questionnaire which will be mailed out to you. You will be able to do the questionnaire at home at a convenient time. It is estimated that it will take you about one hour to complete it. Some questions deal with your experiences as a child, particularly in relation to the parenting you received; other are related to your current life and relationships. There are some questions which are specific to abusive experiences that some people have. These questions may bring up unsettling emotions you may want to discuss with someone. Upon request, the researchers will send you the names and addresses of appropriate organizations or counselling services. Please remember that you are free to withdraw from the study at any time.

Participation in this part of the study will make you eligible to enter a draw. The price is \$ 200 and you will have a 1/150 chance to win.

In addition to the questionnaire, a few of the participants will be interviewed. Please indicate on the next page whether you are willing to be interviewed. If you are selected to be interviewed you will be contacted by phone about setting up an appointment. Interviews take about one hour and can be conducted at your home or at SFU. The interviewer will ask you questions about your current activities, interests, expectations, goals, and life changes you have experienced.

Participation in the interview will make you eligible to enter a second draw with another price of \$ 200 with a 1/30 chance of winning. Please notice that you might not be selected for the interview even if you have agreed to participate.

After the project is completed you will have access to a summary of the study. Please feel free to contact the researchers if you have any questions.

### Questionnaire information form

The following questionnaire includes a total of nine different sections. Please follow the instructions included at the beginning of each section carefully. Some items demand that you remember early events from your childhood. Others focus on the present time. Please try your best to answer all the questions as accurately as you can. Before you start section one, please answer the following information items:

Will you be willing to be interviewed for this study (see information for participants sheet)?

Yes No

TODAY'S DATE \_\_\_\_\_

EDUCATION YEARS COMPLETED \_\_\_\_\_

MARITAL STATUS \_\_\_\_\_

GENDER \_\_\_\_\_

Do you have a current romantic relationship? \_\_\_\_\_

Have you ever received psychotherapy or counselling? \_\_\_\_\_

If "Yes", how old were you? \_\_\_\_\_

What brought you to doing therapy or counselling? \_\_\_\_\_

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Did you find therapy or counselling helpful? \_\_\_\_\_ Please explain your answer briefly

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## APPENDIX K

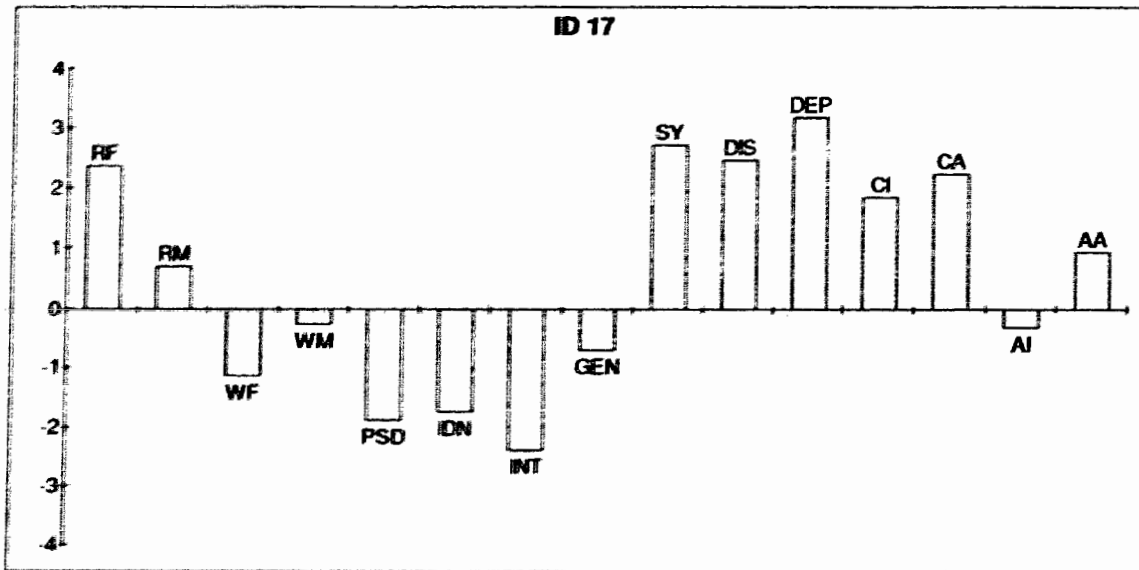
## Erikson's life cycle

Trust	Autonomy	Initiative	Industry	Identity	Intimacy	Generativity	Integrity
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Trust	Autonomy	Initiative	Industry	Identity	<b>Intimacy</b>	Generativity	Integrity
Trust	Autonomy	Initiative	Industry	<b>Identity</b>	Intimacy	Generativity	Integrity
Trust	Autonomy	Initiative	<b>Industry</b>	Identity	Intimacy	Generativity	Integrity
Trust	Autonomy	<b>Initiative</b>	Industry	Identity	Intimacy	Generativity	Integrity
Trust	<b>Autonomy</b>	Initiative	Industry	Identity	Intimacy	Generativity	Integrity
<b>Trust</b>	Autonomy	Initiative	industry	Identity	Intimacy	Generativity	Integrity

**APPENDIX L**  
**Abuse and outcome variables**

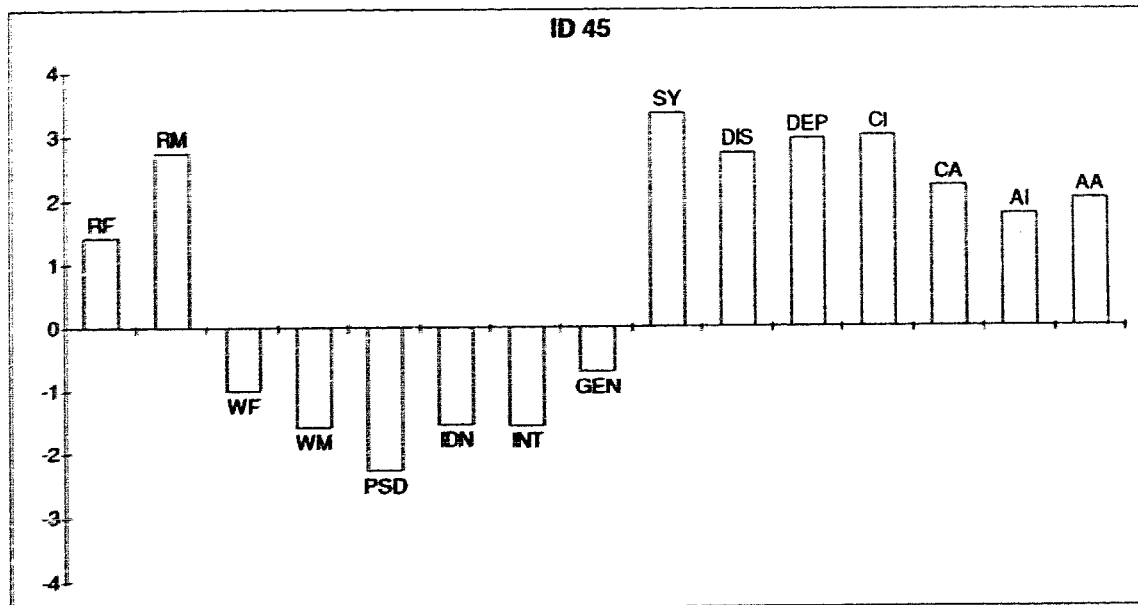
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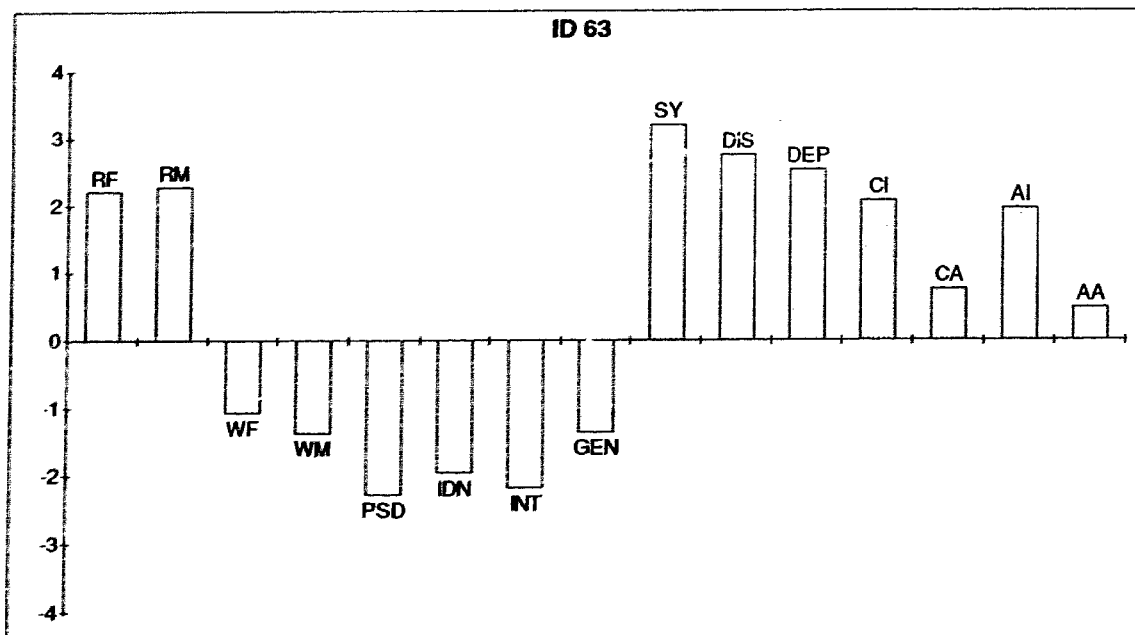
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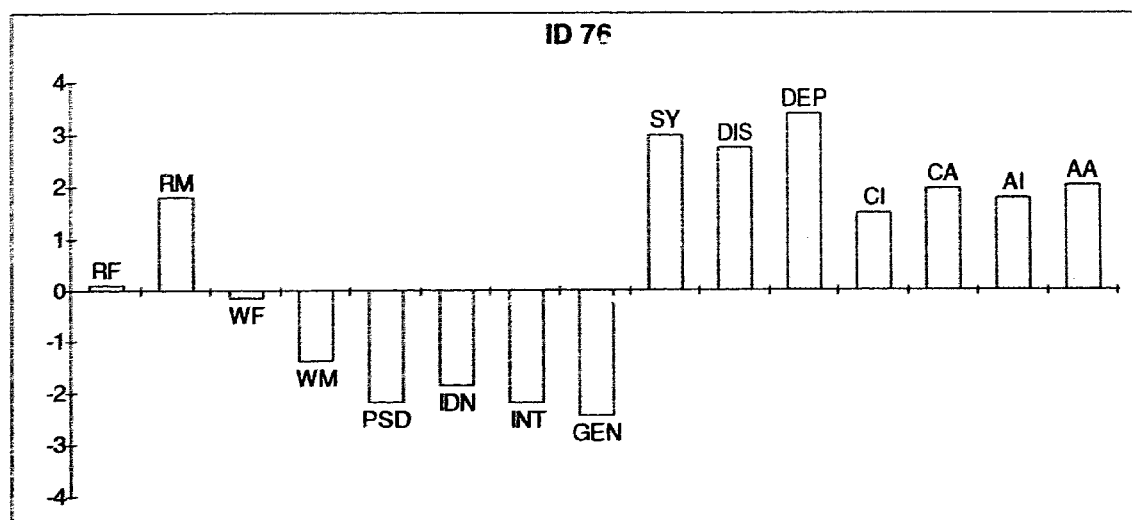
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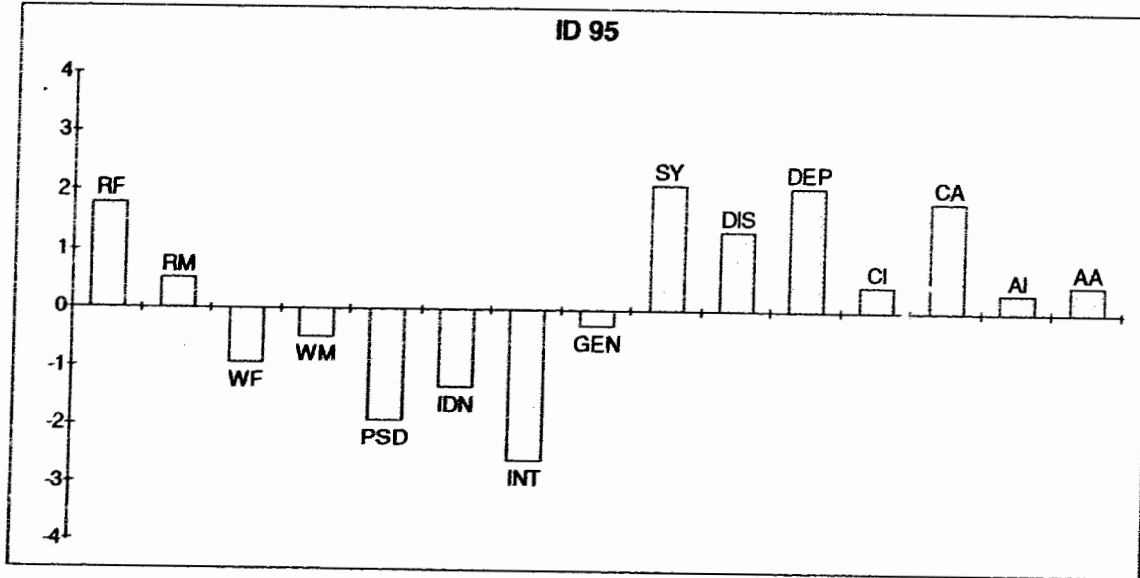
## Group a

Subject ID 76



**Group a**

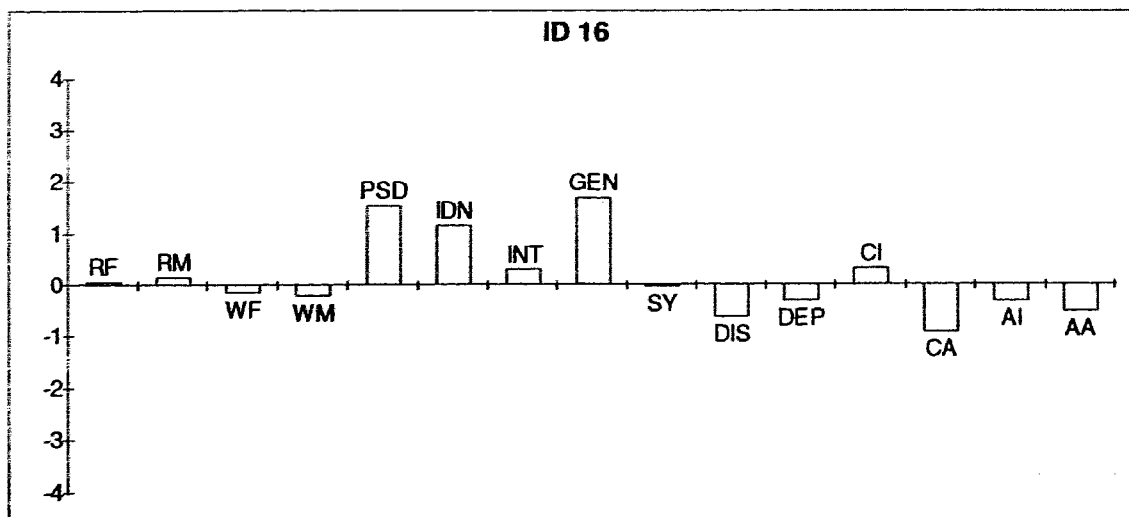
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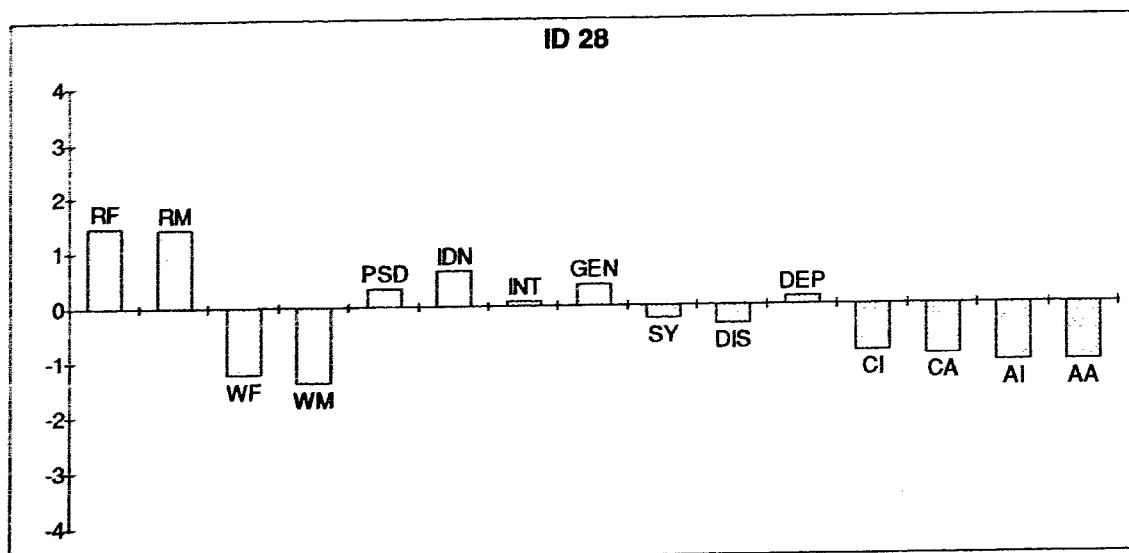


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Subject ID 16

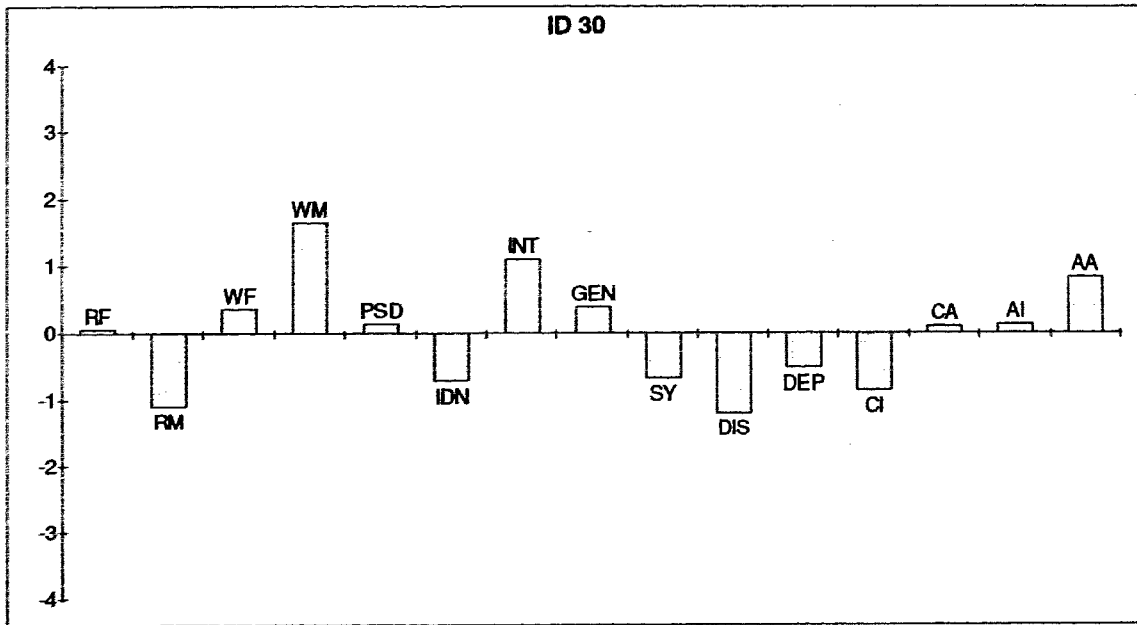


**Group b**  
**Subject ID 28**



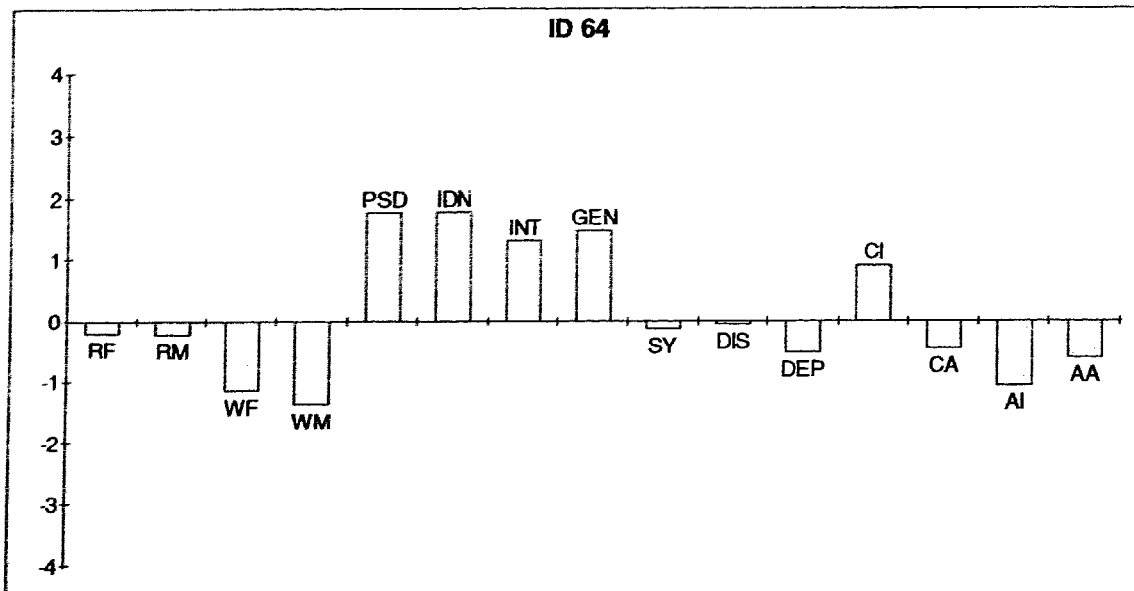
**Group b**

**Subject ID 30**



**Group b**

Subject ID 64



**Group b**

Subject ID 80

