INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI

A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

DEFENSE AND ADAPTATION IN UNINFECTED "AFFECTED" SIBLINGS OF HIV-POSITIVE CHILDREN

by

Lauren Silverman

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York

1999

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

4-20-99
Date

Steve Tuber, Ph.D.
Chair of Examining Committee

4-22-99
Date

Joseph Glick, Ph.D.
Executive Officer

Arietta Slade, Ph.D.

Diana Diamond, Ph.D.

John Matthews, Ph.D.

Elizabeth Frank, Ph.D.
Supervisory Committee

THE CITY UNIVERSITY OF NEW YORK

ABSTRACT

DEFENSE AND ADAPTATION IN UNINFECTED "AFFECTED" SIBLINGS OF HIV-POSITIVE CHILDREN

by

Lauren Silverman

Advisor: Professor Steve Tuber

This study looks at the interactions between defense operations and adaptation in the siblings of HIV-positive children. The subjects consisted of 30 older, uninfected brothers and sisters of HIV-positive children. Thirteen subjects were male, 17 female. They ranged in age from 9 to 18, with a mean age of 14.77.

Each subject met with the researcher for one two-hour session, during which time a multi-modal assessment took place. The subjects were administered the Youth Self-Report version of the Achenbach Child Behavior Checklist (CBCL) to gauge their own conscious evaluations of their behavioral functioning. They then participated in the semi-structured Sibling Interview, which provided them with an opportunity to voice their concerns about their familial situations and to discuss communication patterns both

within the home and within the community. Each subject was also given 10 cards of the Thematic Apperception Test (TAT). TAT narratives were scored using Cramer's Defense Mechanism Manual, which looks at defensive operations along a developmental continuum.

Results indicate that as a cohort group, the siblings of HIV-positive children display notably different patterns of defense usage from Cramer's normative sample. The subject group exhibited more than twice the Denial, the most primitive of the defenses analyzed, and less than half the Identification, the most sophisticated of the defenses analyzed, than did the normative sample. Overall, the behavioral patterns reported by the subjects of this study did not differ significantly from the behavioral patterns reported by a normative sample on the Achenbach Child Behavior Checklist. There were, however, specific symptom scales on which subjects scored higher than national norms, including Delinquent Behavior for the males and Thought Problems for the females. There was also a discernible relationship between symptomatic functioning, as indicated by the Achenbach symptom scores, and Communication about Sibling HIV scores, derived from the Sibling Interview. Higher communication correlated consistently with lower levels of behavioral symptoms.

ACKNOWLEDGMENTS

This project could not have been completed without the help of numerous individuals who are concerned about the lives of HIV-infected children and their families. Elizabeth Frank, and her colleagues in the Department of Pediatrics at NYU Medical Center, facilitated the research process from beginning to end. Project cooperation was also received from the Bellevue Hospital Center and the New York City Health and Hospitals Corporation. Elliot Kagan, Director of Birch Family Camps, and Cathy Painter, of Incarnation Children's Center, graciously welcomed me to interview children and families affiliated with their programs.

I am profoundly grateful to Sarah Miller McCune and the McCune Foundation for providing vital support in the form of a one-year Dissertation Fellowship. In addition, I would like to acknowledge The Pediatric AIDS Foundation for their generous Student Award.

Steve Tuber, the Director of the CUNY graduate program in Clinical Psychology and Chair of my dissertation committee, was the person who first facilitated my working with the Pediatric AIDS community. His integrity, humor, and enthusiasm for his work have

been powerful and positive influences on my burgeoning sense of self as a clinician. I am most grateful to committee members Arietta Slade, who taught me to appreciate both the subtlety and the strength of the human psyche, and Diana Diamond, who showed me how to approach clinical work with a healthy balance of open-mindedness and willingness to question.

I would like to thank John Matthews, dissertation reader, for the gift of his perspicuity; Marc Glassman, statistical consultant, for his immeasurable contribution; and H. Gina Yoon, research coder, for her sophisticated and nuanced approach to the material.

I thank the following clinical psychology graduate students for their hand-holding, pats on the back, and shoulders to cry on: Anabel Bejarano, Lan Chin, Annelie Hartmann, Iris Hellner, Yvette Mercado, Glorianna Valls, Julia Weston, and Addette Williams.

I owe my deepest thanks to my family: my brother Michael, for "taking protect of me"; my brother Peter, for being my first best friend; my father Ted, for being both adventurous and resolute; and my mother, Margo, for loving unconditionally.

This project is dedicated to the memory of Skip Allison, who opened my heart to the world.

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

TABLE OF CONTENTS
(Continued)

LIST OF TABLES

INTRODUCTION

Since 1981, an estimated 8.2 million children around the world and 100,000 children in the United States have had mothers who have died due to illnesses related to AIDS (acquired immunodeficiency syndrome) (Gershenson, 1998). In New York State, AIDS is the leading cause of death for mothers of children under 18. In 1995, a year for which recent New York State data is available, 1547 women between the ages of 15 and 44 died of AIDS, compared with 875 women who died of cancer and 235 women who died in motor vehicle accidents (Richardson, 1998).

New York City is the city most devastated by the AIDS epidemic in the nation. Ernest Drucker and his colleagues at Montefiore Medical Center estimate that by the end of 1999, 100,000 NYC children will have lost at least one parent to AIDS, and that in the case of 35,000 of these children it will be the parent with whom the child lives. At least 30,000 uninfected New York City children have already lost their mothers to AIDS, with this figure expected to rise to 50,000 by the year 2001 (Richardson, 1998). The U.S. city with the second highest infection rate is Newark, N.J., New York's

neighbor to the west, where another 7,200 children are expected to have lost their mothers to AIDS by the end of 1999. (Levine & Stein, 1994).

This research study has been devised to look at a select group of children whose lives have been profoundly altered by the AIDS epidemic: the uninfected siblings of children who have been diagnosed with AIDS or HIV (human immunodeficiency virus). These include older brothers and sisters, born before their mothers contracted HIV, as well as those children who have escaped maternal-fetal transmission. (The current rate of maternal-fetal transmission in the New York City area has decreased from 20 to 30% in the mid-1990s to 5% in 1999 due to advances in prenatal care of infected mothers.)

While working at the Pediatric Infectious Disease Clinic at Bellevue Hospital, I met a number of preadolescent children who, rather than attending school, were attending to their younger AIDS-infected siblings. In some of these cases, these older, uninfected siblings had become the primary caretakers of their ill brothers and sisters. Many had lost not only infected siblings, but also one or both parents. Prematurely parentified, some of these uninfected siblings are having to mourn the loss of their entire

biological families, while enduring other losses, such as moving to new residences, changing schools, and undergoing shifts in custody. Sometimes these siblings are separated from their families, sent to live with other relatives or friends while their infected mother tries to care for herself and the more exigent needs of her infected children. Intensifying the severity of this situation, most of these young people live in impoverished inner-city neighborhoods where they must contend with problems such as drugs and violence, which are endemic to these environments.

Clearly, these are young people at risk. Yet they are perpetually overlooked by the mental health system, which remains focused on the overwhelming demands inherent in servicing the needs of those infected with the AIDS virus itself.

Research has indicated that uninfected siblings evince a wide range of emotional problems, including depression, anger, and guilt. Many are anxiety-ridden, living in perpetual fear of the infected person's death or plagued by fears concerning their own mortality. Other uninfected young people manifest behavioral problems, ranging from school difficulties to engaging in risk-taking behaviors, such as drug use and unprotected sex.

Without question, the status of these overlooked survivors represents an urgent situation that needs to be addressed so that suitable interventions can be introduced.

Goals and Objectives

In conducting this research, my primary goal has been to gain a deeper appreciation for the complex intrapsychic processes that accompany the potentially-traumatic experience of having a sibling with AIDS. Accordingly, this study aimed to provide a forum that enabled the subjects to voice their own concerns in their own words. A key objective was to grant the subjects an opportunity to describe the ways in which they grapple -- both behaviorally and intrapsychically -- with the overwhelming challenges inherent in their personal situations.

To accomplish this, I used several disparate instruments that tapped into different domains of functioning and levels of conscious awareness. I administered the Youth Self-Report version of the Achenbach Child Behavior Checklist (CBCL) to gauge the subjects' own evaluations of their behavioral

functioning. This checklist enabled me to determine whether the uninfected siblings professed internalizing disorders, such as anxiety or depression, or externalizing syndromes, such as hyperactivity and aggression. In addition, I created an in-depth semi-structured interview that illuminated how these siblings experience their own situations and provided them with the chance to voice their personal concerns. Finally, I administered the Thematic Apperception Test (TAT) to gain insight into constructs such as defensive operations, which are less available to conscious awareness. Cramer's *Defense Mechanism Manual* (1991) was used to score sibling TAT responses along a developmental continuum.

This study has both quantitative and qualitative components. For the quantitative section, I have provided a statistical analysis of the data derived from thirty children, examining the interactions between the children's experiences, behaviors, and intrapsychic levels of functioning. For the qualitative component I have included case material on three representative subjects, illustrating their individual defense patterns and modes of verbal presentation.

On a scholarly level, I hope to make contributions to the clinical literature examining the interplay

between defense and adaptation in late childhood and early adolescence. In addition, this study explores the psychosocial phenomenon of AIDS-stigma and the negative impact that this stigma has on the ways in which families and communities adapt to crisis situations. Thus, issues involving AIDS-related communication -- both intra-familial and within the community at large -- are also addressed in this project, with an emphasis on the themes of secrecy and disclosure.

This project concerns a population that, although in dire need of intervention, has far too few professional advocates. As a community, we have yet to provide satisfactory social and psychological services for the tens of thousands of AIDS-orphans who are the living legacy of this century's most devastating epidemic. Previous research has indicated that the presence of well siblings is often considered a hindrance to the efficient conduct of hospital operations (Bank & Kahn, 1982). This assumption needs to be re-examined. With thousands of children being orphaned each year, it is incumbent on us, as clinical researchers and practitioners, to design interventions that address the far-ranging problems that plague the

precariously-balanced and all-too-invisible uninfected "affected" sibling population.

A final goal for this research has been to ensure personal interaction with each individual subject, and to provide additional referrals when appropriate. Fortunately, the process of meeting for the interviews was experienced by some subjects as inherently therapeutic. The interviews and instruments being used for this study necessitated individual, one-on-one administration. It has been my hope that the attention given by the interviewer to the uninfected siblings has proved valuable in and of itself, ameliorating to some degree the common problem of professional neglect.

LITERATURE DOMAINS

Before launching into a discussion of the individual literature domains pertinent to my research proposal, I would like to include a note on the organization of this portion of the work. A fundamental goal of this study is to look at the complex interactions between the internal and external processes effecting the relative adaptation of the subjects. Accordingly, it is necessary to evaluate material concerned with intrapsychic phenomena as well as material relevant to psychosocial issues. In deciding how to present these seemingly disparate topics, I have chosen to organize sections from the 'inside out,' that is, to move from the intrapsychic to the interpersonal. Thus, in the manner of concentric circles, this literature review will start with a discussion of constructs that are quite unavailable to conscious awareness and then move on to an exploration of more consciously-experienced phenomena. The review will conclude with an evaluation of psychosocial issues effecting the individual, the family, and the community at large.

THE CONCEPT OF DEFENSE

Of all of the psychological and behavioral factors being explored in this study, the construct of defense -- and the mechanisms employed in its service -- have the most direct clinical relevance and thus it is what I would like to open with. First I will briefly retrace the historical significance of the construct of defense in psychoanalytic literature. Then, I will discuss Anna Freud's seminal work, *The Ego and The Mechanisms of Defense* (1966). As part of this discussion, I will highlight the defense mechanisms of denial, projection, and identification, which are the defensive operations focused on in Cramer's *Defense Mechanism Manual*, which is being used to score the TAT in this study.

Early Conceptions of Defense

Freud wrote about the idea of defense for the first time in 1894, in his work the *Neuro-Psychoses of Defence*, and later employed the term in several subsequent works, including *The Aetiology of Hysteria* and *Further Remarks on the Neuro-Psychoses of Defense*, to describe the ego's struggle against painful affects or ideas. This

conception of defense, i.e., a mental function used to avoid the experience of pain, remained evident in Freud's work until the publication of *the Ego and the Id* (1923), in which he redefined the concept of defense primarily in terms of its relationship to the drives. During this period of reconceptualization, Freud replaced the term 'defense' with the term 'repression' in his discussions of the ego's struggle against unendurable affects and thoughts. At that juncture in Freud's thinking, the relationship between the two concepts -- defense and repression -- remained undetermined.

With the publication of *The Ego and the Id* in 1923, Freud introduced the model of personality consisting of three independent structures: the id, the ego, and the superego. This model was amplified in *Inhibitions, Symptoms, and Anxiety* (1926), with Freud's discussion of the ego as an independent functional organization. In this work, Freud locates the concept of defense as an ego function that protects the individual against instinctual demands. By 1926, Freud was also reducing the significance of repression to that of a "special method of defence."

Freud also suggested that "further investigations may show that there is an intimate connection between

special forms of defence and particular illness, as, for instance, between repression and hysteria" (p. 164). Thus, Freud conceptualized defense mechanisms as functions that operate in accordance with the particulars of the "illness" to which they are "connected." Yet all defensive operations were seen as serving the same end: that of protecting the ego from id-driven demands.

Anna Freud's Contribution

The first systematic theory of defense mechanisms was provided by A. Freud in her book, *The Ego and the Mechanisms of Defense* (1936). In this work A. Freud moves beyond her father's conception of defense operations as ego-protectors that stave off id-derived impingements. Rather, she contends that defenses protect against painful affective experiences in addition to protecting against id-generated drives. She also suggests that the key motive of defense operations is to ward off feelings of anxiety. According to A. Freud:

> "love, longing, jealousy, mortification, pain, and mourning accompany sexual wishes; hatred, anger, and rage accompany the impulses of aggression; if the instinctual demands with

> which they are associated are to be warded off, these affects must submit to all the various measures to which the ego resorts in its efforts to master them, i.e., they must undergo a metamorphosis. Whenever transformation of an affect occurs, whether in analysis or outside it, the ego has been at work and we have an opportunity of studying its operations" (p.32).

In her seminal study, A. Freud delineates the way in which the ego develops and uses particular defense operations at specific periods and under certain situational circumstances. She writes that "at particular periods in life and according to its own specific structure, the individual ego selects now one defensive measure, now another -- it may be repression, displacement, reversal, etc. -- and these it can employ both in its conflict with the instincts and in its defense against the liberation of affect" (p. 32). The ego, according to A. Freud, "adapts its weapons to the particular need, arming itself now against danger from within and now against danger from without" (p. 174).

A. Freud makes important distinctions between internal and external sources of danger. She differentiates between objective anxiety, which involves fears of the outside world stemming from the fear of transgressing parental prohibitions, and instinctual anxiety, which is conceptualized as a more internally-

derived id-driven threat. Although there are different categories of anxiety which prompt defensive operations, they nonetheless have similar effects. A. Freud writes that "the effect of the anxiety experienced by the ego because of the strength of the instincts is the same as that produced by the superego anxiety or the objective anxiety (p. 59)" in that defensive mechanisms are brought into operation. "Whether it is the dread of the outside world or dread of the superego, it is the anxiety which sets the defensive process going (p. 57)."

At this juncture, I would like to include brief synopses of the three key defensive operations that I will be assessing in this research: denial, projection, and identification. As conceptualized by Cramer, whose *Defense Mechanism Manual* (1991) is being used in this study, these three defensive operations can be considered defining points on a developmental continuum.

Denial

According to A. Freud, the infantile ego resorts to denial to preserve itself from some painful impression from the outside world. Accordingly, denial is conceptualized as a reaction to some external

impingement. The child's ego attempts to reverse an outer reality by expending energy to maintain and dramatize a fantasy. Thus, when the child's capacity for reality testing gets strengthened through normal developmental maturation, the child's propensity to use denial decreases. As children get older, their greater freedom of physical movement and increased powers of psychic activity enable them to evade aversive outside stimuli. This greater psychological mobility decreases the need for the ego to perform the complicated psychic operation of denial.

In her book, *Too Scared to Cry: Psychic Trauma in Childhood* (1990), Terr explores the way in which the defense mechanism of denial is used by traumatized children. According to Terr, children who are exposed to a single unexpected traumatic situation are not apt to shut off their cognitive and emotional adaptive mechanisms, and therefore do not tend to use denial to contend with their distress, especially if they had previously been unexposed to trauma. Thus, these children, who have had a single encounter with a traumatic experience, can usually recall this initial shock and do not psychologically dissemble its significance.

It is once disasters start piling up that children initially develop the capacity to deny reality. "Because second, third, and fourth ordeals can no longer surprise, the battle-weary child finds himself bracing for shocks. He prepares. In an attempt to see no evil, hear no evil, speak no evil, and feel nothing, the youngster starts ignoring what is at hand. His senses go numb and he guards against thinking" (Terr, 1990, p. 79). Thus, it is repeated or long-standing disastrous situations that prompt children to employ the defenses of denial and numbing.

Typically, children who have become benumbed by chronic trauma manifest one of two disparate personality styles. The first style, chronicled by Spitz in his work on institutional deprivation, is the style in which the child seems withdrawn, affectless, and unable to respond to stimulation. The second style is one in which the child appears more promiscuous, showing little discrimination between people. This child may sidle up to acquaintances or strangers, yet fail to develop genuine intimacy with anyone. Traumatized children who develop this second style of adaptation resemble some of the youngsters who fall into the insecure-avoidant category of dyadic attachment; their outward veneer of

friendliness and self-reliance covers a fragile and untrusting wounded core self.

Projection

A. Freud writes that children use the defense of projection as a means of "repudiating their own activities and wishes when these become dangerous and of laying the responsibility for them at the door of some external agent (p. 123)." For projection to occur, the ego previously had to introject critical authorities and incorporate them into the superego's operations. Thus the defensive operation of projection is only possible after superego development and the internalization of parental authority figures has occurred.

When the ego is defending itself against a prohibited impulse, it projects that impulse outward. Thus, the effect of the mechanism of projection is to break the connection between the ego and the ideational representatives of threatening instinctual impulses. As an example, during the process of projection the experience of vehement indignation at someone else's wrongdoing serves as a precursor of and a substitute for guilty feelings on one's own account. Accordingly,

indignation increases automatically when the perception of one's own guilt is increasingly available to conscious awareness.

A. Freud suggests that true morality begins when internalized criticism can coincide with the ego's perception of its own fault, with the consequence of the superego turned inward instead of outward. Dependence on the defense mechanism of projection therefore serves to stall the advent of mature moral functioning.

Identification

According to A. Freud, the defensive process of identification is one in which a child introjects a characteristic of an anxiety-inducing object, and in so doing works to assimilate the anxiety-producing experience associated with the object. By identifying with the anxiety-laden object, the child can take on the attributes of that object, including those that are experienced as aggressive or intimidating.

Thus, through the identification process the child can be transformed from the person threatened into the person making the threat, from victim to victimizer. So, for example, when children play the game of Doctor, they

are able to triumph over the passivity of the powerless patient experience and engage in the assertive activity of the doctor role. Through the use of the defense of identification, children attempt to triumph over their demons by aligning themselves with powerful figures rather than impotently struggling to resist them.

A. Freud writes that with the advent of latency complete dependence on the parents ceases, allowing the process of identification to take the place of object love. During the latency stage, the wishes, requirements and ideals of parents, teachers, and other authorities all get introjected, as the superego is constructed and proceeds to develop. With the burgeoning of the superego and its attendant superego anxiety, the fear of the outside world (objective anxiety) diminishes. In accordance with this progression, the more sophisticated mechanism of identification comes to supersede the more primitive defenses of denial and projection.

Identification plays a role in the ways in which children contend with early trauma and loss. For example, traumatized children often resort to the use of powerful fantasies, involving such themes as magic, heroism, and revenge, when they are grappling with the sequelae of trauma. These fantasies serve a compensatory function,

permitting psychologically-wounded children to cloak themselves in impenetrable mantles of strength, while they are in fact feeling their most vulnerable. These sorts of fantasies ultimately serve an adaptive function, allowing the children to gain psychic mastery over threatening situations.

SIBLINGS OF CRITICALLY-ILL CHILDREN

In this next section I will review the literature pertaining to the feelings and reactions of siblings of critically-ill children. These feelings and reactions are typically more open to conscious awareness than are defensive operations. Thus, children are typically cognizant of these responses and can discuss them if they choose to.

Research indicates that critically-ill children's siblings' emotional needs are less adequately attended to than the emotional needs of other family members (Chesler, 1992). For example, Drotar and Crawford (1985) report that siblings show more distress than patients do in areas such as perceived social isolation and fear of confronting family members with negative feelings.

Landsdown and Goldman (1988) suggest that siblings exhibit more behavioral problems than their ill brothers and sisters.

One of the recurrent themes in support groups for siblings of children with cancer is resentment over the special attention given to the ill child. As one sibling of a child with cancer complained, "Sometimes when both Sara and I are goofing around and both of us should get into trouble, I'm the only one that does. They don't like to yell at her much." Another child expressed ambivalence over a sibling's illness: "Sometimes I feel bad and sometimes I feel a little jealous. I feel sad when I hear that he had all these needles and stuff stuck in him, and I get jealous when he comes home and gets all this attention and doesn't have to clean and make the bed." (Chesler & Barbarin, 1987, p.27). In the case of families in which some members are infected with the AIDS virus, uninfected children may feel excluded from a special bond that appears to exist between family members having the same diagnosis and experiences. Preliminary research on the relationship between infected mothers and their infected children reveals evidence of a strong attachment and bond of secrecy between them (Fair, 1995),

which may further alienate uninfected siblings, forcing them to feel like outsiders in their own families.

Coincident with the well sibling's resentment over the parental attention received by the sick child is the sibling's anger over the parents' physical and emotional unavailability. Well siblings may be disappointed that their parents are no longer cooking dinner for them or helping them with their homework. Parents' exhaustion, depression, and financial pressures may undercut their ability to nurture and attend to their well children. One ten-year old boy suggested that "Maybe if I catch a cold, mom will stay home with me more" (Sourkes, in Schachter & Stone, 1987, p.172).

Adding to their resentment towards their parents, some children also become angry with them for not having been able to protect their brother or sister from illness. Sensing the parents' impotence in this situation, the well child's confidence about the parents' ability to protect him- or herself may be shaken. In some cases, the anger toward the parent -- and resentment over the patient -- may surface when the ill child is home from the hospital or is in remission, since siblings may be too overcome by fear and guilt during the term of the

patient's hospitalization to give voice to their negative feelings (Share in Schachter & Stone, 1987).

Bowen once commented that he never saw a child hurt by exposure to death, but only by the anxiety of other surviving family members (Rolland, 1994). Clearly, an important factor influencing the adaptation of a healthy child to his sibling's illness is the reaction of other family members to the crisis. The expressed reactions of the parents of the sick child have an enormous impact on the ways in which other family members respond to exigent circumstances. Parents who are extremely distressed may have a decreased tolerance for the day-to-day demands of their healthy children, and thus may make themselves emotionally unavailable to them, especially in times of crisis, when they are in fact most needed. Research with spinal bifida patients has pointed to a positive correlation between stress scores reported by mothers and measures of problems in sibling adaptation (Stewart, 1993). A study conducted in 1986 by Daniels lists increased family cohesion, an expressive family environment, and the health of the mother as being associated with better sibling adjustment (Rolland, 1994).

Older children, who themselves may be feeling deprived of parental attention, may also resent having to function as surrogate parents for their younger siblings. The willingness of siblings to accept and give care to each other can be an increasing source of conflict as they enter adolescence. The natural desire for independence can make both the sibling caretaker and sibling care-recipient resentful about their roles. Moreover, adolescents' sensitivities about body-integrity and body-image promote a heightened sense of vulnerability for the well sibling, as well as magnify the concerns about bodily humiliation for the affected sibling when they interact in care-giving (Rolland, 1994).

The presence of chronic childhood illness creates role confusion in the sibling dyad because the ill child often acquires the role of dependent child, regardless of ordinal position. Thus, older children sometimes displace younger children in terms of their need to be cared for (McKeever in Thompson, 1994). This role reversal can prompt resentment and confusion for all parties involved.

In families with the financial and educational resources to procure additional help, healthy siblings may be less burdened by having to care for ill brothers and sisters. Similarly, larger families may also provide

the best outcome for well siblings because the burden of caring for someone who is ill is then distributed among several children. Single-parent families, on the other hand, may increase the amount of time and energy each sibling must commit to caretaking, thereby increasing the onus of responsibility for each parentified caregiver (Thompson, 1994).

An important mitigating factor in the adaptation of siblings to their brother's or sister's illness is the age and developmental stage of the sibling during the period of crisis. In their important work on this topic, Weiner, Fair, and Pizzo (1993) discuss how toddlers and preschool-aged children rely on denial as a way of contending with psychologically-threatening constructs, such as the illness or death of a sibling. Behaviorally, preschoolers tend to busy themselves so that they become too distracted to dwell on painful subjects. In their games preschool-aged children may evince themes associated with death. They may also associate death with going to sleep based on misguided information passed on by caregivers; this sort of erroneous information may also prompt the preschooler to manifest sleep difficulties.

School-aged children tend to use information and concrete facts to help them grapple with difficult feelings. Common defense mechanisms employed at this age include projection, intellectualization, and dwelling in idealized fantasies. Frequently, school-aged children are aware of more information than they have been told by their parents and may have questions about who they can turn to for full disclosure of the facts. This is an age at which siblings may be actively jealous of their sick brother or sister, and may also wonder whether or not they have done something wrong to merit the loss of parental attention. Many school-aged children actively resent the additional work they are given around the house and may even perceive increased responsibility as punishment. In spite of their cognitive developmental advances, school-aged children may still engage in magical thinking, wondering whether they in some way caused their brother or sister to become ill by misbehaving or wishing misfortune on them.

Although adolescents may cognitively understand the nature of the illness and the possibility of sibling death, this intellectual comprehension may not translate into an emotional capacity to cope with their family in crisis. Many teenagers feel anger if they suspect that

the presence of HIV in the family will inhibit their hard-won autonomy from their parents or impinge on their relationships with their peers. Adolescents in families who are public with the AIDS diagnosis may face ridicule or ostracism from their peers, whereas adolescents in secretive families must struggle to maintain the appearance of normalcy as their loved ones physically decline. Many adolescent siblings of children with AIDS get caught in an emotional bind in which they feel helpless and needing of reassurance, yet simultaneously protective of their newly-achieved independence.

To contend with these conflictual pressures, some adolescents seek outlets outside of the familial environment. Reports indicate that some adolescent siblings of HIV-positive children engage in risk-taking activities that place them at risk for contracting the AIDS virus themselves, such as drug abuse and sexual promiscuity. The need to escape their overwhelming emotions, their immature sense of immortality, survivor guilt, and peer pressure all combine to make sex and drugs a powerful magnet for pressured adolescents, even if they have an understanding of the potential consequences. (Wiener, Fair, & Pizzo, 1993).

Regardless of their age, healthy siblings of ill children tend to need reassurance about their own physical status. A brother or sister's illness shatters the myth that serious health problems and death happen only when a person is old. Children may react to the illness or death of a sibling with a newfound realization of their own physical vulnerability. They may wonder if they, too, are ill with the sibling's disease or if they are somehow destined to catch it. If their brother or sister dies, well siblings may unconsciously assume that they are also fated to die at that same age. (Chesler & Barbarin, 1987).

In addition to having fears about their own deaths, healthy siblings may also suddenly manifest somatic reactions, including physical symptoms such as headaches and stomach aches; appetite disorders; sleep problems; and accident proneness. Often these complaints coincide with changes in the status of the affected child's disorder. These symptoms can be both causally and functionally overdetermined. Although symptoms may stem from a preoccupation and identification with the ill sibling, they are also a means of gaining parental attention. The manifestation of somatic symptoms represents a chance to reap a secondary gain for the

healthy child. For example, one child resorted to bedwetting knowing that his mother would spend additional time at home changing the linens and thus delay her daily departure to visit her other child at the hospital (Schachter & Stone, 1987).

In addition to coping with the personal and familial changes inherent in the situation of having an ill brother or sister, well siblings must also develop a reasonable account of the causation of their brother or sister's illness if they are to survive the emotional upheavals of their situations (Drotar and Crawford, 1985). Young children often develop their own private, idiosyncratic versions of what caused their sibling to become ill. From a cognitive perspective, the concept of causality is difficult for a five- or six-year old pre-operational child to grasp. Accordingly, in their quest to explain the unexplainable, many children will link together simultaneous yet unrelated events, claiming that these coincidental experiences are integrally connected. For example, when a six-year-old was asked what made his 13-year old sister sick with cancer, he replied that she "fell off the slide and broke her arm." A five-year old sister of a leukemic patient determined that his brother "got sick because I had a sore throat and he

caught it." A ten-year-old with a sister who has cancer stated that his sister "had hurt her leg on the chain of her bike. She didn't even notice it until I pointed it out to her. I don't even ride my bike anymore. One night I went out and broke the chain so I couldn't ride it. I told my mother it broke by itself, but I broke it." In all of these examples, the children's fear and guilt prompted them to manifest magical thinking in their explanations of the causality of their siblings' diseases (Sourkes, in Schachter & Stone, 1987, p.165).

Since the creation of a causal narrative is critical to sibling adaptation, a potentially powerful intervention is the obtaining of a sibling's version of the cause of the disease. In most cases, children are relieved to share their reasoning. The sooner this view is obtained, the more quickly misconceptions can be clarified. (Sourkes, in Schacter and Stone, 1987).

Yet for many children procuring a reasonable account of the causation of a sibling's illness is not necessarily an easy task. Many siblings of ill children feel uncomfortable talking with their parents about their concerns. Often, they attempt to protect their parents' feelings at the expense of their own comfort. One sibling of a child with cancer stated, "I didn't like

talking about it to my mom because I knew she'd always start crying." Another child commented, "I don't feel free to talk about it. It's just shoved under the carpet. I don't want to stir up bad feelings" (Chesler, 1992, p.32).

When healthy children are hesitant to discuss their concerns, it becomes incumbent on their parents to foster communication. When parents are not forthcoming with information, children's own fears may prevail. For example, when parental concern for an ill child appears out of proportion to the explanations that the parents had previously given the sibling, then the sibling may experience an increase in anxiety about such issues as favoritism and rejection (Chesler, 1992). Parents may also have a faulty assumption that talking about the illness will upset the other siblings and promote lingering unease. On a less conscious level, however, this sort of avoidance serves to protect the parents from stirring up their own guilty or self-blaming thoughts (Rolland, 1994). Siblings benefit from shared information and mutual involvement from the point of diagnosis on. Parents must take it upon themselves to be the first to break the tacitly agreed-upon pact of silence.

Guilt

When caught in the wake of a tragic event, children create fantasied reasons for the existence of their unfortunate circumstances. These made-up explanations of causality protect their creator from feeling victimized and powerless in the face of random events. Often, children imagine themselves as responsible for the terrible situation with which they are attempting to come to terms. Children who are trauma victims, in particular, have a hard time accepting that something terrible can just happen; rather they would prefer to believe that they caused or contributed some responsibility to the tragic circumstance (Terr, 1990). In allowing themselves to feel guilty for these made-up causalities, children work to maintain a view of the world as just and predictable. Feelings of guilt become a way of defending against feelings of helplessness; children, as well as many adults, would rather blame themselves than admit that nothing can be done to change or control the course of an illness or the force of a tragic event (Gardner, in Fanos & Johnson, 1995).

The inner feeling that one is guilty serves as a catalyst for the creation of shame, the fear that one's vulnerability cannot escape outside notice. The combination of shame, conscious suppression of the traumatic event, and unconscious denial of trauma-related thoughts and feelings may induce traumatized children to lie about their genuine reactions to their difficult situations.

Modell, in Fanos and Johnson (1995) suggests that there is an unconscious bookkeeping system within nuclear families that allows each member to evaluate how the fate of the other relatives determines their own. Accordingly, siblings often state that they wish that they could be somewhat sick so that their ill brother or sister could be less so. One sibling of a boy with cystic fibrosis recalls having wanted her own disease and fantasized that she had a brain tumor and would die at 16. This young woman and her mother would talk about wanting to take the disease from her brother; she suspected that having her own affliction would serve as "poetic justice" for being healthy and successful (Fanos & Johnson, 1995). A 10-year old boy whose sister was sick wondered "Why didn't I get sick instead of Cindy?

I wish it had been me. I don't like to see her hurt" (Sourkes in Schachter and Stone, 1987, p.171).

According to Hardy (1995), survivor guilt is common among siblings of children with HIV. Siblings of boys and girls who are HIV-positive have stated that they have would like to get the AIDS virus because they want to be like the other members of their family; they also do not believe that they deserve to live if the rest of the family is going to die (Fair, 1995). These children often feel guilty for not being able to protect the dead person from illness and death, for their unreconciled differences, and, eventually, for experiencing relief at the death of their brother or sister. In these cases, the survivor guilt can extend long after the death of the sibling (Fair, 1995). Siblings' guilt can also be stirred up from their sense of shame at having a brother or sister who is ill or disfigured, which is felt to mark the family as different. Research has also indicated that there is a positive correlation between sibling guilt and sibling resentment: as the resentment increases, increases in guilt are expressed (Fanos & Johnson, 1995). Thus the guilt reflects the angry feelings and impulses that underlie the consciously-experienced resentment. Although children experience mixed feelings, including

relief, about having escaped the fate of their ill siblings, acknowledgment of their relief over their good fortune would merely trigger additional guilt.

Some families remain unable to talk about the death of a member in an effort to avoid confronting guilt and allocating blame. "Parents and child come to share a powerful bond through the spoken or unspoken feeling that, if any one of them had acted differently, the child might still be alive. The guilt maintained by these unrealistic beliefs remains intact and intense, with each individual locked in a struggle with his own conscience and unable to share such painful feelings" (Krell & Rabkin, 1979, cited in Bank & Kahn, 1982, p. 275). Thus, ironically, feelings of guilt become exacerbated by the acts of suppression that are employed to keep these very feelings at bay.

Several research studies have empirically investigated the theme of survivor guilt in children who have siblings who are dying or have died. In a study conducted by Erickson, the presence of guilt remained evident five years after a sibling's death. The subjects of this study considered themselves responsible for the death, insisted that it was their fault, and felt that

they should have died as well as or instead of the sibling (Fanos & Nickerson, 1991).

In 1991, Fanos and Nickerson interviewed siblings whose brothers or sisters died during their adolescence, using an interview that addressed the construct of guilt. Questions pertaining to this construct were organized into the following dimensions: a general sense of being guilty, ruminations over what should have been done or not done in relation to the dead sibling, readiness to accept blame when things happened to self or others, and current difficulties in separating from parents. Siblings between the ages of 13 and 17 at the time of loss expressed the most symptoms. They were troubled by a global sense of guilt, guilt over their handling of the sibling's illness and death, and survival guilt, that is, guilt that they had not been the one to get sick and that they had lived longer than their sibling.

In a 1995 article, Fanos and Johnson further discuss the construct of survivor guilt in their research on siblings of patients with cystic fibrosis. According to the authors, all of the individuals in their sibling group expressed a global sense of guilt. The sense of being "bad," with expectations of retribution,

seemed to lead to fantasied convictions that the siblings were probably carriers of the disease and that punishment might come in the form of giving birth to an affected child. Thus, one could conjecture that siblings of HIV-positive children could have comparable fantasies of being or becoming infected themselves.

The impact of these manifold senses of guilt on the sibling survivors of the AIDS epidemic is an area deserving of further exploration. One goal of this study will be to see if children who have AIDS-infected siblings are able to talk about their reactions to the tragic circumstances surrounding their families without dissembling. A further point for investigation concerns whether survivor guilt can ultimately be conceptualized as an adaptive mechanism in that the misattribution of causality may serve as a defense against ego decompensation.

Mourning

"There are two parties to the suffering that death inflicts, and in the apportionment of this suffering, the survivor takes the brunt."

--Edwin Shneidman (Bank & Kahn, 1982, p. 271)

Sibling death can create a "senseless arithmetic of adding newly warped lives to the one already tragically ended" (Cain et al. 1964, cited in Bank & Kahn, 1982). Although this study is focused on the experience of children who currently have living brothers and sisters with AIDS, some of the subjects who are being interviewed have previously suffered the loss of other family members, including other siblings.

In his work on bereavement, Bowlby outlines four stages which children pass through while in mourning. The first stage consists of denial; the second of protest; the third is characterized by despair coupled with the reworkings of the relationship with the dead individual; and the fourth stage is one in which there needs to be some acceptance of the loss with a resultant detachment from the lost object. The resolution of this fourth phase includes the cultivation of new relationships to substitute for that which has been lost. Young children and regressed older children and adolescents may find themselves stuck in the first stage of Bowlby's continuum. Their defense strategy, which relies heavily on the use of denial, may keep them frozen in the early stages of mourning.

Children, with their "sliding concept of what death really is, may have difficulty believing in the finality of what has taken place. They may take years to pass through the denial phase of grief" (Terr,1990). Depressive, and even psychotic reactions to a sibling's death are not uncommon in the years immediately following the loss (Hilgard, 1969). In their grief, some traumatized children may see the ghosts of their missing family members; others may feel possessed by the presence of the deceased.

If previously traumatized children are forced to contend with a new death or disability, they may, as a consequence of this latest blow, begin to manifest paranormal thinking or character change. Some children, under these extreme circumstances, may meet the unresolvable demands of grief and trauma by becoming passive, withdrawn, and depressed. Others may externalize their grief, acting out their angry feelings in school or around the neighborhood. Often these children are wary about behaving badly at home, sensing that their parents may be too preoccupied with their own loss to bother attending to their surviving child. Ironically, the sabotage of their school performance provides the sibling with a secondary gain: poor

performance in school ensures surviving siblings that they will not outdo their dead brother or sister by surpassing them in their accomplishments in life. By limiting their achievements, surviving children also limit the guilt that would be attendant with success. Many of these acting-out children harbor the unconscious motive to be stopped and controlled. In these cases, the well child induces others to relieve his guilt and validate his sense of badness for having had "death-dealing" wishes (Bank & Kahn, 1982).

Certain factors, such as family secrecy, can serve to delay a child's recovery from mourning. Scenarios of this sort are not uncommon in families with members who have AIDS. When patterns of secrecy become well-established during the illness period, it is unlikely that the groundwork will be laid for the work of mourning should the HIV-infected person die (Fanos and Weiner, 1994). Families may be hampered in their ability to openly and sufficiently grieve because the process of mourning might force them to divulge more information about the illness than they feel comfortable voicing (Mayers & Spiegel, 1992). For example, one mother of an eight-year old girl who died of AIDS would insist on telling others in a support group for bereaved parents

that her daughter had died of birth complications (Wiener, Fair, Pizzo, 1993). Doka has defined this phenomenon as "disenfranchised grief," which is described as grief that persons experience when they incur a loss that is not or cannot be openly acknowledged, publicly shared, or socially supported. Disenfranchised grief can exacerbate mourning by intensifying the strong emotional reactions that often accompany bereavement, such as anger, guilt, and depression.

Parents have an overwhelming emotional load to contend with when one of their children dies. Accordingly, the situation in which a child dies is fraught with opportunities for parents to fail in assisting their surviving children in healthy mourning. Once again, little time is left for the surviving children. It has been said that the surviving sibling becomes a double orphan, losing not only his sister or brother, but also an emotionally available parent (Bank & Kahn, 1982).

After the death of a child, parents sometimes suspect that talking about the death would upset the remaining child, and vice versa. Thus the living sibling and his or her parents can ultimately become trapped in a vicious cycle of mutual protection and self-

protection, each preventing the other from fully facing the loss.

In some circumstances, parents, fearful of being overwhelmed by painful affect, allow the dead sibling to become an untouchable. In these cases the surviving children learn from wounded parents that to raise up a dead sibling's image is treacherous or disloyal. Families who follow this pattern try to behave as normally as possible, in the pretense that the death never occurred. Often, this sort of tacit denial promotes a situation where the dead child can only be experienced by the living sibling as a private phantom, whose name cannot be mentioned aloud. There are also instances in which the remaining child may unconsciously interpret the parents' unwillingness to talk about the dead child as an accusation that the sibling is somehow at fault. Moreover, if a child's relationship with his or her sibling was conflicted before the sibling's death, parental silence can aggravate the surviving child's pre-existing sense of guilt and confusion as to his or her role in the death.

Parents can also over-protect the surviving sibling, by communicating to him or her that the business of living is inherently dangerous and that the point of

life is to escape illness or injury. In these cases, the surviving child may become excessively frightened and timid, with the parents' threats stifling their healthy strivings for autonomy (Bank & Kahn, 1982). Surviving children may start to conceptualize the mere act of surviving as their entire raison d'être, in an attempt to mollify and reassure their grieving parents.

Parents who had been narcissistically invested in the child who died will be likely to mourn in an unhealthy fashion and to involve the other children in their pathological grief. Under these circumstances, surviving children run a high risk for developing a pathological relationship to the parents as well as to the ghostly memory of the deceased sibling. Similarly, if the sibling's identification with the brother or sister who died had been enmeshed or fused, then the death deprives the sibling of narcissistic supplies. For example, if the sibling who died provided a flattering reflection of the survivor, the loss of that ego-gratifying mirror could be experienced as a devastating jolt that could induce psychological decompensation.

In mourning people who had AIDS, family members may feel particularly angry at the deceased for having led a self-destructive lifestyle and for the potential

shame that he or she has brought upon the family (Siegel & Gorey, 1994). These angry feelings are conflict-laden for survivors, and may serve as catalysts for surges of survivor guilt. Moreover, family members of people with AIDS may also be suffering from a syndrome known as bereavement overload, a condition that results from having experienced the multiple deaths of loved ones in rapid succession. Their ability to mourn in a nonpathological fashion may be jeopardized by the sheer amount of loss that they have had to endure.

Prior Research with the Siblings of Ill Children

In this next section of my literature review I will synopsize selected empirical studies that have been conducted with siblings of chronically- and terminally-ill children. For additional information on relevant empirical work, the reader can refer to the Instruments discussion of my Methodology section, where I detail some of the studies that have been done using the measures that I have chosen for this work (i.e., the TAT and the Achenbach Child Behavior Checklist).

According to Spinetta (1981), whose invaluable work on the psychology of ill children and their families has

contributed much to this field, siblings of chronically-ill children suffer at least as much and probably more than do the patients themselves in terms of their emotional responses to the disease. To investigate this hypothesis, Spinetta conducted research using the Kinetic Family Drawing technique (KFD-R), which examines three separate areas: intrafamilial communication patterns, self-image, and emotional tone of responses. Researchers administered the KFD-R to children with cancer, their siblings, and their families, with the instruction that each subject draw a picture of their families "doing something."

This drawing measure proved to be an eloquent research tool, generating a great deal of information about this population. As Wiener, Best, and Halpern have pointed out, verbally adept children have the capacity to cover their feelings masterfully, but art can penetrate their verbal defenses (1994). The drawing process provided the children with an opportunity to nonverbally express their perceptions of their families' levels of communication, particularly as related to the sibling's perceived isolation. Self-image concerns were also manifested in the pictures, which became a means of visually illustrating painful changes such as hair

loss, weight change, and disfigurement. The emotional tone of the drawings was often dysphoric, as evidenced by depictions of depression, loneliness, rejection and withdrawal.

Upon analysis of his results Spinetta determined that the siblings were more seriously distressed by the changes caused by the disease than any other family member. Moreover, the KFD-R scores indicated that siblings were least adaptive at the times when the patient was experiencing the most severe physical pain. Accordingly, siblings feel the most isolated when their brothers and sisters are going through painful periods and their parents are therefore forced to turn their full attention to the needs of the suffering patient. Spinetta points out that when the patient is feeling better, the parents often remain unavailable, shifting their attention to other non-disease related matters, such as concerns about finances and insurance.

In a separate study Spinetta (1981) combined the KFD-R with another projective instrument, a story-telling measure, called the Roberts Apperception Test. Using this instrument, siblings of children with cancer scored at more maladaptive levels than patients did. Not only did the siblings' stories show the families in greater

conflict, but they also contained more elements of punishment and mutilation than did the stories of the patients. Spinetta's study suggests the possibility that patients themselves may rely heavily on the defense of denial as a means for contending with life-threatening illnesses.

Cairns et al. (1979) combined projective tests with objective measures in the battery that they administered to school-aged cancer patients and their healthy brothers and sisters. The results of their study indicate the presence of significant distress on the part of the siblings, including general anxiety, perceived social isolation, perceived vulnerability to illness and injury, and the fear of confronting family members with their negative feelings (Koocher & O'Malley, 1981).

Carpenter and Sahler (1991), in their work with siblings of children with cancer, created a Sibling Perception Questionnaire to tap into siblings' feelings about their brother or sister's disease. This measure consists of three content domains: knowledge about the disease and its treatment; perceptions of how the cancer experience has an impact on the self, on family relationships, and on nonfamily relationships; and mood states. With the use of their questionnaire, the authors

were able to analyze the relationship between the disparate variables examined. Their primary findings indicate that the siblings who are identified as having adaptational difficulties share a nexus of common perceptions: they see themselves as interpersonally isolated, they conceive of the illness as disruptive of usual patterns of family functioning, and they report a lack of resources for coping with how they feel. Carpenter and Sahler also found that the sibling's relative adaptation was contingent on the degree to which the family was able to maintain the sibling's perception of being an integral part of the family unit. The authors note that the parents as a group underestimated the impact of sickness on the healthy child. This underestimation sheds some light on why so many siblings adopt negative behaviors to gain parental attention: acting-out becomes a way in which physically healthy children procure parental attention without directly confronting the notion that their own parents have neither the time nor the energy to attend to their fears and concerns.

In a 1994 study of 21 siblings of children with cancer, Havermans and Eiser examined the role that communication plays in mediating sibling adaptation.

Havermans and Eiser found that higher scores on communication about illness were related to a decreased impact of the illness on the lives of the siblings in general. An additional finding was that siblings with high communication scores also reported heightened concerns that their ill sibling might die, indicating an increased psychological receptivity to a potentially overwhelming topic. The ability to express this fear is seen as an indicator of healthy functioning, whereas avoidance of this -- and other anxiety-provoking topics -- causes the avoided topics to lurk unexamined in the psyche, producing a more serious and potentially dangerous threat. In Haverman's and Eiser's study, the burden of the sibling without cancer was compounded by the burden of secrecy. Thus, increases in secrecy, such as those stemming from the stigmatization of the AIDS virus, result in increases in maladaptive functioning.

Koocher and O'Malley (1981) also focused on the issue of familial communication in their work with 51 brothers and 50 sisters of former cancer patients. In this study subjects were asked to describe current and past experiences and feelings about the patient and the illness. The researchers used a semi-structured format including both forced-choice and open-ended questions, in

which the subjects were asked about memories of the diagnosis and treatment period.

Their results indicated that the level of understanding of the illness among the siblings reflected the amount of open communication about the illness within the family. Siblings who were not provided with information were uncomfortable with the questioning process. Some of the older siblings who had been told the nature of the patients' conditions were asked by the parents to help shield the patient from the truth about the diagnosis, which added to the siblings' burden. The majority of the siblings (67%) thought that even young cancer patients should be accurately informed about their diagnosis and prognosis.

The subjects reported a wide range of responses to their siblings' illnesses. Almost one-quarter of the subjects reported feeling jealous of the patient, with the younger children, aged six to ten, reporting more jealous reactions than those in other age groups. Nineteen percent of the participants reported current feelings of residual jealousy, even years after the advent of their sibling's illness. Other siblings explained that their jealousy finally abated once they

were able to learn more about the illness during the years following their sibling's disease.

Guilt feelings among the siblings were directly correlated with a lack of information and a poor understanding of the patient's illness. Younger children in Koocher and O'Malley's sample claimed that they had believed they were somehow responsible for their sibling's illness. Each of the siblings who felt guilty reported a dearth of open conversation in their families, which suggests that poor family communication is a factor having a direct bearing on the intrapsychic processes that promote survivor's guilt.

Approximately one-third of the siblings questioned worried that they themselves would get cancer during the patient's treatment, and 13% of the respondents claimed that they had this worry still. The children also mentioned several other concerns, including their disappointment at not being able to visit their sibling in the hospital, their need to defend their sibling from ridicule for baldness or physical impairment, and their feelings about neighbors who instructed their children to stay away from the cancer patient because he or she was considered contaminated. Koocher and O'Malley conclude that many of the siblings' problems could apparently

have been prevented or ameliorated by providing direct factual information at the time of diagnosis and during treatment (Koocher & O'Malley, 1981).

Yet even when provided with direct factual information, children often become adept at covering up their feelings. In an attempt to penetrate their subjects' verbal defendedness, Wiener, Best, and Halpern (1994) worked with techniques that tapped into the inherent fantasy nature of the feelings of children with HIV and their siblings. For example, they employed an incomplete sentence technique, using phrases such as, "I often wonder" or "If only" to encourage children to express their thoughts in a nonthreatening style. The researchers determined that these open-ended methods proved to be more fruitful than asking children direct questions, which often resulted in perfunctorily-delivered one-word answers. Wiener, Best, and Halpern note that the asking and answering of direct questions is a source of enormous stress for most HIV-positive children.

Wiener and her colleagues found that their subjects would frequently choose story titles that would succinctly reflect either where they were in the course of their disease or the personal issue that was of the

utmost importance to them at the time. I have chosen to close this portion of my literature review with examples of the literature created by the uninfected siblings of HIV-positive children, who have been interviewed by Wiener and her colleagues (1994). In my view, these excerpts not only encapsulate and reinforce the issues I have been discussing, but do so with considerable grace.

I Often Wonder . . .

> . . . I often wonder what will happen to my family because of AIDs. I wish my sister would be alright but I know that she may not be. I wish my mother would start relaxing and not jump to conclusions about my sister so quickly. I also wish my mother will continue to feel well.
>
> ... I also wish I could not lie about my sisters' and mothers' health. Lying is hard to keep straight and I feel like I could just tell the truth and get the monkey off my back.
>
> -- Melissa, age 13

The Hardest Thing about All of This

> The hardest thing about all of this is my brother. My brother is HIV and he bugs me. He gets a lot of attention especially when he almost died. Sometimes when he gets a lot of attention I feel left out. When he gets new toys and Nintendo tapes I often get nothing. That makes me feel sad. Sometimes I feel angry when my mother is busy and can't help me with my homework. She is busy with all kinds of

activities related to my brother and HIV. I also get angry when I don't have anyone to play with and my brother gets to bring his friends over. I also get scared. AIDS scares me because I am afraid that my brother will die. I always had a brother and I don't know how it would feel not to. Sometimes he wants me to sleep in his bed with him maybe because he is scared too. He doesn't talk to me about what it is like to have HIV. But I haven't asked him either. I told my best friend. She told me she would not tell her family but she did tell them. It worked out O.K. and she is still my best friend. If I could change anything in the whole wide world it would be to get rid of AIDS and that no kids would be sick. I really want my brother to know that I love him even if I don't always show it. There are just some times that I have to hit him back.

-- Lauren, age 10

Once my sister got sick on Thanksgiving. She was going to the hospital. Everybody was calling on the phone asking if she was OK. I told everybody she was fine. I said "Hi" to all of them, but no one said anything to me or even "How are you?" The same thing happened on Christmas.

Sometimes I feel like a spirit. I feel like I can be seen but not heard. Not many people pay attention to me. Like a spirit I am always there, but people don't notice the things I do.

-- Brianna Keisha, age 10

STIGMA, SHAME, AND SECRECY: THE SHADOW OF THE AIDS CRISIS

AIDS Stigma

In addition to being faced with enormous medical, financial, and psychological hardships, families with AIDS are often forced to contend with societal disapprobation. They suffer "in a societal context of marked public condemnation and fear that frequently results in withdrawal by others of empathic support, precisely at the time that it is most needed" (Lockhart & Wodarski, quoted in Mayers and Spiegel, 1989, p. 187). For example, there are some medical professionals who have refused to work with HIV-infected people. In addition, infected children have been expelled from day care, schools, and religious institutions; their families have been evicted from housing and their parents have lost their jobs when others found out about their HIV status. Shame and isolation, potential and actual discrimination, and the loss of multiple generations of family members all have devastating consequences on the developing child.

Fear of AIDS has led to a situation in which the biological, foster, and adoptive families of children with AIDS experience stigma and social isolation (Taylor-Brown, 1991). AIDS discrimination taps into a number of

fears, including fear of helplessness, fear of sexuality, fear of the mentally ill, and fear of death. AIDS-related stigma also stems from the widely-held association of the disease with groups that have traditionally been socially-marginalized, such as gay men, intravenous drug users, and ethnic minorities such as African Americans and Latinos. These groups represent a deviation from the dominant cultural norms of the United States (Douard, cited in Lipson, 1994) and, consequently, are considered outside of the mainstream.

In labeling certain groups as aberrant, society attempts to externalize that which is feared by the normative group. This projection of fear outside of the mainstream social unit is done in an effort to strengthen social bonds during times of crisis (Schulman, 1991). In a self-destructive identification with the aggressor -- in this case, a biased society -- many family members affected by HIV hold the same stigmatized beliefs and feelings about themselves that are held about them by nonstigmatized people in their culture at large (Lipson, 1994). In so doing, the family members collude with the process of stigmatization, and thereby reinforce the bias. Thus, many people affected by HIV allow themselves

to be marginalized by accepting the label of their stigmatization.

A further negative byproduct of the stigmatization process is that it obstructs the social cooperation that is necessary to control the spread of the AIDS epidemic. Social consequences of AIDS stigmatization include a delay in the delivery of AIDS-related education, a limit in the amount of material that has been translated into Spanish, and a dependence on written materials rather than oral presentations despite high illiteracy rates in the infected population. In his frustration with our society's delayed reaction to the AIDS crisis, AIDS researcher David Schulman quotes from Camus' *The Plague* (1972), stating that "officialdom can never cope with something really catastrophic."

Schulman suggests that as a society we have a tendency to project social panic onto already stigmatized groups, as evidenced by the internment of Japanese-Americans during World War II. This projection of blame serves to protect the mainstream populace from confronting its own complicity in whatever negative situation is at hand. The stigmatized group becomes scapegoated, and the nonstigmatized group feels self-

congratulatory about their success in having isolated the problem.

Many families in which members have HIV infections harbor fears of ostracism, which they try to contain through secrecy. Parents, with their admonitions about indiscretion, attempt to protect their children from the phenomenon of the 'courtesy stigma' (Goffman, cited in Siegel & Gorey, 1994), in which the stigma attached to a particular individual is extended to his or her close associates.

Often, issues involving secrecy and AIDS disclosure develop within a specific socio-cultural context. For example, Boyd-Franklin and Aponte have discussed the ways in which African American families, because of their unique history in the United States since slavery, may feel a particular need to be discrete around their children and around health professionals (Lipson, 1994). In Latino families, the tradition of 'familismo' can perform a similar protective but exclusionary function (Lipsón, 1994).

Secrecy and Shame

In their determination to shield their children from outside judgments, parents often misguidedly decide that they will not disclose a family member's HIV status to other children in the family. Those children who are aware of their siblings' HIV-positive status are often instructed not to mention their siblings' health outside of the home. Uninfected siblings, therefore, are often not provided with an outlet that would allow them to discuss their concerns with others, even health care professionals.

In one study on the use of support systems, over half of the HIV-infected children in the sample listed health care professionals as members of their support networks. Their uninfected siblings, however, relied primarily on themselves for support. Moreover, the uninfected children reported having fewer total resources for social support than the adult caretakers in the sample, who reported receiving support from religion and from God. In short, uninfected siblings often feel they have "no one to talk to" about HIV (Mellins & Ehrhardt, 1994).

A child's feeling that he or she has "no one to talk to" leads to a heightened sense of isolation and, ultimately, to poor adaptation. Secrecy may exacerbate children's fears or guilt-laden fantasies, and the potency and malevolence of these fantasies may prompt their creators to suspect that they are deserving of exile. Siblings also seek distance to protect themselves from further pain or multiple loss, fear of contagion, or fear of leaking the secret to the sick sibling (Fanos & Weiner, 1994). Isolation from others, whether self-imposed or as a result of ostracism, leaves the child particularly vulnerable when a parent or sibling becomes ill (Fair, 1995).

The psychic demands of secrecy on a young child are high. Without external confirmation, children may inadvertently begin to believe that their own thoughts and feelings are suspicious or bizarre. Deprived of outside validation, children may also start to doubt the legitimacy of their external reality as well. Under these circumstances, children's own thoughts and perceptions may start to seem absurd to them, with the sense of unreality creating a disturbance in the child's adaptation and psychological self-assessment.

In addition, a child who suspects that family members are withholding vital information may start to see these previously-trusted relations as corrupt or counterfeit. This, in turn, may color their sense of themselves, since they now see themselves as intimately related to someone who is tainted by suspicion. Thus children who are in families where secrecy is the rule may ultimately conceptualize themselves as false as well, which can induce in them overwhelming shame. Without expression, this shame cannot be expiated. Furthermore, without communication the child's sense of their external reality as unreal cannot be confronted. Ultimately, the demand for secrecy causes more significant harm than the content of the secret itself (Cottle, 1980).

Another problem with mandating children to secrecy is that it is frequently difficult for them not to respond to others outside of the family when they are asked why their brother or sister is so sick. Siblings who are aware that transmission of the AIDS virus is often sex- or drug-related, may not only feel discomfort and shame about these methods of contraction, but may also fear the judgment of their peers. The stress of secrecy takes a discernible toll, with siblings who are

in treatment often discussing themes involving secrecy during clinical sessions (Fanos & Weiner, 1994).

Uninfected children may also be anxious about their own future health -- e.g., they may worry about contracting AIDS from an ill family member -- yet because familial communication about HIV is usually discouraged, these distressing misconceptions persist uncorrected (Siegel & Gorey, 1994). With communication cut off, fears of contagion are often accompanied by fears of the well sibling's own death (Fanos & Weiner, 1994).

Some children, on the other hand, may wonder why they are not infected and erroneously conclude that they are invulnerable to the AIDS virus. If these young people are not given appropriate information by their parents, then they may not take proper precautions in protecting themselves from contracting HIV. This sort of carelessness has already become a problem with young people who are in families where there are members with HIV infections. According to one study (Draimin, 1993, cited in Hardy, et.al., 1995) many children with HIV-positive parents claim to have had unprotected sex. For some of these children, the comfort sought from an intimate relationship may have been more compelling than the risk of disease-contraction. Others of these

young people may merely have been misinformed, or not informed at all, about the ways in which the virus is contracted.

Like adults, children who are contending with chaotic situations adapt best when they are able to develop narratives that promote an internal sense of coherence. As noted by Rolland (1994), direct and clear information and supportive reassurance from parents are often the best preventive medicine for well siblings of chronically-ill children. Parents, however, often have a faulty assumption that talking about an illness will upset siblings and promote additional unease. At times, avoidance of discussion of a child's illness may provide the parents with a secondary gain: by evading the loaded topic the parents can protect themselves from self-blame.

Within the home, so much energy may be expended in keeping AIDS a secret that family members may lose touch with each other's feelings (Pizzo & Wilfert, 1991). Parents are often loathe to answer questions about how the disease was contracted. One father, a substance abuser, expressed his concerns this way, "If I tell him, then he will ask all kinds of questions about how we

got it and what will happen to him. I don't think I could handle that" (Mellins & Ehrhardt, 1994, p. S58).

Sometimes, however, children know about their family member's HIV-status, but realize they are expected to play dumb to placate an anxious parent. For example, a six-year old watching a television show on AIDS commented that "This is exactly what I have, I have AIDS. I know it, but please don't tell mommy; it would just kill her" (Pizzo & Wilfert, 1991). In his work with children with cancer, Bearison (1991) noted that at times children use ambiguous speech in accordance with what they think their parents are capable of hearing. Thus, these children participate in a folie à deux, colluding in a mutual pretense with the very adults from whom they most need to hear the truth.

Wiener, Fair, and Pizzo (1993) write that although parents almost always benefit from discussing death with their child, they have great difficulty in doing so. Almost one-half of the parents of HIV-positive children in a recent needs assessment carried out at the Pediatric Branch of the National Cancer Institute needed help in learning how to talk with children about death. According to the researchers who conduct this program, parents worry that if they raise the subject, children

will assume that death is imminent. Children, for their part, often have strong images about death, but keep these images to themselves for fear of making their parents anxious. Wiener and her colleagues suggest that misperceptions and fears can be worked through when a child has the opportunity to express his or her thoughts, through talking, if possible, or through creative measures such as art work and play.

Lipson (1994) argues that it is beneficial to discuss aspects of the AIDS illness with children because certain anxieties and disruptive behaviors ameliorate after disclosure and discussion of illness. Moreover, early discussions pave the way for later communication when the infected family member, and the family itself, is in crisis. Lipson recommends that disclosure of an HIV diagnosis be a process rather than a singular event, noting that cooperation between health care professionals and parents is often useful.

STATEMENT OF HYPOTHESES

In determining the principal hypotheses for this study, I made a decision to consider both conscious and unconscious operations in the hopes of learning more about the ways in which adaptational styles interact with defensive processes.

I also made an effort to consider both the ways in which the individual subjects in my sample resemble each other and the ways in which they are unique. Accordingly, my first two hypotheses define the subjects as members of a cohort group with shared characteristics. These two hypotheses compare the subjects, as a discrete population, to outside pre-established norms. The second two hypotheses are more concerned with the subjects' individual differences. These hypotheses look at how each subject can be distinguished by his or her unique intrapsychic patterns of defense and adaptation. The dual-orientation of these hypotheses is in keeping with two separate but complementary goals for this project: to glean insight into this at-risk population as a whole, and to explore the dynamic interplay of defense and adaptation in the group's individual members.

Hypothesis One: Subjects will have lower-level defense scores than developmental norms, as measured by Cramer's *Defense Mechanism Manual* scoring system for the TAT.

An analysis of the subcategories of defensive functions will be included, with an eye to determining whether subjects' defense mechanisms cluster around certain operations.

Hypothesis Two: Subjects will have higher Problem Scores than national norms on the Achenbach Youth Self-Report version of the Child Behavior Checklist.

This hypothesis will be analyzed using the means of the seven symptom categories and national norms. An analysis of the results will delineate individual symptom manifestation.

Hypothesis Three: There will be a negative correlation between the Problem Scores on the Child Behavior Checklist and the defense level evinced during the TAT, i.e., higher Problem Scores will accompany more primitive levels of defensive functioning, whereas lower

Problem Scores will accompany more sophisticated levels of defensive functioning.

This hypothesis will be analyzed using correlations between the Achenbach syndrome subscales and the Cramer Defense scale. The use of age-appropriate defense styles is predicted to correlate with lower syndrome scale scores.

Hypothesis Four: High communication scores, as measured by the Sibling Interview, will correlate with high levels of adaptive functioning, as indicated by low Problem Scores on the Youth Self-Report CBCL, and developmentally-appropriate defensive operations.

This hypothesis will be analyzed using correlations between the seven Achenbach syndrome scores, and the TAT Defense scores. Breaking this down further, it is predicted that positive correlations will be found between the level of communication and defensive functioning, and negative correlations will be found between the level of communication and scores on the CBCL syndrome scales.

METHODS

In this section I will present information pertaining to the subjects, instruments, procedures, and data analysis plan used in my study. Copies of the Adult Consent Form, Child Assent Form, Defense Mechanism Manual for scoring the TAT, Sibling Interview, and the Achenbach self-report checklist can be found in the Appendix.

THE SUBJECTS

The subjects of my study are 30 children and adolescents who have younger siblings who either are HIV positive or have AIDS. (The researcher did not have access to precise diagnostic information on the infected sibling.) Seventeen of the subjects are female, 13 are male. They range in age from 9 to 18, with a mean age of 14.76. A full demographic breakdown and analysis of the subjects can be found in the Results chapter of this study.

Fifty percent of the subjects are from families being treated by the New York University/Bellevue Medical Center Pediatric Infectious Disease Clinic. Forty percent of the subjects are from families who attended

the Birch Family Camp during the summer of 1997, where I was a clinical staff member. The remaining 10% of the subjects are from families affiliated with the Incarnation Children's Center in upper Manhattan. All of the subjects come from broadly similar socio-cultural backgrounds, and there are no discernible differences between subjects affiliated with different institutions.

THE INSTRUMENTS

Three instruments have been used in this study. Achenbach's Youth Self-Report (YSR) Version of the Child Behavior Checklist (CBCL) was administered first, since it starts with competence scales, which serve as a comfortable springboard for the subjects. Next, I administered a brief, semi-structured interview pertaining to issues related to having a sibling who is HIV-positive or has AIDS. The third instrument used was the Thematic Apperception Test (TAT), which was scored using Cramer's Defense Mechanism Manual (DMM). The order of the instruments presented herewith is in accordance with the precedent set earlier in this dissertation of moving from an examination of intrapsychic phenomena to interpersonal and psychosocial concerns.

TAT Stories Scored with Cramer's Defense Mechanism Manual

Cramer's own books, *Development of Defense Mechanisms: Theory, Research and Assessment* (1991) and *Storytelling, Narrative and the Thematic Apperception Test* (1996) are both invaluable resources in documenting the research done on defensive operations. What follows here is a brief synopsis of those milestones in the history of defense mechanism research that are relevant to my study. As discussed more fully in the following pages, the TAT has previously been used with children to assess developmental defense levels. For example, one study looked at children who had been subjected to a singular traumatic episode; another TAT study examined the impact of environmental stress on defense operations in a simulated experimental situation. Yet the TAT has not yet been used to evaluate relative levels of defense maturity in a group of children and adolescents who are under as severe and chronic stress as the subjects of this study.

Early Research on Defense Mechanisms

In the past there has not been a well-established or widely-accepted set of criteria for measuring defense mechanisms. Consequently, most of the papers on defensive measures have been quite theoretical in nature. Classic works in the defense mechanism canon include Rapaport, Gill, and Schafer's work (1946) on defense manifestation in the Rorschach, TAT, and Word Association Test. Schafer (1954) analyzed defense use in the Rorschach, and Henry (1956) and Bellak (1975) wrote on defense assessment in the TAT. In his 1975 book on the TAT, Bellak devotes a chapter to the study of defenses, examining eight commonly-used defense mechanisms and providing examples of these defense operations in reaction to specific TAT stories.

Several early research studies on defense and the TAT looked at the interaction between adolescent defense usage and adaptation. These previous studies can be considered distantly-related ancestors to this project. Miler and Swanson, for example, conducted a 1960 study indicating that, for early adolescent males, bad home experience in childhood is positively related to the use of denial. Using a similar population, Byrne (1961,

1964) showed how maladjusted home life in early adolescent males is negatively related to the use of repression. Vaillant's studies (1971, 1975, 1976, 1983) have indicated that maladjustment for adolescent males is positively related to the defenses of denial, projection, hypochondriasis, turning against the self, and acting out. Conversely, Vaillant found adolescent maladjustment negatively related to the defenses of suppression, altruism, sublimation, anticipation, and humor. Dias (1976) also used an adolescent population to compare the defense mechanisms used by 50 delinquent and 50 control subjects, ages 15 - 17. The results of Dias's work indicate that the control group used relatively complex defenses, including sublimation, intellectualization, and identification in their responses. The delinquent group, in contrast, relied on more primitive defenses, such as denial, negation, repression, and regression.

TAT Research with Children

At this point I would like to introduce the topic of using the Thematic Apperception Test (TAT) to assess defense mechanisms in children. For over thirty years the TAT has proven fruitful as a way to examine

intrapsychic constructs in research with children. Schwartz and Eagle (1986) provide normative guidelines for the kinds of TAT responses that are elicited from children of different ages; these guidelines are useful in evaluating the relative degree of deviation from the norm in a given research cohort group. Schwartz and Eagle describe the three- to five-year-old child as capable of supplying a limited story that focuses on a description of the characters in the picture. TAT stories from children between the ages of five and seven are still largely unelaborated, although more details may be evident. Children who are seven- to nine-years old may find the storytelling task quite absorbing; their productions may be more fully plotted and characters might begin to evince internalized feelings. There are two primary types of stories that tend to appear with children who are age nine to twelve. Some older children may approach the task in a rather perfunctory way, while others may enter into the story-telling task displaying evident pleasure and enthusiasm.

In her book, *Storytelling, Narrative and the Thematic Apperception Test* (1996), Cramer includes a detailed discussion of the benefits of usage of the TAT in past research protocols with children. Cramer notes

that initial research with the TAT approach to story-telling was used as a way to assess achievement motivation by such researchers as McClelland (1953) and Veroff (1969). Summaries of this work on achievement motivation may be found in Atkinson (1958), McClelland (1961), Smith (1969), and Rawn and D'Andrade (1959), among others. These researchers established that children show a clear and steady increase in the development of the achievement motive from the first to the sixth grade.

Several researchers have used the TAT to establish the existence of developmental change in longitudinal studies (Ireys, 1975; Cramer & Bryson, 1973; Cramer & Hogan, 1975). Others, such as Stewart and her colleagues, have used the TAT story-telling technique to assess children's inner emotional stances by looking at their reactions to life changes (Stewart & Healy, 1985; Stewart, Sokol, Healy, Chester & Weinstock, 1982; Stewart, Sokol, Healy & Chester, 1986). In the 1970s, the TAT was used to examine children's gender identities (May, 1971; Cramer & Hogan, 1975; Cramer, 1975; Fakouri, 1979; Saunders, 1971).

More recently, the TAT has been used to assess children's object relations using Westen's measure (Westen, Klepser, Ruffins, Silverman, Lifton, and

Boekamp, 1991). Results of this research show that children demonstrate a steady increase in the level and quality of their object relations from early elementary school to the end of high school.

Some psychologists, such as Kagan (1960) and Bellak (1975), have wondered whether the TAT is appropriate for use with children, since a large proportion of the clinical and research literature about the TAT has centered on adult responses. Bellak suggests that the Children's Apperception Test (CAT) be used instead for children under the age of ten. This test differs from the TAT in two major ways: animal figures are used in the scenes rather than humans, and the situations that are shown are tied to specific stages of development, such as oral conflicts or Oedipal concerns.

There are, however, some major limitations to the usefulness of the CAT. In their book on the psychological assessment of children, Schwartz and Eagle (1986) conclude that the CAT does not provide as much information as the TAT for the interpretation of interpersonal interaction. Moreover, the use of animals as subjects pulls for regressive responses, while leading to an inhibition of imagination and a concomitant over-emphasis on picture description.

The Use of the TAT to Assess Psychopathology in Children

Numerous psychologists have used the TAT to assess psychopathology in young people and to differentiate among diagnostic groups. In a study that highlights the usefulness of an analysis of the formal characteristics of the stories, rather than focusing solely on the ideational content, Leitch and Schafer (1947) examined the formal characteristics of TAT responses, such as a teller's level of coherence or reliance on overgeneralizations, to differentiate between psychotic and non-psychotic degrees of maladjustment in five- to seventeen-year olds. Leitch and Schafer also determined that there were several disturbances in the perceptual sphere -- including uncommon misrecognitions, the omission of important details, and the expression of unresolved perceptual uncertainties -- that distinguished the stories of psychotic children from non-psychotic children.

In 1970, Goldstein, Gould, Alkire, Rodnick and Judd examined the formal variables in the TAT stories of a group of 24 disturbed adolescents and their parents. The researchers found an important difference between the

protocols of the children at risk who went on to have major psychological disturbances and those who did not eventually decompensate further. The children who ultimately became increasingly disturbed used massive denial and magical thinking in their answers, whereas the others were more likely to openly perceive negative happenings and emotions. Validating the TAT's usefulness as a diagnostic tool, McGrew and Teglasi (1990) systematically reviewed thirteen earlier studies and concluded that TAT stories of disturbed children and adolescents were characterized by certain formal elements such as magical thinking, perseverations, and shorter, more verbally-constricted stories.

Other researchers who have used the TAT to assess psychopathology in young people include Strober (1979), who used TAT stories in his study of white male adolescent psychiatric patients diagnosed as schizophrenic or non-schizophrenic, and Constantino, Colono-Malgady, Malgady and Perez (1991), who administered the TAT to study attention deficit disorders in 95 young outpatients with a diagnosis of ADHD, using a control group of 152 normal public school students. Several different studies have employed the TAT to assess pathology in adolescents with a diagnosis of Borderline

Personality Disorder, including those by Westen, Ludolph, Lerner, Ruffins, and Wiss (1980) and by Bloom-Feshbach and Bloom-Feshbach (1980). Recent TAT studies have examined the personalities of children who have been victims of abuse (Cramer, 1996).

Cramer's Defense Mechanism Manual

Due to their complexity, defense mechanisms are more apt to manifest themselves in relatively extensive verbal samples than in brief, structured responses. Assessment methods concerning defense are therefore most effective when they allow for thought processes to be revealed in an undirected fashion. Accordingly, open-ended formats that discourage stereotyped responses best suit the demands of the task.

Their complexity notwithstanding, it is possible to methodically assess and score defense mechanisms in a way that is in keeping with the standards of psychological research, i.e., in a fashion that permits two or more independent observers to come to a conclusion as to whether a defense was used, and if so, which one. To meet these requirements Cramer has developed the Defense Mechanism Manual (DMM), which scores narrative TAT

responses for level of defense. In this manual, themes that indicate defense use are enumerated for each of the following TAT cards: 1, 3, 3GF, 5, 6BM, 6GF, 7BM, 7GF, 8BM, 8GF, 10, 12MF, 13MF, 14, 17BM, and 18GF.

Using the DMM, a scorer can evaluate whether a TAT response evinces the use of the defense mechanism Denial, which is the most primitive category of defense; Projection, which is more developmentally advanced; or Identification, which is the most sophisticated level of defensive operation scored using this system.

The first major scoring category is Denial, which represents the earliest set of defensive operations acquired by the child. Denial is scored when the following characteristics are evidenced in a TAT response: omission of major characters or objects; misperception; reversal; negation; denial of reality; overly maximizing the positive or minimizing the negative; and unexpected goodness, optimism, positiveness, and gentleness.

The second major defense category consists of Projection, which concerns the attribution of feelings or responsibility to external objects or causes. Projection is scored when the following qualities appear in response to the TAT: nonnormative attribution of aggressive or

hostile feelings, emotions, or intentions to a character; addition of ominous people, ghosts, animals, objects or qualities; magical or circumstantial thinking; concern for protection from external threat; apprehensiveness of death, injury, or assault; themes of pursuit, entrapment, and escape; and bizarre or very unusual stories or themes.

The third major defense scoring category is that of Identification, which is considered the most advanced operation since it entails the differentiation between self and other, as well as the differentiation among others. The following characteristics are scored for identification: emulation of skills; emulation of characteristics; regulation of motives or behavior; self-esteem through affiliation; work; delay of gratification; role differentiation; and moralism.

Both reliability and validity data have been established for the DMM. The coefficient of internal consistency, or split-half reliability, was determined for 80 college students' scores. Using this approach, the defense scores obtained from one-half of the subjects' stories were compared with the scores obtained from the other half. Findings indicate that the most appropriate data from which to determine the first-half versus

second-half reliability coefficient is that of the control group. In this case, the control group reliability coefficients, corrected for attenuation, are as follows: Denial, r = .71; Projection, r = .68; Identification, r = .70; and Total defense, r = .84.

Reliability coefficients were also achieved based on an odd-even split. When corrected for attenuation, reliabilities for the total group using this method are Denial, r = .52; Projection, r = .77; Identification, r = .76; and Total defense, r = .88, indicating adequate reliability for the defense measures. Guttman's split-half method was also used to determine reliability. With this method, adequate reliability was also established for the control subjects: Denial, r = .71; Projection, r = .68; and Identification, r = .66. Using Cronbach's coefficient alpha, the values of alpha indicate adequate reliability for Projection and Identification for the total group of subjects and for the experimental and control groups separately. For the control subjects, an alpha of .63 for Denial indicates adequate reliability, although an alpha of .44 indicated lower reliability for Denial for the experimental subjects.

Interrater reliability using the DMM has also been established. The following results were achieved by

Cramer with four raters having different amounts of experience. Rater One was highly experienced; Raters Two and Three had some training from Rater One, and Rater Four was self-trained. The median reliability coefficients for the three less experienced raters were .87, .81, and .80 for Denial; .82, .81, and .78 for Projection, and .64, .67, and .59 for identification, indicating that the scoring of identification, the most complex of the defenses, is correspondingly the most difficult to rate.

Information from a number of different studies is available that establishes the criterion-related validity of the DMM. In one study, children's defense scores were related to their self-report and their parent's report of psychopathology. In another study, defense scores were related to the presence of a "cross-gender" diagnosis in a group of psychiatric patients. Two other studies related defense scores for individual stories to independent clinical judgments regarding the presence or absence of the defense in the subject (Cramer, 1991).

Previous Use of the TAT To Assess Developmental Level of Defense Mechanisms

Psychologists such as Avery (1985) and Cramer (1987, 1991) assert that there are reliable differences across the developmental spectrum in children's use of defense mechanisms. Avery's work supports the conception of a developmental hierarchy of defense use and demonstrates that stratified defense levels suggest predictable relationships with other personality variables. Cramer adds that these differences can be ascertained through the examination of TAT stories of children from different age groups.

In one study, 320 children were given the TAT, which was then scored for defense mechanism usage. The subjects in this study, consisting of an equal number of boys and girls, represented four age groups, with respective means of five years, eight months; nine years, ten months; fourteen years, six months; and sixteen years, zero months. Children in the youngest age group used significantly more denial than children in the older groups. Projection was used more by children in the middle two age groups, whereas identification was used more by the oldest three age groups, with a steady

increase in the use of identification across the three age groups (Cramer, 1987). A subsequent study of the TAT stories of 28 adolescents (Brody & Layton, 1989, unpublished manuscript; in Cramer, 1991) confirmed these results, with the use of the three defense mechanisms of denial, projection, and identification being used in an age-determined continuum.

An important issue meriting further exploration is the TAT's ability to assess change in defensive operations as a result of environmentally-produced stress. Cramer and Galu (1988) used an experimental intervention in which children were led to believe that they either were or were not successful at a given game. Those children who were led to believe that they were failing at the task used lower-level defense mechanisms in their TAT stories than those who were led to believe that they had succeeded.

Story-telling projective tests have also been used to determine that stress from a genuine traumatic incident can have an impact on defense use (Dollinger & Cramer, 1990). In one study, a group of ten- to thirteen-year old boys, who had experienced the death of a teammate due to a lightning strike during a soccer game, were asked to tell stories in response to two

pictures that depicted lightning-related scenes. In comparing the responses to these stories with clinical ratings of the boys' psychological statuses, the researchers determined that the youngsters who made the greatest use of defenses, especially projection, showed the least degree of clinical upset. This study indicates that the engagement of an age-appropriate defensive style provides a successful strategy for warding off anxiety about trauma.

Sibling Interview

A fundamental objective of this study has been to include a phenomenological component that focuses on "what the person experiences in a language that is as loyal to the lived experience as possible" (Polkinghorne, 1989, cited in Rudestam and Newton, 1992). To this end, I have created an interview that enabled the subjects to describe and elucidate their personal, subjective experiences as a sibling of a critically-ill child. The Sibling Interview is comprised of 24 questions pertaining to the subject's experiences of living with an ill sibling (see Appendix for a copy of the interview). The interview includes subsections examining the subject's

level of knowledge about the sibling's illness, the subject's perception of the effect that the sibling's situation has had on the family, the subject's evaluation of the impact that having a sick sibling has had on him- or herself, and the degree of communication about sibling illness — both within and outside of the family.

For this study, data about the subject's knowledge and level of communication about sibling illness has been coded and quantitatively analyzed. In addition, the interview material also provided descriptive, narrative material, which has been used to illustrate both specific and representative points in the three case studies presented in the Discussion portion of this paper.

In my earlier review of research pertaining to siblings of ill children, I noted selected qualitative studies that have been conducted with siblings of ill children, such as the open-ended writing projects conducted by Wiener, Best, and Halperin (1994). These researchers suggest that "the more we understand about what the child is feeling, the more interventions or models of support we can offer the entire family." To facilitate this same goal, several research studies, such as the 1995 work conducted by Fanos and Johnson on

siblings of cystic fibrosis patients, have used measures such as open-ended interviews designed to elicit phenomenological perspectives.

Many researchers, such as Bernheimer (1986), agree that the use of qualitative methodology is an appropriate way to study phenomena concerning children's health. In Bernheimer's study, interview schedules, which were developed by the investigator, were used to explore the impact of a child's chronic illness on school-aged siblings in the family system. Bernheimer's research yielded important results, including the observation that subjects identified more changes in their parents than in themselves. Bernheimer contends that the data support the need to use school-aged children as primary data sources about their own perceptions of having a sibling with a chronic illness (Menke, 1987).

The Youth Self-Report Version of Achenbach's Child Behavior Checklist

Achenbach's Child Behavior Checklist, of which the YSR is a version, is one of the most frequently used child assessment tools. A *Bibliography of Published*

Studies Using the Child Behavior Checklist and Related Materials is updated annually, with the 1991 edition listing some 200 topics dealt with in over 700 publications (Achenbach & Brown, 1991). Examples of research topics for which the YSR has been used include: children of alcoholics, cross-cultural comparisons, custody issues, depression, DSM diagnoses, gender problems, inpatients, mother/daughter perspectives, oppositional disorder, risk factors for problems, self-concept, social-emotional adjustment, stressful events, suicide, and temperament.

The Achenbach has been used with well siblings of ill children in past research studies. For example, in 1989, Birenbaum used the parent and teacher versions of the Child Behavior Checklist to explore the response of children to the dying and death of a sibling. Birenbaum collected data about siblings both before and after the death of another child in the family, in an attempt to compare siblings of dying children's responses to the responses of children in a control group. Birenbaum's results indicated that, according to parent and teacher reports, siblings of children who are ill or have died exhibit significantly higher levels of internalizing and externalizing behavior problems as well

as significantly lower levels of social competence than those children in the control group. Subjects displayed below average Social Competency scores at all four data collection points, and their internalizing behavior problems scores were significantly different from the norm at all four collection times. Behaviors such as somatic complaints, depression, social withdrawal, anxiety, and uncommunicativeness were evident not only following sibling death, but during the dying process as well. A significant number of responses in this study were severe enough to be labeled referable, with additional assessment and intervention warranted. Since Birenbaum used parent and teacher reports, rather than self-reports, it will be interesting to note points of overlap and discrepancy between this previous study and the one proposed here.

The first part of the Achenbach self-report measure consists of competence-related scales, pertaining to such things as sports, hobbies, clubs, and jobs. These competence-related questions are grouped into two major scales designated as Activities and Social on the basis of their content. The YSR total competence score comprises the sum of the two scale scores, plus the mean of the youth's self-ratings for academic performance.

Normative data for the YSR competence scales were drawn from a subset of subjects in a national sample chosen to be representative of the 48 contiguous states with respect to region, urban-suburban-rural residence, ethnicity and socioeconomic status.

The second major part of the measure derives syndrome scores as well as a Total Problem scale score. Syndrome categories are grouped into three major subcategories. The first group consists of Internalizing Syndromes, such as Somatic Complaints and Anxiety/Depression. The second group is that of Externalizing Syndromes, such as Delinquent Behavior and Aggressive Behavior. The third group consists of syndromes that are neither primarily Internalizing nor Externalizing; these include syndromes such as Social Problems, Thought Problems, and Attention Problems. An additional syndrome, designated as Self-Destructive/Identity Problems, can also be scored for boys, but not for girls.

Scoring of the YSL can be done by hand or by computer. Scored profiles display data for every problem item, as well as raw scores and T scores for the Syndrome scales, Internalizing scores, Externalizing scores, and

Total Problem scores. In addition, normal, borderline, and clinical ranges are designated for the scaled scores.

The YSL has been thoroughly tested for reliability and validity. For raw scores on the YSR competence scales, the mean seven-day test-retest reliability was r = .68 for 11- to 14-year olds and r = .82 for 15- to 18-year olds. The mean *rs* were .65 for 11- to 14-year olds and .83 for 15- to 18-year olds for the problem scales. Over a seven-day period, the mean change in scores was 0.8. On the Total Problem score, the test-retest r was .70 for 11- to 14-year-olds and .91 for 15- to 18-year-olds. Over a seven-month period, the mean stability r was .50 for Competence scales and .49 for Problem scales in a general population sample of 11- to 14-year olds. Stability *rs* were .62 for Total Competence and .56 for Total Problems. The six-month stability r was .69 for the Total Problem score in a clinical sample of 12- to 17-year-olds.

The content validity of the YSR has been supported by the ability of most of its items to discriminate significantly between demographically-matched referred and nonreferred youths. The criterion-related validity of the YSR is supported by the ability of the measure's quantitative scale scores to

discriminate between referred and nonreferred youths after demographic effects have been pulled out. In addition, clinical cut points -- separating the normal, borderline, and clinical scores -- were shown to discriminate significantly between demographically-matched referred and nonreferred youths.

Methods of Scoring Data for this Study

Coding the TAT with Cramer's Defense Mechanism Manual

Scores for the defense operations of Denial, Projection, and Identification were attained on ten TAT narratives per subject. The following TAT cards, for which there are specific Defense coding criteria, were used for this purpose: 1, 3BM, 3GF, 5, 6BM, 7GF, 8BM, 12MF, 13MF, and 18GF.

To determine intercoder reliability between a psychology graduate student coder and the researcher, an analysis was performed on 60 responses determining the intraclass correlation coefficient on the three major defenses. For the defense of denial, the single measure intraclass correlation was .8588; for projection, .9459; and for identification, .8726.

The defense patterns of subjects in this study were compared to the patterns of subjects described in Cramer's 1987 work, *The Development of Defense Mechanisms*. To ensure comparable subject samples, Cramer's youngest group of subjects (mean age: 5.8) were not included in this analysis. The analysis presented here includes Cramer's Intermediate subjects (mean age: 9.10), Early Adolescent subjects (mean age 14.6), and Late Adolescent Subjects (mean age: 16).

Scoring the Sibling Interview for Communication Data

Communication scores were derived from the Sibling Interview in response to two questions posed to the subjects. The first of these questions assessed relative degree of communication about the sibling's illness within the family, and the second question assessed relative degree of communication about the sibling's illness with persons outside of the family. For each of the two questions, the subject indicated whether he or she communicated about sibling illness a lot, sometimes, rarely, or never.

The responses to both the family and non-family communication questions were then correlated to see if

they could be combined into a single variable for analysis. The correlation between the two variables is moderately strong at .45 (significant at .01), indicating that those subjects who tended to communicate more within their families also tended to communicate more outside of their families. Using Cronbach's alpha coefficient, the reliability of the two-item communication measure has been determined to be .61.

Scoring the Achenbach Youth Self-Report

Responses to the subjects' self-reports on the Achenbach Child Behavior Checklist were analyzed to assess whether the subjects exhibited significant differences from the normative control group. This analysis was done by gender to correspond directly to the normative data provided by the Achenbach manual. Each symptom category was analyzed four times: once for all male subjects; once for all female subjects; once for male subjects aged 11 to 18; and once for female subjects aged 11 to 18. These last two categories, comprised of the 11- to 18-year olds, were analyzed separately to provide a direct corollary to the ages of the normative control group used by the creators of the Achenbach

checklist. Thus, each analysis was done once with the inclusion of this study's 9- and 10-year old participants (n = 4) and once without the subjects in this age range. T-test analyses were done on each of the nine individual symptom subscales, on the Internalizing and Externalizing scales, and for the Total Problem Score. In addition, each subject was scored for Social Competence, and these scores were also compared to the national norms.

PROCEDURES

Each subject's parent or caretaker was approached first about the study, prior to the subject's involvement. Upon parental agreement, an interview time and place was arranged. Prior to the commencement of data collection, both the caretaker and the subject were given the opportunity to ask questions and both signed consent forms.

The researcher met with each subject one time, for approximately two hours. During this interval, the caretaker would fill out the Demographic Questionnaire while the subject met with the researcher in a separate room. The subject was first administered the Achenbach Youth Self-Report. This was chosen as a first measure

since it starts with a series of Competence Scales, which are less anxiety-provoking for the subject than Syndrome Scales or projective tests. These scales were administered orally, in a face-to-face interview format that provided the subject with the opportunity to clarify what a given item meant, if necessary. Once the scales were administered, the researcher proceeded with the open-ended interview, which was also given verbally. The TAT was given last. Both the open-ended interview and the TAT narratives were audio-taped to facilitate analysis and coding.

Subjects and caretakers were reimbursed for their travel expenses and were paid a stipend of $20.00 for their participation. All financial remuneration policies were made clear to the subjects in writing in advance of their participation.

RESULTS

The Subjects: Demographic Data

The subjects for this study consisted of 30 older siblings of HIV-positive children. All of the subjects were themselves uninfected with the HIV virus. Thirteen of the subjects were male (47%); 17 were female (53%). The subjects ranged in age from 9 to 18, with a mean age of 14.77.

All of the subjects lived in the New York metropolitan area. Three different sites were used for recruitment: NYU/Bellevue Hospital (50% of the subjects); the Birch Family Camp (40% of the subjects); and Incarnation Children's Center (10% of the subjects). Although the subjects were affiliated with different institutions, they were all from similar socioeconomic and sociocultural backgrounds.

Ninety percent of the subjects had one sibling who was HIV-positive, while 10% of the sample had two HIV-positive siblings. In addition to having a currently-infected sibling, three of the subjects had a brother or sister who had previously died of AIDS, and one of the subjects had lost two siblings to AIDS in the past.

At the time of data collection, 63% of the subjects had one parent who was HIV-positive. One subject had two HIV-positive parents. Seven of the subjects had previously lost one parent to the AIDS virus, and one subject had lost both a parent and a step-parent.

Information about the subjects' psychiatric history was provided by the parents. Sixty-one percent of the subjects had had past psychotherapy, with 29% of the subjects in therapy at the time of data collection. Two of the subjects were on prescription psychiatric medication.

Three of the female subjects were mothers of young children. None of the male subjects claimed to have children of their own.

Table 1, on the following two pages, presents demographic information about the subjects and their families.

Table 1

Demographic Data

Subject Ethnicity	Percentage
African American	57
Latino/Latina	37
Native American	6
Subject Religion	
Catholic	43
Protestant	13
Christian	13
Jehovah's Witness	10
Baptist	7
Muslim	7
No Religion	7
Subject School Performance	
A Grades	8
A and B Grades	12
B Grades	28
B and C Grades	28
C Grades	16
C and D Grades	8

Table 1 (Continued)

Demographic Data

Primary Caretaker Gender	Percentage
Female	73
Male	27
Primary Caretaker Marital Status	
Single	44
Widowed	30
Married	23
Divorced	3
Annual Household Income	
$19,000 - $25,000	11
$10,000 - $18,000	47
Less than $10,000 or On Public Assistance	42
Level of Primary Caretaker Education	
Masters Degree	7
Bachelors Degree	10
Some College	7
High School Degree	40
Some High School	36

RESULTS PERTAINING TO ORIGINAL HYPOTHESES

Do the subjects have lower-level defense scores than developmental norms, as measured by Cramer's Defense Mechanism Manual scoring system for the TAT?

To test this hypothesis, the subjects' proportionate defense responses were compared to the proportionate defense responses in Cramer's normative sample. Standard deviations were not available for Cramer's sample. Consequently, relative use of defensive operations could be compared, but statistical significance could not be determined.

Table 2

Subjects' Relative Defense Use Versus Normative Sample's Relative Defense Use

	Denial	Projection	Identification
Subjects	.31	.49	.20
Normative Group	.14	.40	.46

As a cohort group, the study subjects displayed a notably different pattern of defense usage than Cramer's comparably-aged normative sample, as illustrated by Table 2. More specifically, the study subjects exhibited more than twice the defense of Denial, the most primitive of the response categories, than did the normative group. Further, the study subjects used Identification, the most sophisticated of the defense mechanism categories, less than half as frequently as the comparably-aged normative sample. Study subjects employed the defense of Projection most frequently (49% of the responses), whereas the normative group relied most frequently on the developmentally-appropriate defense of Identification (46%).

Subject Defense by Gender

Subject defense was analyzed by gender, to see if the males and females in this study manifested different patterns of defense usage. T-tests were performed comparing male and female defense use. Results can be seen on Table 3, which follows.

Table 3

Defense Use on the TAT by Gender

Subjects	Denial	Projection	Identification
All	.31	.49	.20
Males	.31	.44	.25
Females	.33	.52	.15

Although the relative defense patterns of the male and female subjects are similar, the females exhibited 15% more Projection responses and 60% fewer Identification responses than did the males. There were only two study participants who relied more heavily on the defense of Identification than on the other defense operations, and both were male.

T-tests indicate that the difference between male and female Identification usage is significant ($p = .02$, $t = 2.54$, $df = 28$). The differences between male and female usage for Projection ($p = .17$, $t = -1.42$, $df = 28$) and for Denial ($p = .66$, $t = -.44$, $df = 28$) are not significant.

Correlations between Age and Defense

Defense data was also analyzed to see if the relative use of the more sophisticated defenses of Projection and Identification would increase with age. Two sets of Pearson's Product Moment analyses were performed, the first set including the 9- and 10-year old subjects, and the second set excluding them.

Table 4

Correlations between Age and Defense

Child's Age	Denial	Projection	Identification
All Subjects	-.25 p = .094	.11 p = .276	.11 p = .287
11-18 Yr.Olds	-.16 p = .217	-.00 p = .494	.16 p = .222

As can be seen in Table 4, increased age correlates with the increased use of sophisticated defenses, as indicated by the decrease in the significance of the use of Denial when the 9- and 10-year olds are omitted from the sample.

Do the subjects profess higher symptom levels than national norms on the Achenbach Youth Self-Report version of the Child Behavior Checklist?

This hypothesis was examined by comparing the subjects' Achenbach Youth Self-Report scores with the Achenbach normative control group. The tables on the following four pages present the results of the T-tests done for each of the Achenbach symptom subscales, the composite Internalizing and Externalizing scales, the Total Problem score, and the Social Competency score. Separate tables were created for the 11- to 18 year old subjects to ensure direct correspondence with the Achenbach Youth Self-Report normative control group.

Table 5

Youth Self Report
All Males

	Subject Group		Normative Group				
Variable	**m**	**sd**	**m**	**sd**	**t**	**df**	**p**
Withdrawn	56.4	8.0	53.8	5.7	1.208	13.35	0.248
Somatic	53.4	4.5	54.3	6.2	0.539	548	0.590
Anxious/ Depressed	54.8	7.3	54.2	6.1	0.361	548	0.718
Social Problems	55.7	7.0	54.1	5.7	1.031	548	0.303
Thought Problems	56.5	9.5	53.8	6.0	1.058	13.27	0.309
Attention Problems	52.9	5.4	54.0	6.0	0.679	548	0.498
Delinquent Behavior	57.3	7.4	53.9	6.0	2.080	548	0.038*
Aggressive Behavior	56.1	7.3	53.9	5.9	1.369	548	0.172
Self-Destruct	55.2	6.6	54.0	5.9	0.749	548	0.454
Internalizing	50.1	12.5	50.1	10.2	0.000	548	1.000
Externalizing	52.6	11.8	49.7	9.9	1.077	548	0.282
Total Problem	52.6	12.1	50.0	10.1	0.946	548	0.345
Competence	44.3	13.2	50.0	9.8	2.054	547	0.040*

*p is significant at < .05

Table 6

Youth Self Report
Males Aged 11 – 18

	Subject Group		Normative Group				
Variable	m	sd	m	sd	t	df	p
Withdrawn	55.1	7.7	53.8	5.7	0.775	546	0.439
Somatic	51.9	2.4	54.3	6.2	3.231	14.53	0.006*
Anxious/ Depressed	53.6	6.7	54.2	6.1	0.336	546	0.737
Social Problems	54.8	7.2	54.1	5.7	0.418	546	0.676
Thought Problems	55.1	7.1	53.8	6.0	0.739	546	0.460
Attention Problems	52.6	5.4	54.0	6.0	0.801	546	0.424
Delinquent Behavior	56.1	6.9	53.9	6.0	1.252	546	0.211
Aggressive Behavior	55.9	7.7	53.9	5.9	1.153	546	0.249
Self-Destruct	54.8	6.9	54.0	5.9	0.463	546	0.644
Internalizing	47.8	11.9	50.1	10.2	0.770	546	0.442
Externalizing	51.3	12.1	49.7	9.9	0.551	546	0.582
Total Problem	50.8	11.8	50.0	10.1	0.270	546	0.787
Competence	43.7	14.1	50.0	9.8	1.475	10.20	0.171

*p is significant at < .05.

Table 7

Youth Self Report
All Females

	Subject Group		Normative Group				
Variable	**m**	**sd**	**m**	**sd**	**t**	**df**	**p**
Withdrawn	54.6	4.9	54.1	6.0	0.330	532	0.742
Somatic	57.7	9.1	54.0	5.8	1.616	15.38	0.126
Anxious/ Depressed	52.6	4.8	54.2	6.4	0.991	532	0.322
Social Problems	54.8	5.7	54.4	6.1	0.259	532	0.796
Thought Problems	57.3	7.5	54.2	6.0	2.020	532	0.044 *
Attention Problems	52.8	5.6	54.2	6.1	0.906	532	0.365
Delinquent Behavior	55.2	6.8	53.9	5.8	0.878	532	0.380
Aggressive Behavior	55.4	6.1	54.2	6.1	0.775	532	0.439
Internalizing	51.8	9.8	50.4	10.0	0.552	532	0.581
Externalizing	51.0	11.7	50.3	10.0	0.274	532	0.784
Total Problem	51.9	12.7	50.5	10.2	0.537	532	0.592
Competence	46.3	9.0	50.3	10.0	1.531	531	0.126

*p is significant at < .05.

Table 8

Youth Self Report
Females Aged 11 - 18

	Subject Group		Normative Group				
Variable	m	sd	m	sd	t	df	p
Withdrawn	54.2	5.1	54.1	6.0	0.062	530	0.951
Somatic	57.3	9.6	54.0	5.8	1.280	13.26	0.223
Anxious/ Depressed	51.6	3.8	54.2	6.4	2.467	15.07	0.026*
Social Problems	53.4	4.4	54.4	6.1	0.609	530	0.543
Thought Problems	56.1	7.0	54.2	6.0	1.164	530	0.245
Attention Problems	51.8	4.5	54.2	6.1	1.461	530	0.145
Delinquent Behavior	54.9	6.7	53.9	5.8	0.634	530	0.526
Aggressive Behavior	54.2	5.3	54.2	6.1	0.000	530	1.000
Internalizing	50.7	10.0	50.4	10.0	0.111	530	0.912
Externalizing	49.5	11.5	50.3	10.0	0.294	530	0.769
Total Problem	50.2	12.6	50.5	10.2	0.108	530	0.914
Competence	44.8	8.7	50.3	10.0	1.964	529	0.050*

*p is significant at < .05.

The overall pattern exhibited by the subjects in response to the symptom scales of the self-report checklist did not vary significantly from the national norms. Nevertheless, there were specific symptom scales on which the subjects differed significantly from the normative control group. The mean Delinquent Behavior subscale score for the male subjects was found to be significantly greater than that for the normative group, 57.3 versus 53.9 ($t = 2.080$, $df = 548$, $p = 0.038$). The males aged 11 to 18 also exhibited a significantly lower mean on the Somatic subscale than did the national norm, 51.9 vs. 54.3, ($t = 3.231$, $df = 14.53$, $p = 0.006$).

The female subjects had a significantly higher mean Thought Problem score than did the normative control group, at 57.3 versus 54.2 ($t = 2.020$, $df = 532$, $p = 0.044$). The 11- to 18-year old female subjects scored lower on the Anxious/Depressed subscale, with a mean of 51.6, than did the corresponding normative group, with a mean of 54.2 ($t = 2.467$, $df = 15.07$, $p = 0.026$).

All of the males and the 11- to 18-year old female subjects scored significantly lower in the Social Competency category than did the normative sample. The male group had a mean Social Competency score of 44.3, versus the normative control group mean of 50.0 (t =

2.054, df = 547, p = 0.040.) The 11- to 18-year old females had a mean Social Competency score of 44.8 as compared to the mean of the female normative group of 50.3 (t = 1.964, df = 529, p = 0.050).

Analyses of individual symptom questions that were not subsumed into any of the nine categorical symptom scores revealed that both sets of male subjects, those of all ages and those 11 to 18, claim to sleep "more than their peers" than the subjects in the comparable control groups. The mean "sleep more than peers" score for all of the males in the study was .64, as compared to a normative score of .26 (t = 3.179, df = 548, p = 0.002). Similarly, the mean "sleep more than peers" score for the 11- to 18-year olds was .67, as compared to the normative sample score of .26 (t = 3.185, df = 546, p = 0.002). The female subjects also claimed to sleep more than the normative control group, although statistical significance was not achieved, with a mean of .50 versus a mean of .29 (t = 1.83, df = 532, p = 0.068).

Is there a relationship between the Problem Scores on the Child Behavior Checklist and the defense levels evinced during the TAT?

This hypothesis was examined using the subjects' self-reported Achenbach scores and their TAT defense scores, pursuant to Cramer's Defense Mechanism Manual. Relationships were analyzed using Pearson's Product Moment correlation coefficient. To ensure comparability of subject and control groups, two sets of analyses were done comparing symptom manifestation with defense usage. The first set included the 9- and 10-year olds in this sample, and the second set excluded them to guarantee direct correspondence with the Achenbach control group. Results of these analyses can be seen in Tables 9 and 10, which follow.

Table 9

Correlations Between Symptoms and Defenses
All Cases

Symptom	Denial	Projection	Identification
Withdrawn	-.05 p = .393	.02 p = .454	.02 p = .463
Somatic	-.02 p = .452	-.07 p = .354	.11 p = .289
Anxious/Depressed	-.16 p = .200	-.01 p = .488	.16 p = .193
Social Problems	-.02 p = .455	-.09 p = .309	.15 p = .221
Thought Problems	-.06 p = .378	-.19 p = .157	.31 p = .049*
Attention Problems	-.17 p = .190	.03 p = .440	.13 p = .241
Delinquency	-.06 p = .372	-.16 p = .199	.28 p = .068
Aggressiveness	.11 p = .280	-.24 p = .097	.21 p = .135
Self-Destructive (Males Only)	-.25 p = .205	.32 p = .145	-.18 p = .279
Internalizing	-.14 p = .228	.14 p = .237	-.05 p = .404
Externalizing	.08 p = .343	-.31 p = .050*	.33 p = .040*
Total Problems	-.07 p = .353	-.09 p = .318	.19 p = .160

*p is significant at <.05.

Table 10

Correlations Between Symptoms and Defenses
11 – 18 Year Olds

Symptoms	Denial	Projection	Identification
Withdrawn	-.10 p = .321	.07 p = .364	-.00 p = .496
Somatic	-.09 p = .329	-.02 p = .465	.10 p = .309
Anxious/Depressed	-.29 p = .075	.08 p = .342	.17 p = .204
Social Problems	-.14 p = .244	-.03 p = .452	.17 p = .198
Thought Problems	-.22 p = .144	-.11 p - .297	.35 p = .040*
Attention Problems	-.29 p = .078	.11 p = .299	.14 p = .249
Delinquency	-.06 p = .383	-.17 p = .202	.28 p = .080
Aggressiveness	.04 p = .416	-.20 p = .159	-.22 p = .140
Self-Destructive (Males Only)	-.27 p = .212	.35 p = .143	-.21 p = .269
Internalizing	-.23 p = .130	.22 p = .145	-.06 p = .378
Externalizing	.03 p = .443	-.28 p = .079	.34 p = .044*
Total Problems	-.16 p = .215	-.03 p = .445	.19 p = .175

*p. is significant at <.05.

It is difficult to find a consistent pattern between the subjects' conscious self-reported Achenbach syndrome levels and their less-conscious levels of defense as obtained through the use of projective testing with the TAT. As can be seen on Tables 9 and 10, Thought Problems were positively correlated with the use of the defense of Identification ($r = .31$, $p = .049$ for all cases; $r = .35$ $p = .040$ for the 11- to 18-year old cases). Externalizing behaviors were also positively correlated with the defense of Identification ($r = .33$, $p = .040$ for all cases; $r = .34$, $p = .044$ for the 11- to 18-year old cases). For the sample inclusive of the 9- and 10-year olds, Externalizing behaviors were negatively correlated with the defense of Projection ($r = -.31$, $p = .050$).

In several cases, the relationships between symptom manifestation and defense were observably close, albeit not statistically significant. In the All Cases subject group, these included a positive correlation between Delinquent Behavior and Identification ($r = .28$, $p = .068$) and a positive relationship between Social Competency and Denial ($r = .30$, $p = .062$). In the 11- to 18-Year Old subject group, these close relationships included a negative correlation between the symptom of

Anxiety/Depression and the defense of Denial ($r = -.29$, $p = .075$), a negative correlation between the symptom of Attention problems and the defense of Denial ($r = -.29$, $p = .078$), and a negative correlation between Externalizing behaviors and the defense of Projection ($r = -.28$, $p = .079$).

Do high communication scores, as measured by the Sibling Interview, correlate with high levels of adaptive functioning, as indicated by low Problem Scores on the Achenbach Youth Self-Report and developmentally-appropriate defensive operations?

Communication and Behavioral Symptoms

Communications scores, derived from the two communication questions on the Sibling Interview, were correlated with behavioral symptoms as reported on the Achenbach Child Behavior Checklist. Two analyses, using Pearson's Product Moment correlation coefficient, were conducted: one that was inclusive of all cases, and one that matched with Achenbach control group by including the subjects aged 11 to 18 and excluding the 9- and 10-year olds.

Table 11

Correlations Between Self-Report Symptoms and Communication about Sibling HIV

Symptoms	All Cases Communication	11 – 18 Year Olds Communication
Withdrawn	-.39 p = .017*	-.33 p = .050*
Somatic	.07 p = . 362	.13 p = .263
Anxious/Depressed	-.18 p = . 164	-.11 p = .291
Social Problems	-.37 p = . 021*	-.41 p = .019*
Thought Problems	-.01 p = .484	.05 p = .402
Attention Problems	-.31 p = . 048*	-.37 p = .030*
Deliquency	-.12 p = . 260	-.01 p = .482
Aggresssiveness	-.19 p = .154	-.23 p = .126
Self-Destructive (Males Only)	-.46 p = .059	-.47 p = .074
Internalizing	-.17 p = .186	-.11 p = .299
Externalizing	-.24 p = .100	-.22 p = .141
Total Problems	-.29 p = .062	-.27 p = . 089

*p is significant at < .05.

Consistently throughout this analysis, higher communication scores correlated with lower levels of symptomatic functioning. In reviewing Table 11, one can see a consistent pattern of negatively correlated items, indicating that high communication corresponds with low symptom levels and vice versa. Many of the items were correlated at a statistically-significant level. For the All Cases subject group, the following symptom categories were negatively correlated at a significant level with communication results: Withdrawn ($r = -.39$, $p = .017$), Social Problems ($r = -.37$, $p = .021$), and Attention Problems ($r - .31$, $p = .048$). In addition, the correlations between Communication and Self-Destructiveness ($r = -.46$, $p = .059$) and between Communication and the Total Problem Score ($r = -.29$, $p = .062$) were notably near significant, with significance determined to be at values less than .05.

Similarly, for the 11- to 18-Year Old subject group, communication scores were negatively correlated with the Withdrawn ($r = -.33$, $p = .050$), Social Problems ($r = -.41$, $p = .019$), and Attention Problems ($r = -.37$, $p = .030$) symptom scores. In this sample, the correlation between the Communication score and the Self-Destructive

symptom score came close to significance, with r = -. 47 and p = .074.

Communication and Defense

The subjects' Communication scores, as derived from the Sibling Interview, were also correlated with each of their three Defense scores: Denial, Projection, and Identification. Pearson's Product Moment correlation coefficient was used for this analysis. As can be seen in Table 12, this analysis did not yield significant results.

Table 12

Correlations Between Defensive Operations and Communication about Sibling HIV

Defense	All Cases Communication	11 – 18 Year Olds Communication
Denial	.02 p = .455	-.02 p = .463
Projection	-.10 p = .305	-.09 p = .340
Identification	.10 p = .291	.13 p = .270

*p is significant at < .05.

Communication and Identification of Sibling HIV

Communication scores, derived from the Sibling Interview, were correlated with the subject's ability to identify their sibling's disease in response to the first question on the Sibling Interview. Pearson's Product Moment correlation coefficient was used to test this relationship. Results suggest that there is a close, albeit not statistically significant, relationship between the subjects' Communication scores and their identification of sibling HIV status ($t = 1.97$, $df = 28$, $p = .058$), suggesting that communication with others may play an important role in the subjects' manifest knowledge of and familiarity with their siblings' disease.

ADDITIONAL ANALYSES

Does the gender of the primary caretaker have an impact on the subject's adaptation?

A full set of analyses were conducted comparing the 22 subjects who lived with a maternal caretaker and the 8

subjects who lived with a paternal caretaker. All analyses were internal to this sample and did not reference the subjects to outside groups. These analyses, which included all Achenbach variables, all Defense variables, and all Communication variables did not yield any statistically significant results. Yet there was a notable difference between the subjects living in maternal-caretaker and paternal-caretaker households in their ability to identify their siblings' illness. Of the subjects who lived with a maternal caretaker, a full 82% (18 subjects) could identify their siblings' illness while 18% (four subjects) could not. In contrast, only 62% (five subjects) of the sub-sample who lived with a paternal caretaker could identify their siblings' illness, while 38% (3 subjects) could not. Although these sub-samples are small, they do suggest that there may be more of an opportunity for discussion of sibling HIV-status in maternal-caretaker households.

DISCUSSION

This chapter will begin with a brief synopsis of the primary results of the data analysis. After the results are presented for the aggregate group, the next section will focus on three individual cases, each highlighting one of the three primary defense styles addressed in this study. The following sections will provide an analysis of the presented information, thoughts on the limitations of the current study, ideas for future, related research, and a conclusion.

Primary Results

This study established that as a cohort group the siblings of HIV-positive children displayed notably different patterns of defense usage than comparably-aged normative controls. The subject group exhibited more than twice the Denial, the most primitive of the defenses analyzed, and less than half the Identification, the most sophisticated of the defenses analyzed, than the control group did. This pattern points to either the presence of developmental delays or to defense operations that have regressed as sequelae of trauma.

Further consideration of primary results indicated that increases in age correlated with increases in higher-level defense usage, even in this developmentally-regressed sample. The nine- and ten-year old subjects, who had not yet progressed from concrete to formal operations, used a higher proportion of denial than did the older subjects. This reliance on denial, which involves a blanket rejection of a given reality, suggests that these younger subjects were not yet in possession of the perspective-taking abilities necessary for the usage of projection.

Overall, the behavioral patterns reported by the subjects of this study did not differ significantly from the behavioral patterns reported by a non-referred, normative sample on the Achenbach Child Behavior Checklist. Nevertheless, there were specific symptom scales on which subjects for this study scored significantly higher than national norms, including Delinquent Behavior for the males and Thought Problems for the Females. Both males and females scored lower in Social Competency than did the normative sample.

There was no discernible pattern between the subjects' conscious, self-reported behavioral items

scored on the Achenbach and their less-conscious defense mechanism scores, based on TAT narratives. There was, however, a discernable relationship between symptomatic functioning, as indicated by the Achenbach symptom scales, and Communication about Sibling HIV scores, derived from the Sibling Interview. Higher communication correlated consistently with lower levels of behavioral symptoms.

An additional set of analyses was done looking at the effect of gender of caretaker on the subjects' adaptation. These analyses, which included the Achenbach variables, Defense variables, and Communication variables, did not yield any statistically significant results. Nevertheless, a greater percentage of subjects living with maternal caretakers could identify their sibling's illness than could those living with paternal caretakers, indicating that there may be more opportunity for discussion of sibling HIV-status in maternal-caretaker households.

Case Studies

In the following section of the discussion chapter, three representative cases are presented to illustrate the ways in which the respective defense styles manifest

themselves in individual subjects. I have chosen sample cases in which the verbal narratives exemplify key themes pertinent to defense structure. Although these cases were chosen to be representative of general patterns, they also illustrate the idiosyncratic ways in which unconscious defense mechanisms interact with conscious operations. For example, the subject of the first case has extremely regressed defense processes but does not report symptomatic behavior on the Achenbach checklist. Conversely, the subject of the third case evinces more sophisticated defense structures, but scored in the pathological range for Aggressive Behavior and for Thought Problems on the Achenbach self-report measure.

In analyzing these cases it becomes clear that there is an internal logic organizing the intrapsychic operations of the individual subjects. The multiple factors that influence their adaptation are too manifold and complex to account for in a generalized fashion. Although patterns can be delineated across subject group behaviors and across subject group defense styles, patterns are more difficult to ascertain between individual behaviors and defenses. Accordingly, these three cases are both representative of patterns as a whole and indicative of the idiosyncratic differences

that characterize each individual. First names have been changed to protect the confidentiality of the participants.

Case Study: Denial

Denise is a soft-spoken, heavy-set 18-year old mother, with the serene, beatific countenance of a Renaissance Madonna. Daisy, Denise's bubbly and flirtatious 13-year old sister, is HIV-positive. Both girls have cascading manes of shiny black hair and engaging smiles, although Denise smiles less frequently than Daisy and is more circumspect in manner. Denise and Daisy have a brother, Edward, who is 15 and painfully shy. Denise's mother, Sylvia, is a warm and welcoming woman in her mid-thirties, who is also HIV-positive. Sylvia's husband and Daisy's father, who was an integral part of the family, died of AIDS-related causes several years earlier. The day I interviewed Denise, Sylvia had bronchitis and was planning on going to the hospital later that evening. The star of the family is Denise's toddler son, Ricky, who, like his mother, has a shiny

crop of long, black hair and a winning smile. All of the family members participate in taking care of Ricky, although Sylvia appears to be the primary caretaker and cares for him during the day while Denise is at school.

During the sibling interview, Denise had a difficult time detailing the ways in which her sister's situation has had an impact on the family. She claimed that "things were the same" in the family now as they were before Daisy got sick and that she could not say how her life was different from someone who had never gone through this.

Denise's identification with her mother and concern for her well-being was evident throughout the interview. When asked what she handled best about her sister's situation, Denise answered, "I tried to be there for my mother when she found out my sister was sick." Similarly, she suggested that if she were to give advice to a person her age whose sister has the same illness, she would say, "To try to be there a lot for her. Especially for her mother. And help out a lot at home. She needs help and stuff."

The family colludes in keeping Sylvia and Daisy's HIV-status a secret from outside relatives. When asked if there were family members with whom she could not talk

about Daisy's situation, Denise noted that she would not bring the topic up to her grandmother. "My mother's scared to tell her because maybe she'll react really bad to it and stuff," Denise explains. "Sometimes I think she does know but she doesn't want to tell my mother." When asked if her grandmother knew about Daisy's father's HIV-status, Denise answers, "She knows that he passed away. But my mother didn't really talk about it and stuff. We don't want to tell her because we don't know how she'll react. Something bad might happen, cause she's not doing too well neither."

Denise also takes pains not to talk about her family's situation with her friends. "I'm scared of the reaction they're going to give," she says. "Like, um, they'll stop talking to me and stuff because my sister's sick. They might be scared that, 'I could get it.' There are people who are really ignorant about it. I'd rather not go through all that. I'd rather keep everything inside of me."

On the Achenbach Youth Self-Report profile, Denise scored in the normative range on all seven symptom scales. Yet her total Competence score was below average, as she does not participate in any sports, organizations, or skill-related activities. Denise

spends the bulk of her free time at home, tending to her mother, sister, and infant son.

Denise's defense patterns, as manifested on the TAT, are highly regressed. Normatively, late-adolescents rely on the developmentally-appropriate defenses of projection and identification. Yet a full 50% of Denise's responses indicated reliance on the more primitive mechanism of denial as a primary defense. In examining her TAT responses, we can see specific examples of the ways in which Denise subverts negative affect by vigilant adherence to defensive denial.

To stave off impending anxiety, Denise adds Pollyanna-like twists to her TAT narratives. For example, on Card 3BM, she says that the figure, "got like depressed. She started to cry. Maybe she got some bad news or something. I think she's gonna stop crying soon. She'll get up." Similarly, on Card 3GF, she talks about the figure being depressed and crying, but adds, "I feel that if she keeps on thinking, she'll start thinking about funny memories and start laughing and stuff." Here we see a wish for the complete reversal of affective reality.

For Denise, it is difficult to allow any of the TAT figures to tolerate dysphoric emotions. On Card 6BM, she

describes the male figure as arguing about something. Immediately she adds that, "he feels bad about what he was arguing. It looks like it could be his mother or something. Maybe he feels bad about it. Maybe he apologized to her." In Denise's world, where mothers (and grandmothers) are so frail, it is impossible to sustain anger at a maternal figure without an internal conviction that one is contributing to the precariousness of their situation. Angry feelings are considered lethal and need to be disavowed. Ultimately, Denise distrusts the potency of her own angry impulses to such an extent that she fears that any display of anger carries with it the potential for annihilation, and, accordingly, all anger must be squelched. For example, on Card 12MF, Denise notes that one character "got angry at (the other) and wants to do something bad. But I think he'll get over it by now."

There is a dissociative quality to some of Denise's TAT responses, as well as a ruptured link between causal factors and their resultant effects. When discussing the figures on Card 13MF, Denise notes that, "He killed her or something," but adds "by accident." Denise comments that the character feels "like he didn't mean it. It was by accident and stuff. Now he realized that he did it."

Denise paints the perpetrator of violence as someone who not only has no intent to harm, but is also not cognizant of what he is doing. The addition of the word "now" to the sentence "Now he realized that he did it," indicates that there was a time when the character was unable to be fully conscious of his actions. For Denise, badness cannot be held in active awareness.

On Card 18GF, Denise says that the character "looks really mad at that person. Maybe she did something bad. After she does kill her, she's gonna realize what she did was wrong. She's not noticing what she's doing. She's doing it out of anger." Here we have an encapsulation of Denise's primary defensive style. Denise is unable to notice what she is doing, especially if there is any anger involved. Her placid exterior covers a benumbed and fragile inner self, which has withstood far more trauma than can be easily assimilated. For Denise, noticing her feelings would entail the admission of rage and suffering. Her "not noticing" is a maladaptive act of survival.

Case Study: Projection

Nina is a responsible and self-reliant 12-year-old who is the only member of her family who is not HIV-positive. Her infant brother died of AIDS in 1995 and her six-year old sister, Tracy, is infected as well. Tracy, a cute and bouncy little girl, is a real attention-grabber, displaying the kind of promiscuous charm associated with a child beauty pageant contender. Nina's mother, Angela, is a high-strung, college-educated woman, who is divorced from her husband, Ricardo. She is currently in the process of trying to meet men, and is preoccupied with questions of appropriate disclosure in dating situations. Angela was quite cautious about allowing Nina to become involved in this research project, and we had several lengthy discussions about confidentiality prior to arranging Nina's participation. Once Angela had agreed to let Nina participate, however, she became very interested in the project and expressed curiosity about both the research process and the data results.

During the sibling interview, Nina's responses were laden with survivor guilt, and focused on the dual themes of resenting the extra attention that her sister receives

and wishing that she herself had been the person infected by the virus. When asked how her life is different from someone who has never gone through this, Nina answered, "I feel just weird. I just feel frustrated half the time. I wish it never happened to my sister and my mom. I wish it happened to somebody else. That nothing happened to me. It should have been me, not my sister and my mom." When asked why it should have been her instead, Nina responded, "Because I got to see them suffer and stuff like that, and I hate to see them suffer."

In response to being asked how her family had changed since her sister got ill, Nina commented, "Sometimes she gets treated more than me, and I notice that. But my mom says that's not true." When asked how she is treated differently from her sister, Nina replied, "Like, for instance, if I do something and my sister blames it on me, and it's not really true, they'll believe her, but they won't believe me."

In keeping with the theme of sibling preferential treatment, Nina said that she would give the following advice to a person her age who has a brother or sister who is HIV-positive: "Try not to be frustrated, sad, and lonely because they're gonna treat the person who has the

illness more than the person who doesn't have the illness."

Although Nina resents the attention given to Tracy, she also derives compensatory pleasure from her parentified status in the home. "I'm proud of myself for being a big sister," she offered. When asked what a big sister does, Nina immediately answered, "Oh my God, everything. Clean the house. Wash the dishes. Wash the clothes. Clean the bathroom. Clean the rooms. Dress her up." Nina's premature identification with the care-taking role is so strong that she also expresses frustration at not having been told about her sister's condition earlier, so that she could have been more actively involved in her sister's care prior to the age of nine or ten when disclosure had actually taken place.

Nina became subdued when she talked about her primary concerns pertaining to her sister. She says she is most worried about whether "she's gonna die or not" and that talking about the situation makes her feel "mostly sad and frustrated." When asked how she felt after the interview, Nina said, "I feel a little worried and a little sad. I feel sad because what I'm talking about now, and it brings back memories of my brother who

died. And I feel worried because I don't know what's gonna happen now and later on."

Nina's mother's preoccupation with issues pertaining to confidentiality and privacy prompted her to advise her daughter not to talk about Tracy's situation with any of her relatives, except her grandmother. "If I tell them, then they'll know," Nina explains. "Then my mom will get mad at me." Similarly, Angela forbade Nina to tell any of her friends about Tracy's illness. Accordingly, Nina does not have a verbal outlet for her persistent and painful ruminations; this deficit serves to intensify the power of her fears.

On the Achenbach Youth Self-Report Nina scored in the borderline clinical range for Thought Problems, stating that has difficulty getting her mind off of certain things, that she sees visions, that she stores up items she does not need, and that others find both her behavior and her ideas strange. Nina's disordered thinking is no doubt a reflection of the intensity of the pressures that confront her at home compounded by the pressure to remain secretive. Without verbal expression, Nina's ruminative fears fester unchecked.

Nina also scored close to the clinical range in the area of Social Problems, saying that she acts clingy,

does not get along with her peers, is teased, is not liked by others, acts withdrawn, and prefers to spend time with younger children. Evidently, the demand on Nina to remain silent about her family situation has taken a toll on her ability to secure and maintain developmentally-appropriate friendships. The mandate to preserve family secrets has inhibited her ability to be comfortable and trusting in social interactions.

Nina's TAT stories are laced with themes involving suspicion, ominousness, and ruminative worry. A full 50% of her responses manifest the use of defensive projection, with many of her externalized attributions concerning the threat of impending aggression. For example, Nina claimed that the figure on Card 5 "looks like she's suspicious, like she's suspicious of something when she comes in the room. She looks like that lady, Cruella DeVille." When asked about the future of the character, Nina simply stated, "I don't know what she'll probably do in the future, but she looks mean."

Some of Nina's TAT narratives evince themes of vigilance and the hyperalert searching for clues. On Card 6BM she notes that the female character is "having a very good look at this person." On Card 8BM Nina scours the card for information about a character's prognosis.

"They have more better equipment in the 1990s," she explains, "so it should be like in the '70s or the '80s. Like in the '90s they have equipment, about oxygen masks, like that. I think she's gonna die in the future, because she has no oxygen."

Nina's TAT responses also exhibit magical and circumstantial thinking, and include scenarios in which one character has control over another. Her response to Card 12MF illustrates these themes, as well as related themes of protection against threat and paranoid hypervigilance. "The lady is sleeping and the guy's trying to do a voodoo thing on her. Like any kind of spell. And he's chanting a word, and the person's still lying down. And she's about to get up. You could see here that knee's going up. So I think she's about to get up and try to back away . . . There's an outline of him like a flash. In the future, I would say that person in the bed is going to be overcome by his power."

On Card 18GF Nina employs similar themes of interpersonal transfer of power, but does so in the service of one person helping to cure, rather than harm, the other. "Um, I, I, I guess this lady right here is holding another lady, could be her mother dying, or her cousin or her sister, or whatever that's dying on her.

And she's sad about it. And she's trying to give her strength to rise again up."

This narrative reflects Nina's magnified sense of her own strength and her magical hope that she can provide the strength that "whatever that's dying on her" needs. She remains committed to the wish to eradicate her mother and sister's illness and refuses to entertain the idea that she may not have the power to do so. When Nina was asked during the sibling interview whether there was any information about HIV that she did know but wished she did not, she responded, "I wish that I never, that there never was a disease called it. And I wish my sister never had that and my mom."

Nina's burgeoning thought disorder, as indicated by her Achenbach Thought Problems score and her projection of paranoid ideation on the TAT, is a direct manifestation of this wish. Nina's wish to undo her family's HIV status is also a reflection of her mother's concern that the illness not be mentioned or discussed. Ironically, however, this insistence on secrecy has only served to increase the potency of Nina's pathological ruminations and make more exigent the need for external reality testing.

Case Study: Identification

William, 13, lives with his stepfather and three of his sisters in a quiet, working-class neighborhood in the Bronx, where he spends most of his free time playing basketball in the driveway. A fourth sister is currently living with her grandmother because she had difficulty abiding by the rules of her stepfather's home. William's mother died of AIDS-related illnesses in 1993, and his step-father and seven-year old sister are HIV-positive. William is a handsome boy with a cautious, slightly wary demeanor. He speaks mostly when spoken to, and even then does so sparingly.

William was well-informed about HIV transmission, mentioning that "You can get it more than one way. By blood transfusions, sex, drugs, using needles." He noted that he thought "a lot, too much" about his sister's illness, and that he worried "that she might die at a young age." When asked what advice he would give to someone his age with a sibling who has the same disease, William offered, "Be real nice to her. Don't make her cry or yell and stuff. Give her the right time, because she's not going to be here for long." These responses suggest that William lives with a profound sense of

life's impermanence, and that he is well-aware of the precariousness of his familial situation.

William describes his stepfather as essentially fair in his parenting techniques. When asked if his stepfather treats him differently than he does his HIV-positive sister, William responded that he doesn't, "but I might think (he does) sometimes." He went on to explain, "Like, if she would start bothering me. And maybe I would hit her or something. He'd go 'Don't hit her.' And he won't do nothing about it. But if she would tell him, then he would like punish me or something. But a few days later it would be like the opposite."

When asked whom he talks to in the family about his sibling's illness, William answered that he confides in his stepfather and two older sisters. He added that he does not talk to his grandmother about these topics "because she said things about my mother that she shouldn't have." William also mentioned that he has told one of his friends about his sister's illness, and that this friend has "kept the secret for about three years so far."

William's Externalizing score on the Youth Self-Report Checklist was elevated into the clinical range.

Contributing to this elevation was his high Aggressive Behavior score. On this measure, William claimed that he argues; brags; tries to get attention; shows off; talks too much; teases; and is mean to others, self-destructive, jealous, and loud. His score on the Delinquent Behavior scale, the other primary component of the Externalizing score, was not in the clinical range, although he did report that he swears, hangs around with kids who get in trouble, and prefers to socialize with people older than himself.

On the Thought Problems scale, which does not contribute to the Externalizing score, William scored at the top of the borderline clinical range. He stated that he has difficulty getting his mind off of certain things, that he repeats certain acts over and over again, that he stores things up, and that others find his behavior strange.

On the TAT, William employed the developmentally-appropriate defense of identification 41% of the time, while using the less-sophisticated defenses of projection and denial 36% and 23% of the time, respectively. His TAT responses are laden with themes of self-reflection, self-recrimination, and disappointment with others, indicating that he struggles with the demands of a harsh

and unforgiving superego that has been stoked by survivor guilt.

For example, on Card 5, a mother has "sent her son to go to sleep. In the future she sees him in the kitchen sneaking a snack. And she's feeling, 'how could he lie to me? He's dishonest. He said he was going to bed.' And . . . she's feeling like mad and shocked." In this narrative we can see how the relatively innocent transgression of sneaking a snack is experienced as a major betrayal, with attendant feelings of anger and shock.

William's figures tend to be extremely self-questioning, ruminating on their level of responsibility in creating their own discomfort. In response to Card 8BM, William creates a character who berates himself for visiting an art museum: "This boy went to a museum to see pictures of famous people, doctors, And in the future, he was like, 'I don't want to look at this picture, why did I even come here?' He was thinking, 'That picture's like . . . I don't get that picture.' He's feeling mad because he came here, like he's not going to do anything. So he just feels he's wanting to leave." This narrative illustrates several machinations of William's defensive style. He creates distance from the affective pull of

the image by introducing the art museum construct as the framing device. Thus, the affect-stimulating TAT image is safely at a remove. Yet the framing device fails to protect William from his dysphoric reactions, which relate to his feelings about the overall-testing situation as well as to a more localized reaction to a specific TAT card.

William employs a similar framing device in response to Card 18GF, although, again, the distancing construct fails to protect him from the dysphoric pull of the image. "Is that a person?" he asks at first. "This lady, she's like a designer. In the past she like designed this person out of cloth, a wig, put clothes on them. And in the future she's looking at it. 'I don't like this; I should do it over.' She's thinking, 'Why did I waste my time on this? I should have just sketched it out first.' And she's feeling mad." Again we see the effortful contrivance to dehumanize the figure; William is compelled to distance himself from the provocative stimuli inherent in the card. Yet the protective distancing fails, and both the character and the story-teller appear subject to self-recrimination.

For William, it is extremely important and increasingly difficult to hold onto the concept of the

world as a just place. He is perpetually questioning events and outcomes, attempting to find an inherent logic and justice. On Card 1, the figures asks, "Why did they give me this violin," adding "I don't want this." On Card GF, a character who had been robbed wonders, "Why did somebody do this to me?" And on Card 13MF he creates a figure who cries "How did this happen?" after another character has passed away.

William's characters are often mobilized into action by their personal crises. Just as he struggled mightily to create ego-preserving framing devices that allowed him to contend with dysphoric stimuli, his characters must also solve their own problems and are not permitted to wallow in their angst. In response to Card 6BM he describes a character who mentally problem-solves rather than accepts a less-than satisfactory situation as it stands. "In the past he came to this room because he wanted to go get a refund. For something he bought, maybe the hat he's holding in his hand. In the future, he's like, still on this line. And he's feeling like, 'God, they should have more than one line open. So everything will go faster.' And he's thinking, 'Why don't they have that?'"

In an effort to gain mastery over difficult situations, William looks for ways to turn passive objects into active subjects. He uses feelings of victimization to mobilize productivity. Accordingly, the character who was robbed on Card 3GF ends up getting the police to help her, suggesting that negative consequences do not need to be tolerated passively.

In response to Card 12MF William creates a narrative about a woman who crashed her car into a tree. In William's story, "a guy came, picked her up. He's thinking, 'Wow, how did she crash into that tree? Was she drinking?' He's feeling happy that he saved somebody's life." Here we can see how William struggles to make sense out of disaster. He looks for plausible evidence of causality (Was she drinking?) and attempts to create a narrative that turns chaos into reason. In this example, William allows his male character the opportunity to play savior and rescue the imperiled woman. Although William was denied that opportunity in his earlier life, he tenaciously holds onto the image of himself as problem-solver and rescuing hero. Fueled by the demands of a guilt-driven superego, William feels compelled to right the wrongs of his life.

Denise, Nina, and William all face a common challenge: how to survive the familial and psychic fractures inherent in living with HIV-infected parents and siblings. On the surface, they have much in common: they are all adolescents, they all come from similar socioeconomic and cultural backgrounds, and they all must contend with similar problems. Yet each has developed a unique mode of adaptation, in which behavior and defense interact in idiosyncratic ways, determined by factors too complex to tease apart. Ideally, the above case vignettes have suggested the subtle complexity of the subjects' individual differences. These nuanced differences need to be appreciated to understand the richness of this cohort group as a whole. In the following section, the subjects will once again be looked at as an aggregate, and we can see how the overall patterns of defense and behavior replicate the complexity of the individual examples.

ANALYSIS OF RESULTS

The subjects of this study, uninfected siblings of HIV-positive children, evince considerably regressed patterns of defense. Taken as a whole, their usage of

defense mechanisms inverts the usual, age-appropriate patterns. They use twice the more primitive defense of denial and less than half the more sophisticated defense of Identification than do normative controls.

These inverse patterns may be attributed in part to environmentally-produced stress, which has been shown to have a regressive impact on defense use in the past. When Cramer and Galu (1988) used an experimental intervention that led subjects to believe that they either were or were not successful at a game, those children who believed they were failing at the task used lower-level defense mechanism in their TAT stories than did those who believed they were succeeding. As illustrated by this example, defensive operations are sensitive to external stressors, even in situations of far less serious consequence than those experienced by the subjects of the current study.

It is important to bear in mind, however, that in Cramer and Galu's experiment, the subjects were responding to a single stress-inducing incident, rather than the presence of complex and continuous traumatic factors. As noted by Terr (1990), children who are exposed to a single, unexpected traumatic event are usually able to recover from their trauma and are not apt

to shut off their cognitive and emotional adaptive mechanisms. Thus children who have had a single encounter with a traumatic experience do not typically use the defense mechanism of denial to contend with their distress; in most cases, these children can recall and discuss the precipitating trauma.

The children in the current study, in contrast, have not only had to endure multiple losses and attendant grief in their brief lifetimes, but must also prepare vigilantly for additional loss in the future. Their circumstances, consisting of repeated and long-standing disastrous situations, are the sort that is likely to induce the numbing defense of denial. Many of the subjects of this study, having become accustomed to chronic trauma, have needed to protectively turn their consciousness awareness away from the harsh realities of their lives. Multiply-traumatized "children struggle not to think trauma-related ideas and not to feel trauma-related feelings. They fight any mental picture that might create new upsurges of feeling . . . By not thinking about their trauma, by not talking about it, children try to heal their wounds and to look 'normal'" (Terr, 1990, p. 111).

The most benumbed survivors of trauma emerge from the most extreme situations, such as Hiroshima, the Holocaust, and the Cambodian "Killing Fields." According to this criteria, some American urban ghettos, in which there is incessant, repeated violence and loss, can provide a context in which traumatization can occur. Certainly a number of the subjects of this study, who have had to deal not only with AIDS and death, but with drug-addicted family members, imprisoned family members, and the loss of external community support, live in extremely traumatic environments. As Terr notes, "psychic numbing occurs when horrors are extreme, long-standing, variable, and repeated -- in other words when a state of horror becomes predictable" (1990, p. 80). Many of the children interviewed for this study live in such a state of horror and cannot plausibly envision relief in the future.

Although the subjects of this study used twice the denial of their normative peers, projection was their most widely-used defensive operation. In fact, they used projection 23% more than Cramer's comparably-aged normative group. This reliance on projection indicates that these subjects have difficulty tolerating their own aggressive wishes and attempt to "lay responsibility for

them at the door of some external agent" (A. Freud, p.123). The subjects who rely on this defense perceive hostility to be emanating exclusively from external forces, rather than recognizing that hostile or threatening impulses can also be internally-derived. Accordingly, they approached the TAT task in a hypervigilant fashion, and remained on constant alert for impending attack. By employing projective defenses, the subjects could disavow the link between internal causality and external consequence.

The use of projection as a primary defense style forestalls the advent of mature functioning, as it permits the ego to search for external sources of fault rather than admit to internalized criticism. By externalizing all aggression, and therefore all blame, these subjects fixate their focus outside of themselves. Certainly, there are many unpredictable externalized evils in these subjects' lives; unfortunately, however, the attention demanded by these exigent impingements results in diverting the subjects' defensive operations from their normative developmental paths so that the subjects have difficulty recognizing the internal derivation of their own impulses.

The subjects' delayed development of higher defense structures becomes most evident in the examination of their Identification responses. Only 20% of the subjects' TAT responses reflected the most sophisticated of the measured defenses, Identification, whereas 46% of Cramer's normative group responses entailed use of this defense. The limited use of Identification as a response indicates that the subjects in this study, as an aggregate, have difficulty assimilating, and ultimately mastering, anxiety-inducing objects.

The defense of identification is one in which children can triumph over their intrapsychic demons by aligning themselves with powerful figures rather than struggling against them. For example, a traumatized child may use identification to create a fantasy in which he or she takes on enough of a destructive force's power to avenge him- or herself against the imagined nemesis. Fantasies such as these serve a compensatory function, granting their creators the opportunity to feel strong at a time when they may in fact be feeling most vulnerable. Thus, the use of identification can be a highly adaptive mechanism, enabling a wounded child to gain psychic mastery over an ominous situation.

The failure of the children in this study to fully take advantage of this salutary defense intimates the existence of difficulty in object introjection, a process that accompanies healthy superego development. Unable to identify with powerful objects, perhaps because their parents had been depleted of power by their own illnesses, these subjects remain incapable of taking in or taking on the attributes of strength. Power remains externalized and therefore subject to the more primitive defense of projection.

As noted earlier, the pattern of defenses displayed by these subjects inverts the normative pattern of defense responses used by this age group, in which Identification is the most heavily used defense (46%), followed by Projection (40%) and then, to a much lesser extent, by Denial (14%). The inverted pattern of defense structures seen in these subjects (Identification, 20%; Projection, 49%; and Denial, 31%) supports the hypothesis that the high level of trauma inherent in these subjects' lives has had a significant and regressive impact on their ability to use developmentally-appropriate defensive operations.

Unlike defensive operations, which are typically not available to conscious awareness, symptomatic behaviors, as measured by the Achenbach Youth Self-Report Checklist, need to be conscious to the subject before they can be reported. Consequently, the reporting of these symptoms is subject to conscious acts of suppression and revision, due to such constraints as the maintenance of social desirability. The acknowledgment of symptomatic behavior is also subject to less conscious repressive operations, such as denial. In this study, where the subjects relied heavily on the mechanism of denial, one could reasonably anticipate a reduction in symptom reporting on measures such as the Achenbach. As Dollinger and Cramer note, "If, indeed, people use defense mechanisms to protect themselves from upset, then people who are highly defensive would be expected to report fewer upsetting feelings" (1990, p.125).

This was indeed the case, as the baseline symptom picture reported by these subjects was not in the clinical range. Nevertheless, the subjects did score in the clinical range on some of the discrete syndrome scales. The males scored significantly high on the Delinquency subscale, indicating that for these physically-healthy young men, acting out may be a way in

which they can procure parental attention without directly confronting the notion that their parents may not have the time or energy to attend to them (Carpenter & Sahler, 1991). Interestingly, the males in this study also exhibited significantly lower-than-average scores on the Somatization subscale, which reinforces the concept that these subjects prefer to seek attention through behavioral means. These low Somatization scores suggest that, for these young males, anxieties related to bodily concerns are so intolerable that they cannot be held in conscious awareness. The only physical symptom that these subjects were able to profess was over-sleeping, which is compatible with defensive denial, in that both operations involve the negation of conscious reality.

For siblings of HIV-positive children, risk-taking behaviors may indicate an unconscious identification with their HIV-positive family members, since high-risk behaviors include such things as drug abuse and sexual promiscuity, which may place them at risk for contracting the AIDS virus themselves (Weiner, Fair, & Pizzo, 1991). A variety of factors -- including survivor guilt, peer pressure, an immature sense of immortality, and overwhelming emotions -- add to the appeal that sex and drugs have for these pressured adolescents. Since

many of the participants of this study manifest a regressed reliance on immature defenses, such as denial and projection, it is possible that they are not fully cognizant of, or able to take responsibility for, the consequences of their delinquent behaviors. Operating without the benefit of integrated superego functions, they are rendered more vulnerable to their own destructive impulses.

The female subjects manifested different, but also troubling, patterns on the Achenbach Youth Self-Report Checklist. They claimed to be less anxious and depressed than females in the normative sample. This disavowal of anxiety and depression may be a manifestation of parentification pressure, coupled with denial-heavy defensive operations. The females also scored significantly higher than their normative peers on the Thought Problems subscale. These clinical ratings are indicative of intense internal conflict, such as may be derived from survivor's guilt, which, in the case of these subjects, is not given release through the outlet of verbal expression. Unlike their male peers and in keeping with gender stereotypes, the females in this study did not engage in attention-seeking externalized behaviors, such as acts of delinquency. Rather, they

internalized their anxiety so that it became manifest through the indirect expression of abnormal thought patterns. Ironically, these guilt-induced thoughts are made more potent by the effort to conceal them.

The experience of guilt becomes a way for surviving children to defend against feelings of helplessness, as they would rather blame themselves than admit that nothing can be done to change the course of an illness or tragic event. Children who are trauma victims, such as many of the subjects of this study, have a difficult time accepting the randomness of terrible events and would rather believe that they are in some way responsible for their own tragic circumstances (Schacter & Stone, 1987; Fanos & Johnson, 1995;). In the case of HIV, survivor guilt induces the siblings of HIV-positive children to manifest magical thinking and have fantasies about infected others or being infected themselves.

It is important for clinicians working with these siblings to find ways to introduce interventions that may help reduce the impact of these destructive, guilt-induced fantasies. In most circumstances, the provision of a logical, causal narrative mediates against the tendency to manifest paranormal thinking in the wake of a

traumatic situation (Drotar & Crawford, 1985; Roland, 1994). Guilt feelings among siblings of past research studies have been directly correlated to a lack of information and a poor understanding of the sick child's illness (Koocher & O'Malley, 1981). Yet in situations in which AIDS is a variable, there is often a dearth of information about the virus and its causes, due to parental and community suppression of information. Children may also be hesitant to bring up a topic which they assume will distress their parents, in an attempt to protect their parents' feelings at the expense of their own reassurance needs (Chesler, 1992). Thus, parents and children often collude in a cycle of mutual avoidance of HIV-related topics.

This collusive avoidance has an impact on sibling adaptation. In this study, degree of communication about sibling-HIV topics negatively correlated with degree of symptomatic behavior. In other words, the subjects who were in environments that allowed for higher levels of HIV-related communication professed lower levels of symptomatic behavior. This correlation was statistically significant across several syndrome domains, including the Withdrawn, Social Problems, and Attention Problems subscales. In this sample, there was also a notable

negative correlation between the Communication score and the Self-Destructive subscale for the males.

Past research has indicated that uninfected children have fewer total resources for social support than their infected siblings do, and often feel that they have "no one to talk to" about HIV (Mellins & Ehrhardt, 1994). These feelings lead to increased isolation and, as indicated by this study, may contribute to poor adaptation. Isolation also leaves the children at a heightened state of vulnerability should their parent or sibling become ill (Fair, 1995).

Family-validated secrecy exacerbates the potency of these children's guilt-laden fantasies, prompting them to suspect that they are deserving of their own exile. Collusive secrecy may also induce a sense of mistrust in these children, since they recognize that their parents are withholding vital information about important topics. With familial communication discouraged, uninfected children lack proper channels for reassurance should they harbor fears of contagion or misinformation about viral transmission (Fanos & Weiner, 1994; Siegel & Gorey, 1994).

The present study confirms the vital link between level of familial communication and level of sibling

adaptation. Discussion of HIV illness with children is beneficial because certain anxieties and disruptive behaviors ameliorate after disclosure and discussion of illness (Lipson, 1994). Infected siblings' misperceptions and fears can also be worked through if they are given the opportunity to express themselves through talking, or through creative measures, such as art or play. Parents themselves almost always benefit from discussing HIV illness and death with their child, although they often need help in learning how to do so (Weiner, Fair and Pizzo, 1993).

Siblings of HIV-positive children, who are invariably contending with chaotic situations, are offered the best chance of healthy adaptation when they can develop narratives that promote a sense of internal coherence. The provision of direct and clear information is often the best preventive medicine for well siblings of chronically-ill children (Rolland, 1994). In situations involving AIDS, however, parents may be unable or unwilling to provide direct information. In these cases the clinician is confronted with a difficult challenge. He or she must respect the parents' struggle to maintain the status quo, while recognizing that the maintenance of the status quo is both an illusory and

potentially damaging goal. This study empirically supports the supposition that communication mediates adaptation, while avoidance of painful topics, whether through defensive denial or in collusion with others, promotes pathological functioning.

Limitations of the Study

In developing the hypotheses for this study, I chose to include variables that tap into both conscious and unconscious intrapsychic operations, in the hopes of learning more about the ways in which these processes interact with each other. Perhaps it is to some degree inevitable that interaction analyses would be difficult to procure for measures that tap into such disparate domains of functioning, and do so in such dissimilar ways. Cramer's Defense Mechanism Manual is used to score unconscious defense structures that manifest themselves in response to the ambiguous stimuli of a projective measure, the TAT. Achenbach's Youth Self-Report, in contrast, assesses conscious responses to nonambiguous questions on an objective measure. Thus, the essential qualities of the instruments are different (projective

versus objective) as are the operations being addressed (unconscious versus conscious).

In this light it becomes more understandable, perhaps even expectable, that these two measures would not interact in a statistically significant fashion. Essentially, a projective measure examines a realm of operations that is unavailable to conscious awareness, and therefore outside of the purview of an objective measure. Accordingly, the procurement of conceptually contradictory data from an objective and a projective measure actually validates the simultaneous use of both types of instruments, in that it shows how they can be used as complementary, rather than comparable, assessment tools. The findings of this study support Dollinger and Cramer's suggestion that the role of defense mechanisms be considered as moderator variables in self-report measures of personality (1990, p.125).

This study analyzed an extremely complex subject cohort. Although these youngsters share many fundamental commonalities, there are other factors effecting their individual lives that are far too numerous and complex to adequately account for. For example, many of the subjects have had to contend with situations that were rife with trauma, including the loss of parents and of multiple

siblings. Some of the subjects were burdened by serious care-taking responsibilities, while others were not at all involved in care-taking and familial decision-making. In order to do justice to the multiple factors that have an impact on these children's lives, a far greater number of subjects would need to be analyzed so that the effect of the individuating factors could been seen across a wider spectrum. This larger study could enable a researcher to better identify which of these intertwined factors create coherence amongst these subjects and which factors categorically distinguish them from each other.

Ideas for Future Research

There are two primary constructs that merit further examination with these subjects. The first of these is sibling survivor guilt. Although several researchers (Harder & Zalma, 1990; Bybee and Zigler, 1991; Kugler & Jones, 1992) have devised instruments that conceptualize and assess guilt, there are not adequate measures to address the quality of survivor guilt in children and adolescents. Researchers such as Zahn-Waxler, Kochanska, Krupnick and McKnew (1991) have examined expressions of guilt in a semiprojective procedure using vignettes to

elicit children's narratives about interpersonal conflict and distress. These procedures showed promise when used with children of depressed and well mothers, and may also be applicable with children of ill and well siblings.

The other idea meriting further consideration involves assessing the formal quality of expression exhibited in the narrative responses to the Sibling Interview and analyzing these narratives vis à vis the Commmunication scores derived from the interview. Thus an assessment could be made contrasting the temporal frequency of communication on HIV-related topics with the expressive quality of the communication itself.

It is currently difficult to find a narrative assessment measure that can be used with both latency-aged children and adolescents. There are several empirically-sound story-completion and play narrative measures available for assessment of pre-school aged children (Bretherton, Prentiss, & Ridgeway, 1990; Buchsbaum & Emde, 1990; Mueller & Tingley, 1990). Narrative quality has also been empirically-assessed in adult populations by such measures as Main and Goldwyn's Adult Attachment Classification System (1984/1996) and Aber and Slade's Parent Development Interview Coding System (1984). The use of a developmental narrative-

assessment measure appropriate for both school-aged children and adolescents would bring qualitative richness to a discussion about both communication frequency and facility of expression.

With such a measure, a researcher could examine both the formal qualities of the narrative and the degree of verbal productivity. This information could help gauge whether the interviewee's subjective assessment of level of communication on a given topic corresponds to the qualitative characteristics of the expressed narrative. Narrative-sample scores could also be correlated with constructs such as defensive operations and symptomatic behaviors, providing the researcher with the opportunity to analyze the extent to which the quality of verbal expression mediates the degree of adaptation to trauma.

Conclusion

This study, which looks at the interactions between conscious self-reports of behaviors and unconscious defensive operations, confirms the validity of using a multi-modal approach in assessing relative degrees of adaptation and psychopathology. The subjects of this study, 30 uninfected siblings of HIV-positive children,

reported behavioral patterns on the Achenbach Child Behavior Checklist that were, with few exceptions, not significantly different from the behavioral patterns reported by a normative sample. Yet these same subjects displayed notably regressed patterns of defense usage in response to the TAT, a projective measure that taps into processes that are less available to conscious awareness.

The subjects' reliance on the developmentally-inappropriate defense operation of denial suggests that they have difficulty processing, and ultimately acknowledging, the traumatic situations with which they contend. This unconscious reliance on defensive denial also has an effect on the subjects' ability to admit to difficulties when confronted with the requirement to respond to a self-report measure. Accordingly, level of defensive operations serves as moderating variable in the analysis of self-reported symptomatic behavior.

This study also established that there is a relationship between behavioral symptoms and degree of communication about distressing topics. Increased communication about sibling illness correlated consistently with decreased levels of behavioral symptoms. This finding reinforces the need for therapeutic interventions, such as individual and group

psychotherapy, which provide the affected sibling with the opportunity to discuss HIV-related issues, including fears concerning the death of one's sibling, parent, or self. Increased levels of communication can also enable the sibling to create a coherent internal narrative pertaining to familial-HIV issues. These narratives, which promote causal understanding of seemingly incomprehensible, traumatic events, help to facilitate adaptation and decrease the regressive pull of defensive denial.

APPENDIX

Sibling Interview

Lots of times people doing research studies talk to kids who are sick or their parents. I want to know what it's like to be the brother or sister of someone who is sick. So, I want to know what you have to say and then I can let other people know what it's like to be in your situation. These questions don't have right or wrong answers, and anything that you want to tell me is ok. OK? Ready to start?

First I'm going to ask you some questions about the kind of information you have about your b/s illness. OK?

1. What's the name of your b/s illness?

2. What have you been told about this illness?

3. Is there any information that you don't know about this illness but want to know?

4. Is there any information about this illness that you do know but wish you didn't know?

5. Overall, in terms of your b/s illness, would you say you know more information than you want to know, less information than you want to know, or the right amount of information?

More Less Right amount

Ok, now I want to talk a little bit about the impact that your b/s situation has had on you and your family.

6. When a family member has a serious illness, it sometimes causes changes in the way people in the family get along with each other. Some families grow closer while others grow further apart. What has happened in your family?

(Circle response based on subject's answer.)

Closer Further Apart Stayed the Same

7a. Do your parents treat you differently than your ill b/s? Yes No

7b. (If 'Yes' to 7a) How do they treat you differently?

8. How is your life different from someone who has never gone through this?

9. What were things like before your b/s got sick?

10. What do you think you have handled the best about your b/s being sick?

10b. What have you handled best in the last month?

11. What do you think you have handled the worst about this situation?

11b. What did you handle worst in the last month?

12a. How much do you think about your b/s being sick?

12b. What kinds of things do you think about?

13. What worries you the most about your b/s illness?

I want to know what it's like for you to talk about what's going on with your b/s. Some kids find it really hard to talk about sickness. You've been honest with me in talking about this today. I want to know what it's like talking with other people too.

14. Who are the people that you like to talk to when you feel like talking about different things on your mind?

Name	Relationship
_____	_____
_____	_____
_____	_____

15. If you want to talk about your b/s illness, are there any family members who you can talk to about it?

Name	Relationship
_____	_____
_____	_____
_____	_____

16. Are there any family members who you can't talk to about this? Why not?

Name	Relationship	Reason
_____	_____	_____
_____	_____	_____
_____	_____	_____

17. Overall, how much do you talk with people in your family about your b/s being ill? Would you say a lot, sometimes, rarely or never?

A lot Sometimes Rarely Never

18. Are there any people outside of your family who you can talk to about your b/s illness? Who?

Name	Relationship
_____	_____
_____	_____

_____ _____

_____ _____

19. Are there people outside of your family who you can't talk to about this? Why?

Name	Relationship	Reason
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

20. Overall, how much do you talk with people outside of your family about your b/s being ill? Would you say a lot, sometimes, rarely or never?

A lot Sometimes Rarely Never

21. When you talk to someone about your b/s, how do you feel after?

22. If you were going to give advice to a person your age who has a b/s with the same illness that your brother/sister has, what would you say?

23. Is there anything else that you want to say?

24. This is the last question. How do you feel right now?

Thank the subject.

YOUTH SELF-REPORT FOR AGES 11–18

For office use only
ID #

Please Print

YOUR FULL NAME: FIRST MIDDLE LAST

YOUR SEX ☐ Boy ☐ Girl

YOUR AGE

ETHNIC GROUP OR RACE

TODAY'S DATE Mo. _____ Date _____ Yr. _____

YOUR BIRTHDATE Mo. _____ Date _____ Yr. _____

GRADE IN SCHOOL _____

NOT ATTENDING SCHOOL ☐

IF YOU ARE WORKING, PLEASE STATE YOUR TYPE OF WORK:

PARENTS' USUAL TYPE OF WORK, even if not working now *(Please be specific—for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.)*

FATHER'S TYPE OF WORK: _____

MOTHER'S TYPE OF WORK _____

Please fill out this form to reflect *your* views, even if other people might not agree. Feel free to print additional comments beside each item and in the spaces provided on pages 2 and 4.

I. Please list the sports you most like to take part in. For example: swimming, baseball, skating, skate boarding, bike riding, fishing, etc.

☐ None

	Compared to others of your age, about how much time do you spend in each?			Compared to others of your age, how well do you do each one?		
	Less Than Average	Average	More Than Average	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐

II. Please list your favorite hobbies, activities, and games, other than sports. For example: cards, books, piano, cars, crafts, etc. (Do *not* include listening to radio or TV.)

☐ None

	Compared to others of your age, about how much time do you spend in each?			Compared to others of your age, how well do you do each one?		
	Less Than Average	Average	More Than Average	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐

III. Please list any organizations, clubs, teams or groups you belong to.

Compared to others of your age, how active are you in each?

riding, fishing, etc.

☐ None

	Less Than Average	Average	More Than Average	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐

II. Please list your favorite hobbies, activities, and games, other than sports. For example: cards, books, piano, cars, crafts, etc. (Do *not* include listening to radio or TV.)

Compared to others of your age, about how much time do you spend in each?

Compared to others of your age, how well do you do each one?

☐ None

	Less Than Average	Average	More Than Average	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐

III. Please list any organizations, clubs, teams or groups you belong to.

Compared to others of your age, how active are you in each?

☐ None

	Less Active	Average	More Active
a. _____	☐	☐	☐
b. _____	☐	☐	☐
c. _____	☐	☐	☐

IV. Please list any jobs or chores you have. For example: paper route, babysitting, making bed, working in store, etc. (Include ***both*** paid and unpaid jobs and chores.)

Compared to others of your age, how well do you carry them out?

☐ None

	Below Average	Average	Above Average
a. _____	☐	☐	☐
b. _____	☐	☐	☐
c. _____	☐	☐	☐

4-95 Edition
U. of Vermont, 1 So. Prospect St., Burlington, VT 05401.

Please Print

V. 1. About how many close friends do you have? (Do *not* include brothers & sisters) ☐ None ☐ 1 ☐ 2 or 3 ☐ 4 or more

2. About how many times a week do you do things with any friends outside of regular school hours? (Do *not* include brothers & sisters) ☐ less than 1 ☐ 1 or 2 ☐ 3 or more

VI. Compared to others of your age, how well do you:

	Worse	About Average	Better	
a. Get along with your brothers & sisters?	☐	☐	☐	☐ I have no brothers or sisters
b. Get along with other kids?	☐	☐	☐	
c. Get along with your parents?	☐	☐	☐	
d. Do things by yourself?	☐	☐	☐	

VII. Performance in academic subjects. ☐ I do not attend school because _____

Check a box for each subject that you take	Failing	Below Average	Average	Above Average
a. English or Language Arts	☐	☐	☐	☐
b. History or Social Studies	☐	☐	☐	☐
c. Arithmetic or Math	☐	☐	☐	☐
d. Science	☐	☐	☐	☐
Other academic subjects – for example: computer courses, foreign language, business. Do *not* include gym, shop, driver's ed., etc. e. _____	☐	☐	☐	☐
f. _____	☐	☐	☐	☐
g. _____	☐	☐	☐	☐

Do you have any illness, disability, or handicap? ☐ No ☐ Yes—please describe:

VII. Performance in academic subjects. ☐ **I do not attend school because** _____

Check a box for each subject that you take		Failing	Below Average	Average	Above Average
	a. English or Language Arts	☐	☐	☐	☐
	b. History or Social Studies	☐	☐	☐	☐
	c. Arithmetic or Math	☐	☐	☐	☐
	d. Science	☐	☐	☐	☐
Other academic subjects—for example: computer courses, foreign language, business. Do *not* include gym, shop, driver's ed., etc.	e. _____	☐	☐	☐	☐
	f. _____	☐	☐	☐	☐
	g. _____	☐	☐	☐	☐

Do you have any illness, disability, or handicap? ☐ **No** ☐ **Yes—please describe:**

Please describe any concerns or problems you have about school:

Please describe any other concerns you have:

Please describe the best things about yourself:

Below is a list of items that describe kids. For each item that describes you ***now or within the past 6 months***, please circle the ***2*** if the item is ***very true or often true*** of you. Circle the ***1*** if the item is ***somewhat or sometimes true*** of you. If the item is ***not true*** of you, circle the ***0***.

Please Print **0 = Not True 1 = Somewhat or Sometimes True 2 = Very True or Often True**

0 1 2 1. I act too young for my age
0 1 2 2. I have an allergy (describe): _____
_____
_____
0 1 2 3. I argue a lot
0 1 2 4. I have asthma
0 1 2 5. I act like the opposite sex
0 1 2 6. I like animals
0 1 2 7. I brag
0 1 2 8. I have trouble concentrating or paying attention
0 1 2 9. I can't get my mind off certain thoughts (describe): _____
_____
_____
0 1 2 10. I have trouble sitting still
0 1 2 11. I'm too dependent on adults
0 1 2 12. I feel lonely
0 1 2 13. I feel confused or in a fog
0 1 2 14. I cry a lot
0 1 2 15. I am pretty honest
0 1 2 16. I am mean to others
0 1 2 17. I daydream a lot
0 1 2 18. I deliberately try to hurt or kill myself
0 1 2 19. I try to get a lot of attention
0 1 2 20. I destroy my own things
0 1 2 21. I destroy things belonging to others
0 1 2 22. I disobey my parents
0 1 2 23. I disobey at school
0 1 2 24. I don't eat as well as I should
0 1 2 25. I don't get along with other kids
0 1 2 26. I don't feel guilty after doing

0 1 2 40. I hear sounds or voices that other people think aren't there (describe): _____
_____
_____
0 1 2 41. I act without stopping to think
0 1 2 42. I would rather be alone than with others
0 1 2 43. I lie or cheat
0 1 2 44. I bite my fingernails
0 1 2 45. I am nervous or tense
0 1 2 46. Parts of my body twitch or make nervous movements (describe):
_____
_____
0 1 2 47. I have nightmares
0 1 2 48. I am not liked by other kids
0 1 2 49. I can do certain things better than most kids
0 1 2 50. I am too fearful or anxious
0 1 2 51. I feel dizzy
0 1 2 52. I feel too guilty
0 1 2 53. I eat too much
0 1 2 54. I feel overtired
0 1 2 55. I am overweight
56. Physical problems ***without known medical cause:***
0 1 2 a. Aches or pains (*not* stomach or headaches)
0 1 2 b. Headaches
0 1 2 c. Nausea, feel sick
0 1 2 d. Problems with eyes (*not* if corrected by glasses) (describe):
_____
_____

0	1	2	10.	I have trouble sitting still
0	1	2	11.	I'm too dependent on adults
0	1	2	12.	I feel lonely
0	1	2	13.	I feel confused or in a fog
0	1	2	14.	I cry a lot
0	1	2	15.	I am pretty honest
0	1	2	16.	I am mean to others
0	1	2	17.	I daydream a lot
0	1	2	18.	I deliberately try to hurt or kill myself
0	1	2	19.	I try to get a lot of attention
0	1	2	20.	I destroy my own things
0	1	2	21.	I destroy things belonging to others
0	1	2	22.	I disobey my parents
0	1	2	23.	I disobey at school
0	1	2	24.	I don't eat as well as I should
0	1	2	25.	I don't get along with other kids
0	1	2	26.	I don't feel guilty after doing something I shouldn't
0	1	2	27.	I am jealous of others
0	1	2	28.	I am willing to help others when they need help
0	1	2	29.	I am afraid of certain animals, situations, or places, other than school (describe): _____
0	1	2	30.	I am afraid of going to school
0	1	2	31.	I am afraid I might think or do something bad
0	1	2	32.	I feel that I have to be perfect
0	1	2	33.	I feel that no one loves me
0	1	2	34.	I feel that others are out to get me
0	1	2	35.	I feel worthless or inferior
0	1	2	36.	I accidentally get hurt a lot
0	1	2	37.	I get in many fights
0	1	2	38.	I get teased a lot
0	1	2	39.	I hang around with kids who get in trouble
0	1	2	47.	I have nightmares
0	1	2	48.	I am not liked by other kids
0	1	2	49.	I can do certain things better than most kids
0	1	2	50.	I am too fearful or anxious
0	1	2	51.	I feel dizzy
0	1	2	52.	I feel too guilty
0	1	2	53.	I eat too much
0	1	2	54.	I feel overtired
0	1	2	55.	I am overweight
			56.	Physical problems ***without known medical cause:***
0	1	2		a. Aches or pains (*not* stomach or headaches)
0	1	2		b. Headaches
0	1	2		c. Nausea, feel sick
0	1	2		d. Problems with eyes (*not* if corrected by glasses) (describe): _____
0	1	2		e. Rashes or other skin problems
0	1	2		f. Stomachaches or cramps
0	1	2		g. Vomiting, throwing up
0	1	2		h. Other (describe): _____
0	1	2	57.	I physically attack people
0	1	2	58.	I pick my skin or other parts of my body (describe): _____
0	1	2	59.	I can be pretty friendly
0	1	2	60.	I like to try new things
0	1	2	61.	My school work is poor
0	1	2	62.	I am poorly coordinated or clumsy
0	1	2	63.	I would rather be with older kids than with kids my own age

Please see other side

0 = Not True 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 64. I would rather be with younger kids than with kids my own age
0 1 2 65. I refuse to talk
0 1 2 66. I repeat certain acts over and over (describe): _____
_____
_____
0 1 2 67. I run away from home
0 1 2 68. I scream a lot
0 1 2 69. I am secretive or keep things to myself
0 1 2 70. I see things that other people think aren't there (describe): _____
_____
_____
0 1 2 71. I am self-conscious or easily embarrassed
0 1 2 72. I set fires
0 1 2 73. I can work well with my hands
0 1 2 74. I show off or clown
0 1 2 75. I am shy
0 1 2 76. I sleep less than most kids
0 1 2 77. I sleep more than most kids during day and/or night (describe): _____
_____
_____
0 1 2 78. I have a good imagination
0 1 2 79. I have a speech problem (describe): _____
_____
_____

0 1 2 85. I have thoughts that other people would think are strange (describe): _____
_____
_____
_____
0 1 2 86. I am stubborn
0 1 2 87. My moods or feelings change suddenly
0 1 2 88. I enjoy being with other people
0 1 2 89. I am suspicious
0 1 2 90. I swear or use dirty language
0 1 2 91. I think about killing myself
0 1 2 92. I like to make others laugh
0 1 2 93. I talk too much
0 1 2 94. I tease others a lot
0 1 2 95. I have a hot temper
0 1 2 96. I think about sex too much
0 1 2 97. I threaten to hurt people
0 1 2 98. I like to help others
0 1 2 99. I am too concerned about being neat or clean
0 1 2 100. I have trouble sleeping (describe): _____
_____
_____
0 1 2 101. I cut classes or skip school
0 1 2 102. I don't have much energy
0 1 2 103. I am unhappy, sad, or depressed
0 1 2 104. I am louder than other kids

0	1	2	71.	I am self-conscious or easily embarrassed
0	1	2	72.	I set fires
0	1	2	73.	I can work well with my hands
0	1	2	74.	I show off or clown
0	1	2	75.	I am shy
0	1	2	76.	I sleep less than most kids
0	1	2	77.	I sleep more than most kids during day and/or night (describe): _____
0	1	2	78.	I have a good imagination
0	1	2	79.	I have a speech problem (describe): _____
0	1	2	80.	I stand up for my rights
0	1	2	81.	I steal at home
0	1	2	82.	I steal from places other than home
0	1	2	83.	I store up things I don't need (describe):
0	1	2	84.	I do things other people think are strange (describe): _____
0	1	2	94.	I tease others a lot
0	1	2	95.	I have a hot temper
0	1	2	96.	I think about sex too much
0	1	2	97.	I threaten to hurt people
0	1	2	98.	I like to help others
0	1	2	99.	I am too concerned about being neat or clean
0	1	2	100.	I have trouble sleeping (describe): _____
0	1	2	101.	I cut classes or skip school
0	1	2	102.	I don't have much energy
0	1	2	103.	I am unhappy, sad, or depressed
0	1	2	104.	I am louder than other kids
0	1	2	105.	I use alcohol or drugs for nonmedical purposes (describe): _____
0	1	2	106.	I try to be fair to others
0	1	2	107.	I enjoy a good joke
0	1	2	108.	I like to take life easy
0	1	2	109.	I try to help other people when I can
0	1	2	110.	I wish I were of the opposite sex
0	1	2	111.	I keep from getting involved with others
0	1	2	112.	I worry a lot

Please write down anything else that describes your feelings, behavior, or interests

PLEASE BE SURE YOU HAVE ANSWERED ALL ITEMS

Demographic Questionnaire

1. What is child's name?

_____

2. What is the child's age? _____ years

3. What is the child's birthday? _____

4. What grade is the child in? _____

4a. What kind of grades is the child making?

____ mostly A's	____ mostly C's
____ mostly A's and B's	____ mostly C's and D's
____ mostly B's	____ mostly D's
____ mostly B's and C's	____ mostly D's and F's

5. What is your own name?

_____

6. What is your relationship to the child?(please check one)

_____	mother	____	grandmother
_____	father	____	grandfather
_____	legal guardian	____	foster parent
_____	aunt	____	uncle
_____	step-parent	_____	other (please describe) _____

7. What is the child's ethnic group? (please check one)

____	Asian	____	Native American
____	African American	____	Caucasian
____	Latino/Latina	____	Other (describe) _____

8. What is the religion of the child? (please check one)

____ Catholic ____ Jewish

____ Protestant ____ No religion

____ Muslim ____ Other (describe)

_____

9. What is your current marital status?

____ single ____ widowed

____ married ____ living with partner

____ divorced

10. How many brothers and sisters does the child have?

_____

11. Please fill in the names and ages of the brothers and sisters. (Use other side of page if necessary.)

Names Age

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

12. With whom does the child currently live? Please list all the people who live in the child's household. Use the back side of the page if necessary.

Names	Relationship to Child
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

13. Please check off the highest educational degree you have obtained: (please check one)

____ some high school

____ high school

____ some college

____ college

____ Masters

____ Other (please describe)

_____

14. What is your current occupation?

_____

15. Please check your immediate household's combined yearly income: (please check one)

____ public assistance

____ less than $10,000

____ $10,000 - $18,000

_____ $19,000 - $25,000

____ $26,000 - $35,000

____ $36,000 - $45,000

____ $46,000 - $55,000

____ More than $55,000

16. Did the child grow up in the United States? (If the answer is no, please state where he or she grew up.)

____ Yes

____ No. The child grew up in _____
and moved to the United State in _____ .

17. Where is the child currently living?

____ In an apartment or house owned by your family
____ In an apartment or house you or your family rent
____ In someone else's apartment or house
____ In a shelter
____ In a hotel/motel

18. Is the child currently taking any medication, including medication for a psychiatric or emotional problem?

____ Yes ____ No

19a. If the answer to question #18 is yes, what are the names of the medications?

_____

_____

19b. What are the medications for?

_____

_____

20. Is the child in individual psychotherapy or counseling now?

____ Yes ____ No

21. If the answer to question #20 is yes, how long has the child been in treatment? ____ months

22. Was the child ever in therapy or counseling in the past? (please check all that apply)

		For how long?
____	individual	_____ months
____	at school	_____ months
____	family	_____ months
____	group	_____ months
____	other	_____ months

(please explain) _____

23. Please list the family members who are HIV positive.

Names	Relationship to child
_____	_____
_____	_____
_____	_____
_____	_____

24. Please list any family members who have died due to AIDS-related illnesses and note when they died.

Names	Relationship to child	Month/Year
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Thank you very much for your help with this questionnaire.

NEW YORK UNIVERSITY MEDICAL CENTER
BELLEVUE HOSPITAL CENTER
&
HOSPITAL FOR JOINT DISEASES

INFORMED CONSENT TO PARTICIPATE IN RESEARCH

You are being asked to volunteer to be a subject in a research study. This form is designed to provide you with information which you should know and understand as well as to answer any questions.

Project Directors: Dr. William Borkowsky, M.D.; Lauren Silverman, M.A.
Department: Pediatric Infectious Disease Telephone: (212) 724-9117

TITLE OF RESEARCH STUDY: The psychological and behavioral impact of HIV infection on uninfected "affected" siblings

SUBJECT PARTICIPATION: Inpatient:__ Outpatient:_x__ Other:Patient's Family Members

We expect to enlist the following number of subjects for this study: 30

Your participation will involve this many visits: 1

Each of these visits will take the following amount of time: 2 hours

THE PURPOSE OF THIS RESEARCH IS: to study the experiences of brothers and sisters of children who are HIV-positive. Each child's participation in this project could provide useful information on the ways in which we can make these children's lives better.

THE FOLLOWING PROCEDURES WILL BE INVOLVED: Your child will be met with individually, interviewed, and shown some pictures that he or she can tell stories about. The meeting, which will be audio taped, will take approximately two hours. Research records of the child's participation in the study will be kept confidential.

Patient Initials:_____

Date:_____

IBRA Consent Form #2 12/97

CONSENT TO PARTICIPATE IN RESEARCH (CONTINUED)

DONATION OF BLOOD: _____cc. (equivalent to _____ounces). Frequency of withdrawal: _____Total amount_____ The potential risks of donating blood may occasionally include pain, bruising, fainting or a small infection at the puncture site.

Note: Blood donation is not involved in this study.

THE POTENTIAL RISKS OR DISCOMFORTS TO YOU ARE: (IF LIMITED TO DONATION OF BLOOD, LEAVE BLANK) Your child might become upset in thinking about sibling illness. In order to minimize this, trained professionals, including the coprincipal investigators, will be available to address the child's concerns. If necessary, the child will be referred for further counseling or other services, such as adolescent programs.

THERAPEUTIC OBJECTIVES (CHECK THE APPROPRIATE CHOICE(S) BELOW):

_X_ This research study includes procedures that may change the treatment you (your child) would otherwise receive. We hope the knowledge gained will be of benefit to you.

_X_ This research study includes procedures which may not give you immediate benefits. It is hoped the knowledge gained will be of benefit to others in the future.

____ This research study is planned to select by chance your treatment. It is not known if the treatment you receive will be of benefit to you.

THE POTENTIAL BENEFITS TO YOU OR TO OTHERS ARE: This project will provide information about the behavior and psychological consequences of being an uninfected sibling so that psychotherapeutic interventions may be developed to address the needs of these at-risk children. If intervention is necessary, the researchers will assist in securing appropriate services. In addition, this research will make a contribution to the study of AIDS-stigma and the negative impact that this stigma has on the ways in which a family can adapt to a crisis situation. All subjects will be reimbursed for their travel expenses, and a $10.00 cash payment will be made to each youngster for their participation.

Patient Initials: _____

Date: _____

IF YOU DO NOT PARTICIPATE IN THIS RESEARCH, YOU MAY RECEIVE THE FOLLOWING ALTERNATIVE TREATMENT(S):

GENERAL CONDITIONS

1. Should you consent to participate in this research, your identity will be kept confidential within these limits. If investigational drugs or devices subject to U.S. Food and Drug Administration regulations are involved, it may be necessary for this consent form and other medical records to be reviewed by representatives of the F.D.A. and the agency providing the test substance and/or the Sponsor of the study. In addition, if your participation in this research is for treatment or diagnostic purposes, a copy of the informed consent documentation will be included in your medical record maintained by your treating physician or hospital, as applicable, and will be subject to New York State and federal regulations concerning confidentiality of medical records.

2. All forms of medical diagnosis and treatment -- whether routine or experimental -- involve some risk of injury. In spite of all precautions, you might develop medical complications from participating in this study. If such complications arise, the researchers will provide emergency medical treatment and will assist you in obtaining appropriate follow-up medical treatment but this study does not provide compensation for additional medical or other costs, unless otherwise state in 2.A. below.

2.A.

3. You will be told of any new findings that may influence your willingness to continue to participate in the research. Your participation in this study may be terminated by the Project Director if in his/her judgment it is inadvisable for you to continue.

4. If you would like to discuss your rights as a research subject and/or your participation in this study with an institutional representative who is not part of this study, please call the Administrator, Institutional Board of Research Associates, Telephone No. (212)263-6705.

5. Should you agree to participate in this research you may change your mind at any time. Refusal to participate will not harm your relationship with the faculty and attending staff, nor will in prejudice your further treatment.

Patient Initials: _____

IBRA Consent Form #2 12/97

Date: _____

CONSENT TO PARTICIPATE IN RESEARCH (CONTINUED)

USES OF THE AUDIOTAPE

Each session will be audiotaped. These tapes will be labeled only with a code number, which will be kept in the Investigator's files. The tapes will be used for coding the Interview responses and for analysis of the stories told to pictures (TAT).

TERMS OF PARTICIPATION

If you agree to participate in this study, this signature on the consent form grants the researchers permission to retain the audiotape for this purpose. However, you have the right to review the audiotape and request that all or any portion of the tape be erased.

Additionally, the researchers would like to be able to use the transcripts of brief excerpts from the audiotapes for training purposes and publication of their findings in scientific journals and presentations at professional meetings. You are free to refuse this request, and the tapes will not be used in this way unless you give your explicit consent by signing the additional release at the bottom of this page. If you do so, you will not be identified by name in any publication or presentation of this material.

RELEASE FOR ADDITIONAL USE OF THE AUDIOTAPES

I understand that the researchers would like to use brief excerpts from the audiotapes for training purposes and to illustrate their findings in scientific publications or at professional meetings. My consent for this use is optional, and I am free to refuse this request. My signature in the space below indicates my consent to these uses of the tapes.

I consent to the above uses of the audiotapes:

_____

Signature of Participant or Legal Representative

_____

Date

Patient Initials _____

Date: _____

IBRA Consent Form #2 12/97

AGREEMENT TO PARTICIPATE

I have read the description of the research study and general conditions or it was read to me by: _____. Anything I did not understand was explained to me by:_____, any questions that I had were answered by:_____. I certify that I am / am not (circle one) participating in another research project at this time, and have discussed the implications of such activity with the project director(s) of this project. In consideration of this understanding, I voluntarily agree to participate in this research at:

_____NYUMC _____Bellevue Hospital _____Other (Identify) _____

I will receive a copy of this consent form.

WHEN THE SUBJECT IS A CHILD

_____I have solicited the assent of the child. _____ I have not solicited assent for the following reason(s):_____

_____

_____
Signature of Person Obtaining Consent

_____I agree with the manner in which assent was solicited and given by my child and I agree to have my child participate in the study.

_____Although my child did or could not give his/her consent, I agree to have my child participate in the study. I will be given a copy of this Consent Form.

_____/_____		_____/_____	
Print Name of Parent(s)**	Date	Signature of Parent(s)	Date
_____/_____		_____/_____	
Print Name of Participant	Date	Signature of Participant or Legal Representative	Date
_____/_____		_____/_____	
Print Name of Witness	Date	Signature of Witness	Date

*For Subjects who may not be capable of providing informed consent the signature of a legal representative is required. For children between the ages of 12 and 17, their signature is generally required in addition to that of the parent or legal representative.
**The signature of one parent is sufficient when the research is of minimal risk to the child, or when the research presents the prospect of direct benefit to the child. The signature of both parents is required when the research involves greater than minimal risk with no prospect of direct benefit to the child. The requirement for signature of both parents may be waived if one parent is deceased, unknown, incompetent, or not reasonably available, or when one parent has sole legal responsibility for the care and custody of the child.

Patient Initials:_____
Date:_____

Child Assent Form

I have been asked to participate in a study. The purpose of the study is to understand more about what happens when someone's brother or sister is sick. I will be asked questions about my feelings and behavior, and will be asked to tell stories to pictures. I will be interviewed by one researcher. The interview will take about two hours.

I understand that what I say will be private. The only people who will know who I am are the people doing the study. The specific answers I give will not be shared with my parent/guardian, but he or she will be informed if I have any serious problem because I may need professional help. If the interviewer thinks I need help she will talk to me first and then to my parent/guardian. If we wish, the interviewer could arrange to get me help. During the interview if I mention instances of child abuse the researcher will report it to the project director, Lauren Silverman, M.A., who will follow established procedures for suspected child maltreatment.

As a think you for my participation in this study I will receive twenty dollars.

I understand that I am volunteering to participate in this study. I also understand that I may refuse to answer questions I do not want to answer. I understand that I may refuse to participate in this study and that even if I start, I can stop participating, even after signing this form.

I agree to participate in the study.

Name_____

Date_____

BELLEVUE HOSPITAL CENTER

First Avenue at 27th Street
New York, NY 10016
Tel: (212) 562-4141

MEMORANDUM

TO: W. Borkowsky, M.D.
Pediatrics

FROM: Pierre DuBose, Chairman
BHC Research Review Committee

DATE: April 7, 1998

SUBJECT: IBRA/BRC#: 7661-01 HHC#:98-110
IMPACT OF HIV ON UNINFECTED SIBLINGS

This is to inform you that the above referenced research protocol has been approved by Bellevue Hospital Center and NYC Health and Hospitals Corporation for implementation.

This office must, however, be informed immediately if there is any major change in the protocol or if there are adverse patient events. This approval is valid for the period 01/26/98-01/25/99. You are reminded that you must also inform this office, when applicable, if you receive a Notice of Grant Award from an external funding agency or if the project is terminated within the period for which approval is now being given.

Research reports, whether published or not, must acknowledge cooperation from Bellevue Hospital Center and the NYC Health and Hospitals Corporation.

If you have any questions, please don't hesitate to contact Deborah A. Gregory at (212) 562-4904.

PLEASE NOTE

For <u>all</u> non-GCRC protocols involving a <u>consent form</u>, you <u>must</u> submit, quarterly, a list of the subject's name, chart number, and protocol number (IBRA#) to Deborah Gregory, Research Coordinator, Old Administration Bldg., Rm. 302.

cc: Deborah A. Gregory
Vernette Owens
Cecilia Baquiran
Diana Nilsen, M.D.
Laura Zabriskie

Appendix: Manual for Scoring Defenses

This manual was developed to assess the use of three defenses—denial, projection, and identification—as revealed in stories told for standard TAT and CAT cards. Specific criteria have been developed for CAT Cards 3, 5, and 10, and for TAT Cards 1, 3, 3GF, 5, 6BM, 6GF, 7BM, 7GF, 8BM, 8GF, 10, 12MF, 13MF, 14, 17BM, and 18GF.

The scoring for each defense is based on seven categories, each designed to reflect a different aspect of the defense. Each category may be scored as often as necessary, with the exception of a direct repetition in the story; in cases of repetition, the category is scored only once.

Although examples are provided to aid in deciding whether or not a category should be scored, questions inevitably arise. A thorough knowledge of the nature of the defense mechanisms will help in answering these questions. Beyond this, the general rule to be followed is, "When in doubt, leave it out." That is, if there is a serious question about whether or not the story segment is an example of the defense, do not score it.

Denial: Summary of Scoring Categories

1. Omission
2. Misperception
3. Reversal
4. Statements of negation
5. Denial of reality
6. Overly maximizing positive, minimizing negative
7. Unexpected goodness, optimism, positiveness, gentleness

Primitive Denial

In the categories of primitive Denial, the storyteller assumes that the stimulus card *is* something, and the defense is seen in the avoidance or changing the nature of that thing.

1. Omission of Major Characters of Objects

This category refers to the failure to perceive salient stimuli that are perceived by nearly all one's peers. This applies only to the major or obvious objects. Omission of any of these objects from the story is scored, according to the following plan.

CAT 3:	pipe plus cane = 1
	mouse = 1
	lion = 1
CAT 5:	2 out of 3; bed, forms in bed, crib = 1
	teddy bears = 1
CAT 10:	bathroom = 1
	adult dog = 1
	baby dog = 1
TAT 1:	boy = 1
	violin = 1
TAT 3BM	person = 1
	gun or knife = 1
TAT 3GF:	person = 1
TAT 5:	woman = 1
	room = 1
TAT 6BM:	young man = 1
	older woman = 1
TAT 6GF:	man = 1
	woman = 1
TAT 7BM:	older man = 1
	younger man = 1
TAT 7GF:	young girl = 1
	woman = 1
	baby or doll = 1
TAT 8BM:	gun = 1
	knife = 1
	standing young man = 1
	prone man = 1
TAT 8GF:	woman = 1
TAT 10:	man = 1
	woman = 1
TAT 12MF:	standing man = 1
	prone man = 1
TAT 13MF:	standing man = 1
	prone woman = 1
TAT 14:	standing man = 1
	window = 1
TAT 17BM:	man = 1
	rope = 1
TAT 18GF:	woman above = 1
	woman below = 1

Do not score if reference to the function of a critical object is made. For example, the *knife* in TAT 8BM may be implied by the mention of an operation; the *cane* in CAT 3 may be implied by reference to lameness. On TAT 1, reference to the object, even if not named, is sufficient. (However, if it is named incorrectly, score under Denial (2).)

2. Misperception

This may come about because the perceptual process itself is distorted by pathology or because, in the case of a child or inexperienced person, the name of the object is not known and the individual defensively calls it something it is not, rather than referring to it as a "thing" or an "object," in which case no score is given. In this latter case, the point is whether, in a situation in which the individual does not have all the information needed, he is able to cope adaptively, or whether he must distort the situation to fit his inadequate knowledge.

Examples of adaptive coping are seen in the following two stories for TAT 1; in both cases, the child is uncertain about how to identify the violin:

This person is thinking what to do, with something that is in front of him. He might use it for something, or something might happen. The thing that might happen is that he might think of something to do with the thing. (What happens?) He's going to do something with it. He's thinking that he will use it for what it is supposed to be used for; on some kind of material, which is called paper.

That's a little boy. He's down on his work bench and he's looking this over and he's wondering what it is. And he's wondering if he'll ever find out. He can't wait till his father comes home so he can ask his father. And he's kind of sitting there wondering when his father will come home.

(a) *Any unusual or distorted perception of a figure, object, or action in the picture*, which is without sufficient support for the observation, *if and only if* the projected image is NOT of ominous quality, in which case it would be scored under Projection.

"(TAT8BM) The man is tickling the man lying down;"
"(CAT3) He's in a wheelchair;"
"(TAT1) That's a cross-bow;"
"TAT17BM) That's a statue climbing down a rope";
"(TAT1) He's eating;"
"(TAT1) He's playing checkers;"
"(TAT17BM) Is that a picture of me?" (*S* is 5 years old)

(b) *Perception of a figure as being of the opposite sex from that usually perceived.*

"(TAT12M) The girl on the couch;"

Note: If the storyteller misperceives an object, and then corrects the misperception, score Denial (2). If, after the correction, he continues to

use the misperception as the basis for the story, score also under Denial (5).

Do not score on TAT 1 if children call the violin a guitar, harp, or instrument. Do not score if violin is called a "thing," "object," or "that." Only score when violin is turned into something other than a musical instrument. Do not score if violin is referred to as "homework or a "project" unless it is clear that this means something *other than* a violin—e.g., a book, a boat, etc.

3. *Reversal*

The reversal may be either in terms of the usual perception of the card or in the story itself, especially when the reversal is normatively unusual.

(a) *Transformations* such as weakness into strength, fear into courage, passivity into activity, and vice versa.

"He had been king of the jungle, but now he was very old;"
"The mouse used to be afraid; then he grew up and fought the lion;"
"He used to be an excellent surgeon, but then he killed a man by mistake;"

Note: If the transformation involves a drastic change for the good, score under Denial (7).

(b) *Score any figure who takes on qualities previously stated conversely* in the story, including change of sex of figure.

"(TAT12M) The boy is in a coma and the man is hexing him. The boy will get the man in his power;"
"He's dead, and he'll come back to life."
"(TAT17BM) *I* am in a big cave and *I*'m caught . . . And he's half way up to the top" (Here the *S* has changed the threatened "I" into "he;"
"He is an actress" (*S* is 9 years old).

Reversal differs from Denial (4) and Denial (6) in that it involves both ends of a continuum (e.g., weak–strong) rather than just one end that is negated (e.g., weak–not weak: Denial 4) or overly stressed (Denial 6). Reversal may be scored where one end of the continuum is implied but not explicitly stated (strength–weakness, implied by growing old).

Do not score "growing old" by itself.

Do not score if a character doesn't know how to do something and then learns how.

Do not score if character was strong, became weak through tiredness, but in the end won, or was strong again; or if sad, but through doing something, becomes happy.

4. *Statements of Negation*

Simply stating something in the negative (e.g., "He didn't do it") is not sufficient to be scored in this category. Whether or not a negative statement should be scored depends on whether the negation is defensive. Sometimes this can be determined by the fact that the negative statement is unusual or unexpected (e.g., "He didn't stuff peanuts up his nose")—that is, that no one would have expected this event to happen anyway, so why point out that it didn't happen? At other times the defensive nature of the negation is more straightforward (e.g., "He didn't get hurt"). Often, only the context makes it clear if the statement is defensive or not.

(a) *Score if a character "does not . . ." any action, wish, or intention*, which, if acknowledged, would cause displeasure, pain, or humiliation.

"He caught the mouse but did not kill him;"
"He never fell down from ropes."

(b) *Also score statements in which the storyteller negates or denies a fact or feeling.*

"He is going to go hunting and catch something. I don't know what, though;"
"I don't know what that is (referring to whole card or part of card);"
"At first I thought he was dead, but he isn't;"
"No one is in that bed" (CAT 5, referring to large bed);"
"I don't know where he is going."

(c) *References to doubt as to what the picture is or represents.*

"What is it? I don't understand the picture" should be scored here, and should be distinguished from references to difficulty in formulating a story ("I can't think of what to say"), which is an example of repression. The difference lies in the fact that denial generally operates on a more concrete level, whereas repression is seen in the person's inability to *think* of something.

Do not score if "I don't know" is used as a way to end a story, or is in response to a question by the examiner.

Do not score if a character wants to or tries to do something, but can't or isn't able to, or doesn't know how to.

Do not score if a character doesn't like something, or doesn't want to do something that is neutral or pleasant in nature (e.g, do not score "He doesn't want to practice the violin").

Do not score "He doesn't want to get hurt," but *do* score "He doesn't get hurt."

Do not score "He does not reveal it" (a secret, a clue, etc.) here; score under Projection 4).

Do not score, on TAT 17BM, "He's got no clothes on."

Do not score if subject asks, at the end of the story, if the story was "right" or "correct."

5. *Denial of Reality*

This is an overlapping category with Denial (4).

(a) *The storyteller denies the reality of the story or situation* by the use of phrases such as

"It was just a dream;"
"It didn't really happen;"
"It was all make-believe;"
"(TAT 8BM) That's really a dummy; when they cut it, it was all red cotton;"
"They're going to play (pretend) a fight,"
or describing the picture as part of a movie.

Do not score TAT 8BM if it is described as a dream, because of the nebulous atmosphere of the picture.

(b) *Sleeping, daydreaming, or fainting as a way of avoiding something unpleasant.*

(c) *References to avoiding looking at something* that would be unpleasant to see, or hearing something that would be unpleasant to hear, or thinking something that would be unpleasant to think.

"He's walking away because he doesn't want to see the operation."

(d) *Any perception, attribution, or implication which is blatantly false with regard to reality* as generally defined or by reality as defined by the picture.

"(CAT 10) The two dogs are playing checkers;"
"(CAT 10, referring to crib) Nothing is in here;"
"(CAT 10) He's going to have puppies;"
"That dog climbs up the rope;"
"(TAT17BM) A statue climbing a rope" (score also under Denial (2) for misperception of figure in the picture.) The score under Denial (5) is for a statue doing something statues cannot do in reality.

Note: If the perception is not false so much as unusual or distorted, including seeing the picture as being of the opposite sex from the usual perception, score under Denial (2).

Do not score running away from or avoiding "society" here; score under Identification (3).

Pollyannish Denial

Pollyannish denial belongs to a later period of development than primitive denial, and may involve a rather saccharine, "life is beautiful" attitude. It is often characterized by a note of unfounded optimism.

6. *Overly Maximizing the Positive or Minimizing the Negative*

Any gross exaggeration or underestimation of a *character's* qualities, potency, size, power, beauty, or possessions.

"(CAT3) A small lion;"
"An old lion (weakness implied);"
"The most beautiful . . . in the world;"
"The biggest . . . in the world;"
"The eagle picks up the lion."

Note: If the exaggerated quality involves a reversal of the character's usual nature, score under Denial (3).

Do not score exaggeration of physical objects (e.g., "the highest mountain;" "he fell thousands of feet").

7. *Unexpected Goodness, Optimism, Positiveness, Gentleness*

(a) *Unexpected goodness.* This is a difficult category to score and should be scored only when beyond doubt. It is often seen in instances of revenge, when the revenge is built up to, but never consumated when the opportunity arises. Building up to a theme of harm and then concluding without justification that all is well is scored here. Also when a character "takes his lumps" or punishment or bad luck completely in stride when all previous indications were of an avenging "righteous indignation" attitude.

"The lion chases the mouse for many hours; he finally catches him, but then he lets him go;"
"He has always failed, but he knows that he will be successful in the end."

(b) *Any sort of drastic change of heart for the good.*

"He is a murderer who goes around killing people. But then he decides to become a doctor and saves many lives."

(c) *Also scored here are references to natural beauty, wonder, awesomeness.*

"He realized the beauty and magnificence of the forest;"
"She contemplated the wonder of the universe;"
"(TAT1) He found peace with his violin;"
"(TAT14) He finds enlightenment."

(d) *Nonchalance in the face of danger.*

(e) *Acceptance of one's (negative) fate or loss*, with the justification of not really wanting it any way; a "sour grapes" attitude.

"He learns to make the best out of what he's got."

Do not score "they lived happily ever after" or similar clichés if used at the end of a story.

Note: If the change for the good involves a moralistic turn, score under Identification (7).

Projection: Summary of Scoring Categories

1. Attribution of aggressive or hostile feelings, emotions, or intentions to a character, or other feelings, emotions, or intentions that are normatively unusual
2. Additions of ominous people, ghosts, animals, objects, or qualities
3. Magical or circumstantial thinking
4. Concern for protection from external threat
5. Apprehensiveness of death, injury, or assault
6. Themes of pursuit, entrapment, and escape
7. Bizarre or very unusual story or theme

Projection

1. Attribution of Aggression or Hostile Feelings, Emotions, or Intentions to a Character, or of Any Other Feelings, Emotions or Intentions that Are Normatively Unusual

This category can be scored either when such emotions are attributed by the storyteller to a character in the story or when one character attributes them to another character, *but only* if such attribution is without sufficient reason.

References to a character's *face* looking a certain way (e.g., anguished, puzzled, etc.) are scored here.

"He killed her because he hated her" (with no explanation of the reason for his hatred) [Score twice, once under Projection (5)];
"(CAT3) This is a mean lion;"
"I think he dislikes me" (unexplained);
"(CAT3) The lion growls too much;"
"(CAT3, mouse speaking) I think that lion is thinking about getting after me;"
"His parents don't care, even if he's sick" (This is a borderline case, but is scored because it is implied that the parents, through neglect, are mean to the child);
"(TAT1) He is looking at it with contempt" (This is also somewhat borderline but is scored here because contempt includes hostility toward the object of contempt);
"(TAT17BM) He had to find his girl friend or they would kill her" (unexplained);
"(TAT17BM) Maybe he's angry" (unexplained);
"(TAT17BM) Probably that look on his face is a signal of some kind;"
"(TAT17BM) His features become distorted and take on the look of an animal as it hides from a hunter;"
"(TAT17BM) His look is that of frustration and great emotion" (scored once);
"(TAT17BM) He has a mean personality; he is a murderer" (scored twice);
"(TAT17BM) He was in the shower . . . a fire . . . he feels *embarrassed* [due to nakedness];"
"(TAT1) He's looking at it in a mad way" (unexplained);
"He's contemplating suicide."

Note: Score aggressive or hostile *actions* under Projection (5).

Do not score TAT 17BM for simple mention of fright, tenseness, or tiredness.

Do not score depression or thought of suicide on TAT 13MF; if suicide is actually carried out on card other than TAT 13MF, score Projection (5).

Do not score TAT 3MB for simple mention of sadness or depression, or crying, if reason is given.

Do not score TAT 6GF for mention of woman looking surprised, startled.

2. Addition of Ominous People, Ghosts, Animals, Objects, or Qualities

(a) *This category is scored only if the details added to the situation are of an ominous or potentially threatening nature.*

"(CAT3) He got an *axe* and killed him;"
"(CAT3) They said if he wasn't good they'd put him in front of *alligators*;"
"(CAT5) He was afraid to go to sleep because he heard scary *noises* . . . then a *robber* came" (score both for noises and for robber; score fear of sleep under Projection 5);
"(CAT5) There are *bees* outside the window;"
"(TAT1) That's a dangerous toy;"
"(TAT17BM) There are warriors coming;"
"(TAT17BM) The guards are trying to get him" (This is a borderline case; do not score for mention of guards alone; score only if the guards are clearly threatening; if guards are pursuing, score under Projection (6) only);
"(TAT17BM) The soliders throw spears" (score only once for the spears; the soliders alone are not necessarily ominous);
"Fire."

Do not score TAT 17BM for mention of prison, dungeon, cave, guards alone, prisoner, or pursuers (the latter is scored under Projection (6).

(b) *Score especially the addition of blood, mention of serious and uncommon illnesses, including mental illness, comas, and nightmares.*

"(TAT8BM) This guy got badly hit by malaria;"
"(TAT12M) He finds out that the boy is in a coma;"
"(TAT8BM) He has these horrible nightmares."

(c) *Also, score here references to people, animals, or objects being decrepit, falling apart, or deteriorating.*

"(CAT5) This crib looks like it's going to fall over;"
"(CAT5) It must have been an old crib that they sent away to a place to get fixed up;"
"(CAT5) The lamp looks like it's all cracked;"

"(TAT1) He's sad because one of his strings are broke;"
"He foud his violin all over the floor all broken."

Note: In TAT 1, score for violin being broken only if the implication is that someone not in the picture (unknown or disliked) breaks it, or if it was broken before the story begins (i.e., was "inherently" damaged).

Do not score if a friend or parent breaks it.

Note: If the same addition is called two different things, score only once (e.g., "a bat or a black widow;" "a thorn, not a hornet").

Do not score the addition of a bullet in TAT 8BM.

Do not score TAT 17BM, rope breaking while climbing, unless prior mention is made of the rope being inadequate to support weight.

Do not score "falling apart" if this is due to some other event specified in the story, such as an explosion, fire, or earthquake, which are themselves scored.

3. *Magical, Autistic, or Circumstantial Thinking*

(a) *Any use of magic or magical powers, including hypnosis or other unusual powers or control of one character over another*; this also includes animals banding together to accomplish some herculean task.

"He was thinking that he had a magic bird that followed him and saved him;"
"The boy died and the parents got a dog, and every night they could hear the boy talking to him;"
"He was putting spells all over the man;"
"This hypnotist turned him into a little green thing."

(b) *Animism*: attribution of human thoughts or emotions to objects other than animals and people (not applicable to the "teddy bears" of CAT 5).

"Canes talking;"
"Rifles feeling sorry;"
"(TAT1) The project has a problem;"
"(TAT1) An idiotic violin;"
"(TAT17BM) The rope tried to overpower him."

(c) *Circumstantial reasoning that has a paranoid flavor; hyperalert search for flaws and misleading cues* (implies a mistrust of others); *efforts to find hidden or obscure meanings; criticism of the way in which the pictures are drawn*. (Implied is that this makes the task more difficult.)

"(TAT17BM)... A bobcat jumped at him. Because this is out in the woods and the door was open;"
"(TAT17BM) It must have been a murder the committed, because he isn't carrying any valuables or money;"
"There's probably a trick to this;"
"Is the rope supposed to suggest a hanging?"

4. *Concern for Protection Against External Threat*

(a) *Include here evidence for fear of external threat of physical assault or injury and the need for protection against that threat*, as seen in the erection of walls (real or imaginary), use of masks, disguises, shields, armor, locking of doors or windows, or creation of other protective barriers.

"(CAT3) The mouse is really worried that the lion will bring the cats in and they'll chase the mice" (This overlaps with Projection 6, but is scored here because the emphasis is on the worry);
"The king kicks him out but he puts on a disguise and gets back in again."

(b) *Also included here are references to suspiciousness*, to people or animals hiding or "lying in wait," concern about being "taken by surprise," spying on others, anticipation of kidnap that does not occur, or a feeling that "others are against you" (stated explicitly).

"(CAT5) There's a great big man who is under those covers;"
"(CAT5) The mother and the father are hiding in the bed;"
"(CAT5) There's a crib and no one is there and they wouldn't know if anyone stealed them;"
"(TAT17BM) He has witnessed a crime and is being hunted by the killer."

(c) *References to having seen something one shouldn't have seen*, or that will get one into trouble, and *the necessity for hiding this*; hiding incriminating evidence; protective hiding of oneself or one's property; fear of being seen.

"(TAT17BM) He was captured because he knew too much about something, possibly murder" (score once for captured [Projection 6], and once for knowing);
"(TAT17BM) He's breaking out of prison . . . he's looking around to see if anyone sees him" (score once for escape [Projection 6] and once for fear of being seen).

(d) *Responses indicating a defensive need for self-justification on the part of the storyteller* (i.e., not in response to a question from the examiner).

"(TAT8BM) I say it is a gun because it looks like one we had at home;"
"Although this is just a first reaction, he looks like he is escaping."

5. *Apprehensiveness of Death, Injury, or Assault*

(a) *This is an overlapping category with Projection (4). The difference is that in Projection (5) the death, physical attack, or injury actually occurs or has occurred*, whereas in Projection (4) the emphasis is on the need for *protection* against threat. Unexplained or unjustified punishment is scored here, as is completed suicide.

"(CAT10) The doggie got run over;"
"It looks like his father has just died;"
"(CAT5) Once there was a baby, and he had no mommy. His mommy died;"

"He fell off and broke his leg;"
"His son died;"
"He shoots himself;"
"He looks like he just had a fight before;"
"He poisoned all the bloodhounds;"
"He murdered her;"
"He gets eaten by the alligators;"
"He got slapped around."

The following are borderline cases but are scored here because injury is suggested as resulting from the fall. (Do not score a "fall" by itself.)

"The man's going to fall. On his head;"
"The rope is going to fall . . . . It ends with his body down on the floor."

(b) *Score here also fear of going to sleep.*

"At night he was afraid to go to sleep."

Do not score justified punishment by authority or parents. Score under Identification (3).

Do not score if hero aggresses against someone else for justified self-protection or for vindication.

Do not score on CAT 3 if the conflict is between the lion and the mouse.

Do not score on TAT 8BM or 13MF, unless the assault was carried out by a character not present or suggested by the picture; also, *do not score* if the attack against a nonpresent character is in retaliation for some previous physical attack by that character.

Do not score on TAT 12M unless the standing character is about to or has physically attacked the prone character.

Do not score "spanking" on CAT 10.

Do not score "suicide" on TAT 13MF.

6. *Themes of Pursuit, Entrapment, and Escape*

(a) *Included here are themes involving one character pursuing another; also score any mention of one character trapping another, kidnap or unjustified being put jail or prison which actually occurs.*

"(CAT10) The dogs are going to chase the kitty; and the kitty is chasing the mousey";
"(CAT5) The little bears are going to be tooken;"
"He's escaping; he's running, the police are chasing him" (score twice);
"He gets trapped in the cave and can't get out."

(b) *Also included are themes of escape.* The escape must be from a physical imprisonment or physical danger, or threat thereof (i.e., not symbolic). "Running away" when there is no pursuer is scored only if it is due to anticipation of pain or punishment, where the anticipation is not justified by the story.

"(TAT17BM) He escaped from the tower and left the country;"
"(TAT17BM) There was a fire and he's escaping out the window" (score twice, once for escape and once for fire [Projection 2].

Note: The category may be scored twice: once for pursuit–entrapment, once for escape.

Note: If "being put in jail" is accompanied by a sense of righteousness or moral justification—that is, if the storyteller is identifying with the authority who puts the character in jail, or if jail is the justified outcome of criminal activity—score under Identification (7). "Being put in jail" is scored under Projection only when the character has not committed a crime, but is put there because of the jealousy, fear, or whim of someone else—that is, only when the encarceration is not (legally) justified. Political or war imprisonment is scored under Projection (6).

Note: If the character is already in jail or prison at the beginning of the story, score under Projection only if it is made clear that this is *not* due to criminal activity. If it *is* due to criminal activity, score under Identification (7). If it is not clear *why* he is in prison, do not score.

Note. Score being chased, trapped, or caught by *police* under Identification (7).

Do not score trapping unless one character traps another (e.g., do not score being trapped in a well, unless one character put another there).

Do not score escape if character is being rescued (by hero), where the emphasis is on the rescue rather than on the escape.

Do not score escape if it is only mentioned at the end of the story, or after the examiner's inquiry, unless the need for escape has been implied throughout.

Do not score escape, when the hero is escaping from "society" or "the world" around him [score this under Identification (3)].

Do not score running away from home; this *may* qualify for scoring under Identification (3).

Do not score on CAT 3 if the conflict is between the lion and the mouse. If the mouse is injured, score under Projection (5).

7. *Bizarre or Very Unusual Story or Theme*

This category depends heavily on the subjective judgment of the scorer, who must determine the limits of bizarreness.

(a) *Negative themes that occur very rarely, especially if they have a peculiar twist.*

"(TAT8BM) He goes outside and get glass in his heel and the doctor pulls and puts pins in . . . ;"
"(CAT3) He's going to eat the whole house because no one's there;"
"(TAT1) This is a saw . . . he sawed his desk in half."

(b) *Also included here are instances of unusual punishment, including unusual self-punishment.*

"(TAT8BM) He's thinking what's going to happen to him when he's really old, and like he's done something bad, and he's going to get zapped" (chuckle);
"(CAT3) He ate a big piece of wood and got all bloated and blew up" (This would also be scored under Projection 7a);
"(TAT17BM) He is tortured."

Do not score as unusual punishment spanking alone, unless it continues for a very long time.

Identification: Summary of Scoring Categories

1. Emulation of skills
2. Emulation of characteristics
3. Regulation of motives or behavior
4. Self-esteem through affiliation
5. Work: delay of gratification
6. Role differentiation
7. Moralism

Identification

1. Emulation of Skills

(a) *References to one character imitating, taking over, or otherwise acquiring a skill or talent of another character, or trying to do so.* This is often seen in a younger character emulating an older one.

"(TAT1) He picked up the violin and thought, 'Maybe if I could be as great as my father;'"
"(TAT1) The little boy is wondering what this is, if he'll ever find out; he wants to ask his father . . . waiting until his father comes home . . . then he finds out" (This is a borderline case, but is scored here because the boy acquires his father's knowledge.);
"(TAT1) He wants to do it because he saw other people do it;"
"(TAT1) He was looking at this violin of his father's, he really did want to play it . . . . he learned how to play it;"
"(TAT1) He wanted to play . . . . The man said he would teach him . . . after a while he got good . . . ;"
"(TAT1) His father taught him how to do it;"
"(TAT1) He wants a teacher to teach him how;"
"(TAT1) He wants to do it like his teacher does."

Do not score "it is his father's violin and he is playing with it" (in the sense of fooling around with the violin).

Do not score if learning occurs only at the adult's insistence; the character must *want* to learn.

2. Emulation of Characteristics

(a) *References to one character imitating, taking over, or otherwise acquiring a characteristic, quality or attitude of another character, or trying to do so.*

Examples of "identification with the aggressor" are scored here.

"(TAT17BM) Jack and the Beanstalk . . . he wanted to be a giant;"
"(TAT17BM) He gave his Tarzan call [gives imitation] and Tarzan came and . . . got the bad guy."

(b) *References to one character being like another, the same as another, or, in an extreme case, merging with another.*

"He hoped he could be like his father" (in a general, nonspecific way, i.e., not in terms of a specific skill);
"(TAT1) He became Wagner;"
"(TAT17BM) He is trying to be Tarzan;"
"(TAT17BM) He gets the giant's muscles and now he's a giant."

Do not score acquisition of another's physical property (e.g., money, jewels).

3. Regulation of Motives or Behavior

Keep in mind here that it is the storyteller who has internalized these regulatory mechanisms and is now attributing them to a character in the story.

(a) *References to demands, control, influence, guidance, or prohibitions of one character over another, or through societal mores; or the active rebelling against these* (not in thought only, and not by passively doing nothing), including running away from the pressures of family or society. Include here being caught doing something one shouldn't be doing.

"(TAT1) His mother didn't hear him practicing so he had to start practicing again;"
"(TAT1) he didn't want to take violin lessons . . . so he threw it away and smashed it [the violin] all up;"
"He is going to ask his mother if he can go out . . . and she is going to say no;"
"His mother made him take violin lessons, but he didn't want to so he played hookey" (score twice, once for mother controlling him and once for rebellion);
"He asks his Dad if he can do it some other day;"
"He was told to play his violin but he doesn't want to . . . but he'll get in trouble;"
"He's a recognized criminal so he won't have it too easy in the world outside" (borderline);

"(TAT1) The people who gave it to him . . . said he had to find out what it was before he could play it;"

(b) *Indication of self-criticism, or self-reflection* on the part of either the storyteller or a character in the story.

"It isn't a very good story;"
"The mouse built a trap, but he thought it wasn't very good;"
"He feels guilty for what he did";
"(TAT1) He's not very good . . . he's flunking it . . . *he's really mad* because he wanted to be a really good one;"
"(TAT17BM) He's feeling he should have concentrated more;"
"(TAT1) He started to play it, but it sounded funny, it didn't work. He's feeling that he is stupid;"
"He decided 'I'm not a very good violin player;'"
"(TAT17BM) He climbed up a vine . . . gets in trouble . . . and thinks 'I shouldn't have climbed up this time. Next time, maybe, not this time;'"
"(TAT17BM) He looks around in fear, but realizes that he . . . does have the strength to continue."

(c) *References to justified punishment by parents or authority*, as a way of controlling or regulating a character's behavior.

"His father sent him to his room because he was bad;"
"His mother gets mad and he gets spanked;"
"He breaks it and his father says 'you're never going to get a new thing again . . . ;'"
"(TAT1) The father is furious . . . the boy is having to buy another string to replace the old one."

Note: Score 3(a) only once, even if two different people (e.g., parent and teacher) are applying the same kind of control or pressure.

Note: Control through hypnotism or magic is scored under Projection (3).

Note: Unjustified punishment is scored under Projection (5).

Do not score escape from physical danger, or if the demands are of an ominous nature, or suggest an ominous outcome; instead, score Projection (6).

Do not score child begging parents for something, or hero requesting help, freedom, and so on.

Do not score justified punishment by authority that occurs as the outcome of the story; score under Identification (7) moralistic outcome.

Do not score "being put in jail" here; if being in jail is justified, score under Identification (7); otherwise, it *may* be scored under Projection (6).

Do not score "spanking" on CAT 10.

4. *Self-Esteem Through Affiliation*

(a) *Success or satisfaction that comes about through association with someone else* (not parents, aunts, uncles, grandparents, police), or *the expressed need for this kind of affiliation.*

Adoption by a foster family, if pleasant, is scored here.

"He was happy that he had a friend;"
"He gave his Tarzan call and Tarzan came and got the bad guy" (age 6);
"He realizes that he and his classmate are in exactly the same situation . . . they become very close and comfort themselves with the situation;"
"He must escape and help save his people. The people are very happy . . . they were very poor and now they are rich" (age 5);
"He's lonely and needs to be with a family;"
"He was caught because a trusted friend turned him in" (implied here is the need for a *good* friend);
"Has he the courage to master it? Interest must be backed;"
"He is adopted and lives with a nice family;"
"His brother was killed . . . he was the only source of pleasure."

(b) *Being part of a special group from which some special pleasure or help derives.*

"(TAT17BM) He is part of the English navy . . . he escapes the French . . . he is picked up by an English ship;"
"(TAT17BM) The slave is going down a rope to a fake well. It's part of the underground railroad to help him escape to Canada;"
"(TAT17BM) The sailor and his crew win the battle in a great defeat;"
"(TAT17BM) The people are citizens of the U.S. . . . they have all had hard lives. Now they are almost at the end of their climbs to greatness;"
"(TAT17BM) This man has every desire to be free. He lives in a community of similar people."

Do not score "friends" giving help, "friends" rescuing, or the need for rescue.

5. *Work; Delay of Gratification*

(a) *References to a character working*, or the implication that a character is about to work or has been working, where this is not clearly suggested by the picture. Working at homework, or references to extensive practicing, or studying very hard, are scored here.

"(TAT1) I have to keep on practicing and I have to do my homework from school. This is just fouling up my time" (score once for practicing, once for homework);
"(TAT1) He has a whole bunch of homework to do, and to practice on the violin" (score twice);
"He has to study really hard;"
"He practiced all his life;"
"He is working;"
"(TAT17BM) His muscles are straining and hurting, but he must go on."

(b) *References to delay* (e.g., waiting, biding one's time, planning ahead) to attain some future gratification. A recognition that success will not be immediate.

"He wants to learn it, but not too fast, not in one day;"
"He's looking at a violin . . . later, about four months later he can play one chord on it . . . then 12 months later he can play 19 chords, no, he can play beginners . . . two years later he can play it very well;"
"(TAT1) He's looking at it . . . after a few years he was able to play one . . . ;"
"(TAT17BM) First he was planning his rhythm [his moves] or what he's going to do when he get's up there . . . ;"
"(TAT1) It's a car track and he's been trying to make this for about two weeks;"
"(TAT1) He didn't know how to play it . . . he waited and waited for someone to come and help him . . . his next door neighbor [finally] came and taught him."

The following two examples of "waiting" are borderline cases:

"He is thinking maybe he can play it. And he cares to do it when he grows up;"
"He is going to try to become a violinist in the next years to come."

Do not score references to exercising (unqualified) or to being tired from athletic endeavors.

Do not score references to a character thinking about the fact that he should do some work, but he doesn't do it.

Do not score "in the future he did it" unless the need for delay and/or work is clearly mentioned.

Do not score being trapped somewhere for a period a time before being freed.

6. *Role Differentiation*

(a) *Mention of characters in specific adult roles, other than* mother or father or other relatives (e.g., husband, wife, teacher, sailor, married couple, farmer, priest, soldier, scientist, rock-and-roll player, "professional," king, princess, gymnast (but not "trapezeman").

Also included here are specific historical characters.

Do not score mention of mythical or comic book roles here (e.g., giant, Tarzan).

Do not score a role indicated only by the addition of _____ man or _____ woman to a noun or adjective (e.g., trapezeman, violinman, strongman) *unless* this is the commonly accepted term to designate that role (e.g., mailman, businessman, fireman).

Do not score references to ominous roles (e.g., hypnotist); these should be scored under Projection (2).

Do not score "doctor" or "surgeon" on TAT 8BM.

Do not score violinist, musician, or similar term on TAT 1.

Do not score references to law enforcement officers in action here; score under Identification (7).

Do not score "king" on CAT 1.

Do not score "guards," "keepers," "soldiers," or "police" on TAT 17BM.

Do not score "husband," "wife," "boyfriend," "girlfriend," or "prostitute" on TAT 13MF.

Note: Capitalization may help differentiate, e.g, mountain climber (someone climbing mountains) from Mountain Climber (a profession).

7. *Moralism*

(a) *Stories that include a moralistic outcome*, in which good conquers evil, wrongdoing is punished (by other than parents), goodness begets goodness, justice triumphs, a (moral) lesson is learned, and so on.

"(TAT17BM) Prisoner . . . breaks out . . . starts to run . . . . Then he thought sooner or later the police will find him. So he decided it would just be better to go back, so he went back;"
"He escaped from the army . . . he was a prisoner [of war] . . . they chased him . . . . He lived to tell everybody;"
"He's been in prison [but] he's innocent . . . . He finally proves that he didn't do it . . . he captures whoever did it;"
"He was in jail for speeding . . . he's escaping . . . gonna kill himself for escaping;"
"Climbed the rope, saw a lion . . . he was scared. 'I'll never do it again;'"
"(TAT17BM) He is probably going to fall because he is a criminal;"
"He's thinking about this homework, wondering what happen if he doesn't get it done . . . he's just sitting there, when he walks home slowly . . . he doesn't do it. When he gets to school [next day] he won't have it done and then he'll have twice as much to do" (This is a borderline case, but is scored because the implication is that he is worse off for not having done what he was supposed to do).

(b) *Justified punishment administered by teacher*, judge, policeman, or other authority figure (excluding parents or guardians).

Included here are stories in which someone breaks (or has broken) the law, is apprehended, and *put in jail*. Usually, this will occur near the end of the story. If a character is in jail at the beginning of the story, score only if it is explained that he is in jail for having committed a crime.

"(TAT17BM) He robbed a bank . . . the police will get him . . . he will be in jail;"

Note: If being put in jail, prison, etc., is not justified (e.g., due to jealousy, fear, or whim) score under Projection (6).

Note: Score being chased, trapped, or caught by *police* under Identification (7).

Note: Unjustified punishment, or extremely cruel or unusual punishment is scored under Projection (6) or Projection (7).

Do not score if punishment is given by parents or guardian; instead, score Identification (3).

BIBLIOGRAPHY

Aber, J.L., Slade, A., Berger, B., Bresgi, I., & Kaplan, M. (1984). *The Parent development interview.* Unpublished manuscript.

Bank, S.P. & Kahn, M.D. (1982). *The sibling bond.* New York: Basic Books.

Bearison, B.J. (1991). *They never want to tell you: Children talk about cancer.* Cambridge: Harvard University Press.

Birenbaum, L.K., Ronbinson, J.A., Phillips, D.S., Stewart, B.J., & McCown, D.E. (1989-90). The response of children to the dying and death of a sibling. *Omega, 20*(3), 213-228.

Bowlby, J., (1973). *Attachment and Loss* (Vol. II). *Separation.* New York: Basic Books.

Bowlby, J., (1982). *Attachment and Loss* (Vol. I.) *Attachment* (2nd ed.). New York: Basic Books.

Bretherton, I., Prentiss, C., & Ridgeway, D., (1990). Family relationships as represented in a story-completion task at thirty-seven and fifty-four months of age. *New Directions for Child Development,* (48), 85-103.

Buchsbaum, H.K., & Emde, R.N., (1990). Play narratives in 36-month-old children. *Psychoanalytic Study of the Child* (45). New Haven: Yale University Press.

Bybee J.A. & Zigler, E. Self-image and guilt: A further test of the cognitive-developmental formulation. (1991). *Journal of Personality, 59*(4), 733-745.

Carpenter, P.J. & Sahler, O.J. (1991). Sibling perception and adaptation to childhood cancer: Conceptual

and methodological considerations. In Johnson, J.J. & Johnson, S.B. (eds.), *Advances in child health psychology* Gainsville: University of Florida Press.

Chesler, M.A. & Barbarin, O. (1987). *Childhood cancer and the family: Meeting the challenge of stress and support.* New York: Brunner/Mazel, Inc.

Chesler, M.A., Allswede, J., & Barbarin, O.O. (1992). Voices from the margin of the family: Siblings of children with cancer. *Journal of Psychosocial Oncology, 9* (4), 19-42.

Cohen, D.S., Friedrich, W.N., Jaworsky, T.M., Copeland, D., & Pendergrass, T. (1994). Pediatric cancer: Predicting sibling adjustment. *Journal of Clinical Psychology 50* (3), 303-319.

Cottle, T.J. (1980). *Children's secrets.* New York: Anchor Press/Doubleday.

Cramer, P. (1979). Defense mechanisms in adolescence. *Developmental Psychology 15*, 467-477.

Cramer, P. (1987). The development of defense mechanisms. *Journal of Personality 55* (4). 597-614.

Cramer, P. (1991) *Development of defense mechanisms: Theory, Research, and Assessment.* New York: Bruner-Mazel.

Cramer, P. et al. (1996) *Storytelling, Narrative, and the TAT.* New York: Guildford Press.

Cramer, P., Ford, R.Q., Blatt, S. (1988). Defense mechanisms in the anaclitic and introjective personality configuration. *Journal of Consulting and Clinical Psychology 56* (4), 610-616.

Cramer, P., & Gaul, R. (1988). The effects of success and failure on children's use of defense mechanisms. *Journal of Personality 56* (4), 729-741.

Dollinger S.J. and Cramer P. (1990). Children's defensive responses and emotional upset following a disaster: A projective assessment. *Journal of Personality Assessment 54* (1 & 2), 116-127.

Drotar, D. & Crawford, P. (1985). Psychological adaptation of siblings of chronically ill children: Research and practice implications. *Developmental and Behavioral Pediatrics, 6* (6), 355-362.

Fair, C.D., Spencer, E. D., Wiener, L., & Riekert, K. (1995). Healthy children in families affected by AIDS: Epidemiological and psychosocial considerations. *Child and Adolescent Social Work Journal, 12*(3), 165-181.

Fanos, J.H. & Johnson, J.P. (1995). Barriers to carrier testing for adult cystic fibrosis sibs: The importance of not knowing. *American Journal of Medical Genetics, 59,* 85-91.

Fanos, J.H. & Johnson J.P. (1995). Perception of carrier status by cystic fibrosis siblings. *American Journal of Human Genetics, 57,* 431-438.

Fanos, J.H. & Nickerson, B.G. (1991). Long-term effects of sibling death during adolescence. *Journal of Adolescent Research, 6* (1), 70-82.

Fanos, J.H. & Weiner, L. (1994). Tomorrow's survivors: Siblings of human immunodeficiency virus-infected children. *Developmental and Behavioral Pediatrics, 15* (3), S43-S48.

Freud, A., (1966), *The ego and the mechanisms of defense, Revised edition.* Madison, Connecticut: International Universities Press, Inc., 1966.

Freud, S., (1923). *The ego and the id.* (J. Riviere, trans.). New York: W.W. Norton & Co., 1960.

George, C., Kaplan, N., & Main, M. (1984/1996). *Adult attachment interview.* Unpublished manuscript. Department of Psychology. University of California, Berkeley. (Third edition)

Gershenson, A. (1998, December 13). Giving solace to children made orphans by AIDS. *The New York Times.* p. 52.

Harder, D.H., & Zalma, A. (1990). Two promising shame and guilt scales: A construct validity comparison. *Journal of Personality Assessment, 55*(3&4), 729-745.

Harder, D.W., Cutler, L., & Rockart, L. (1992). Assessment of shame and guilt and their relationships to psychopathology. *Journal of Personality Assessment, 59(3),* 584-604.

Hardy, M.S., Routh, D.K., Armstrong, F.D., Albrecht, J., & Davis, J. (1995) Interpersonal distance and coping in children with HIV and cancer. *Children's Health Care, 24*(2), 119-131.

Havermans, T. & Eiser, C. (1994). Siblings of a child with cancer. *Child: care, health, and development, 20,* 309-322.

Koocher, G.P. & O'Malley, J.E. (1981). The Damocles syndrome: Psychosocial consequences of surviving childhood cancer. New York: McGraw-Hill.

Krener, P. & Black Miller, F. (1989). Psychiatric response to HIV spectrum disease in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 28* (4), 596-605.

Kugler, K. & Jones, W.H. (1992). On conceptualizing and assessing guilt. *Journal of Personality and Social Psychology*, 62 (2), 318-327.

Lavigne, J.V. & Ryan, M. (1979). Psychological adjustment of siblings of children with chronic illness. *Pediatrics, 63*(4), 616-627.

Levine, C. (1989). The special needs of women, children and adolescents. In *The crisis in AIDS care: A call to action.* (pp. 63-74). New York: The Working Group of the Citizen's Commission on AIDS.

Lipson, M. (1994). Disclosure of diagnosis to children with human immunodeficiency virus or acquried immunodeficiency syndrome. *Developmental and Behavioral Pediatrics, 15*(3), S61-S65.

Lobato, D., Faust, D., & Spirito, A. (1988). Examining the effects of chronic disease and disablity on children's sibling relationships. *Journal of Pediatric Psychology, 13* (3), 389-407.

Mayers, A. & Spiegel, L. A parental support group in a pediatric AIDS clinic: Its usefulness and limitations. (1992). *Health and Social Work, 17* (3), 183-191

Mellins, C.A. & Ehrhardt, A.A. (1994). Families affected by pediatric acquired immunodeficiency syndrome: Sources of stress and coping. *Journal of Developmental and Behavioral Pediatrics, 15* (3), S54-S60.

Menke, E.M. (1987). The impact of a child's chronic illness of school-aged siblings. *Children's Health Care: Journal of the Association for the Care of Children's Health, 15*(3), 132-140.

Mueller, E., and Tingley, E., (1990). The bears' picnic: Children's representations of themselves and their families. New Directions for Child Development, (48), 47-65.

Pizzo, P.A. and Wilfert, C.M. (1991) Pediatric AIDS: The challenge of HIV infection in infants, children, and adolescents. Baltimore: Williams and Wilkins.

Richardson, L. (1998, January 2). When AIDS steals a parent. *The New York Times*. p. B1.

Rolland, J.S. (1994). Families, illness & disability: An integrative treatment model. New York: Basic Books.

Sahler, O.J., Roghmann, K.J., Carpenter, P.J., Mulhern, R.K., Dolgin, M.J., Sargent, J.R., Barbarin, O.A., Copeland, D.R., & Zeltzer, L.K. (1994). Sibling adaptation to childhood cancer collaborative study: Prevalence of sibling distress and definition of adaptation levels. *Developmental and Behavioral Pediatrics, 15* (5), 353-366.

Sargent, J., Sahler, O.J. & Roghmann, K.J., Mulhern, R.K., Barbarian, O.A., Carpenter, P.J., Copeland, D.R., Dolgin, M.J., & Zeltzer, L.K. (1995). Sibling adaptation to childhood cancer collaborative study: Siblings' perceptions of the cancer experience. *Journal of Pediatric Psychology, 20* (2), 151-164.

Saylor, C.F., Editor, (1993). *Children and disasters*. New York: Plenum Press.

Schulman, D.I. (1991) AIDS Discrimination: Its nature, meaning, and function. In N.F. McKenzie (Ed.) *The AIDS reader: Social, political, ethical issues*. New York: Meridian.

Siegel, K. & Gorey, E. (1994). Childhood bereavement due to parental death from acquired immunodeficiency syndrome. *Journal of Developmental and Behavioral Pediatrics, 15* (3), S66-S70.

Sourkes, B.M. (1987). Siblings of the child with a life-threatening illness. In F.F. Schachter and R.K.Stone (Eds.) *Practical concerns about siblings: Bridging the*

research-practice gap. (pp. 159-183) New York: The Haworth Press.

Spinetta, J.J., (ed). (1981). *Living with childhood cancer.* St. Louis: Mosby.

Spinetta, J.J. & Maloney, L.J. (1978). The child with cancer: Patterns of communication and denial. *Journal of Consulting and Clincial Psychology, 46*(6), 1540-1541.

Spinetta, J.J., Rigler, D., & Karon, M. (1974). Personal space as a measure of a dying child's sense of isolation. *Journal of Consulting and Clinical Psychology, 42*(6), 751-756.

Spinetta, J.J. (1974). The dying child's awareness of death: A review. *Psychological Bulletin, 81*(4), 256-260.

Stewart, S.M., Kennard, B.D., DeBolt, A., Petrik, K., Waller, D.A., & Andrews, W.S. (1993). Adaptation of siblings of children awaiting liver transplantation. *Children's Health Care, 22*(3) 205-215.

Task Force on Pediatric AIDS, American Psychological Association. (1989). Pediatric AIDS and human immunodeficiency virus infection. *American Psychologist, 44* (2), 258-264.

Terr, L. (1990). Too scared to cry: Psychic trauma in childhood. New York: Basic Books.

Thompson, A.B., Curtner, M.E., & O'Rear, M.R. (1994). The psychosocial adjustment of well siblings of chronically ill children. *Children's Health Care, 23*(3) 211-226.

Taylor-Brown, S. (1991). The impact of AIDS on foster care: A family-centered approach to services in the United States. *Child Welfare, LXX* (2), 193-209.

Vaillant, G.E. (Ed.) (1986). *Empirical studies of ego mechanisms of defense.* Washington, D.C.: American Psychiatric Press.

Vaillant, G.E., Bond, M. & Vaillant, C.D. (1986). *An empirically validated hierarchy of defense mechanisms.* Archives of general psychiatry, 43, 786-794.

Wiener, L.S., Best, A., & Pizzo, P.A. (1994). *Be a friend: Children who live with HIV speak.* Illinois: Albert Whiltman & Company.

Wiener, L., Best, A., & Halpern, A.(1994). Children speaking with children and families about HIV infection. In P.A. Pizzo & C.M. Wilfert (Eds.), *Pediatric AIDS: The Challenge of HIV Infection in Infants, Children, and Adolescents* (937-962). Baltimore, MD: Williams & Wilkins.

Wiener, L., Fair, C., & Pizzo, P.A.(1993). Care for the child with HIV infection and AIDS. In A. Armstrong-Dailey & S.Z. Goltzer (Eds.), *Hospice Care for Children* (85-104). New York, NY: Oxford University Press.

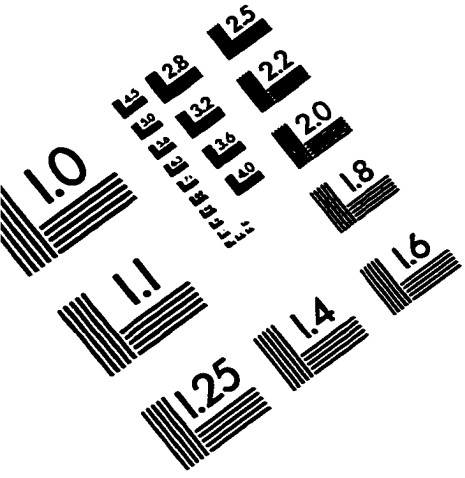
Wiener, L.S., Spencer, E.D., Davidson, R., & Fair, C. (1993). National telephone support groups: A new avenue toward psychosocial support for HIV-infected children and their families. *Social Work with Groups, 16*(3), 55-71.

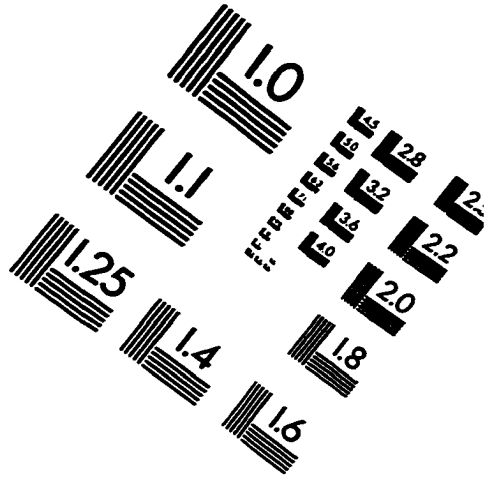
Wiener, L., Theut, S., Steinberg, S.M., Riekert, K.A., Pizzo, P.A. (1994) The HIV-infected child: Parental responses and psychosocial implications. *American Journal of Orthopsychiatry, 64*(3), 485-492.

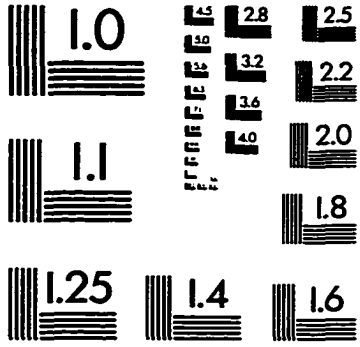
Williams, C. & Byubee, J. (1994). What do children feel guilty about? Developmental and gender differences. *Developmental Psychology, 30*(5), 617-623.

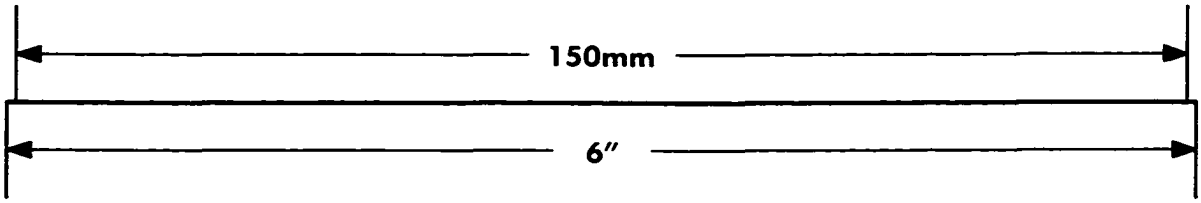
Zahn-Waxler, C. & Kochanska G., Krupnick, J., & McKnew, D. (1990). Patterns of guilt in children of depressed and well mothers. *Developmental Psychology, 26*(1), 51-59.

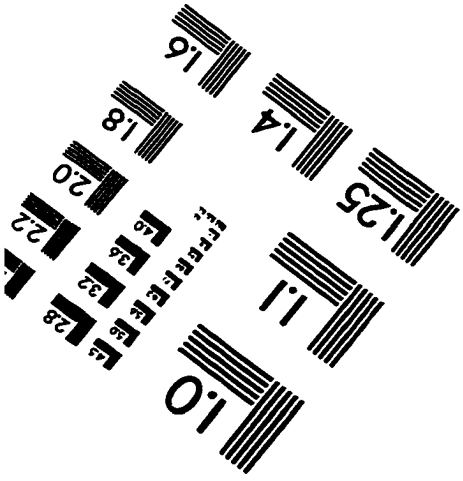
IMAGE EVALUATION
TEST TARGET (QA-3)

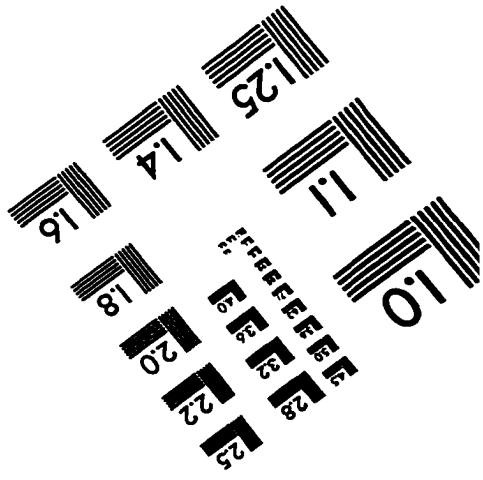












APPLIED IMAGE, Inc
1653 East Main Street
Rochester, NY 14609 USA
Phone: 716/482-0300
Fax: 716/288-5989