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The role of fantasy in adaptation: A study of homeless children

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THE ROLE OF FANTASY IN ADAPTATION:

A STUDY OF HOMELESS CHILDREN

by

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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.

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Abstract

THE ROLE OF FANTASY IN ADAPTATION:

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by

Paul J. Donahue

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The present study was intended to test the hypothesis that children with more structured and well-developed fantasies would better withstand the stress of being homeless, and would have more mature cognitive structures and more adaptive internal representations and interpersonal skills than their peers who lived in the same "welfare" hotel in New York City. It was based on the belief that their capacity for fantasy would provide these children with a means of interpreting the chaotic and often dangerous environment in which they live, and would allow them to respond to the crises and stressors that they face on a daily basis. It was also premised on the notion that the children with more developed fantasies would be better equipped to look with hope to the future, and would be able to envision more possibilities for themselves as adults.

These hypotheses were based on recent psychoanalytic and cognitive theories on the role of symbolic play and fantasy in development. A review of the literature on coping with stress and trauma had revealed that these advances had been

largely ignored in discussions of resilience in childhood, in part because of the historical emphasis in academic psychology on logical reasoning and rational discourse.

Forty-Six children from the largest family shelter in New York City were tested for the study. Children were placed in high and low fantasy groups based on their movement scores on the Rorschach Test and their total creativity score on the Torrance Circles Task. As predicted, the high fantasy children scored consistently higher on measures of cognition and object relations. They were not rated higher on scales of their behavioral functioning and level of aspiration. In a surprising finding, it was determined that the high fantasy children had spent a significantly longer period of time at the hotel in which they currently resided.

Additional analyses revealed that children who had been homeless for an extended period had less adaptive object relations and less developed cognitive skills. Yet high fantasy children in this group still scored in the higher ranges on the cognitive tests, and they were apparently able to remain focused and organized in the face of this ongoing trauma. However their object representations did suffer, as their images of relationships were much less adaptive than those of the high fantasy children who had been homeless for only a short period of time.

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CHAPTER 1

Introduction

> The palace of eternity is a golden, lovely place and every winter 3 rainbows keep the warmth in and the flowers are grown in gold flower pots and all of them grow small rainbows to guard them from harm.... In the palace there is no crime, and if a crime was committed that person would be banished from the palace. This made life very easy.
>
> From "The Palace of Eternity"
> Jason M., Age 12
> Prince George Hotel
> New York, NY 1987

Homelessness has become an indelible part of the American scene. Recent media attention and campaign rhetoric have heightened public awareness of the problem, and have raised concern in far-reaching quarters about the quality of shelter available to the economically disadvantaged. Despite the constant deluge of facts, figures and statistics, the numbers remain staggering. Estimates of the number of homeless individuals in this country run as high as 4 million.

According to the most recent estimates, there are nearly 15,000 people housed in temporary shelters in New York City. The greater proportion of this population are children. In her comprehensive report on the lives of homeless families, Molnar (1988) noted that half of the children were under 5

years of age. Few mothers in the shelters and "welfare" hotels that she surveyed had access to prenatal care, and 1 out of 6 of their children were underweight at birth. Poor nutrition is a constant problem, and many of the women eligible for food stamps do not receive them. Few of these children are properly immunized. Diseases such as lead poisoning, diarrhea, asthma, and pneumonia are fairly common. Only half of the approximately 6000 school-aged children that Molnar studied attended school regularly, and few toddlers were enrolled in early education programs.

The effects of these conditions are often catastrophic for both child and parent. Molnar (1988) found that the majority of the pre-schoolers living in the Martinique Hotel had short attention spans, poor impulse control and speech delays, and were prone to engage in regressive behavior. They were overly aggressive and exhibited generally inappropriate social behavior. Bassuk and Rubin (1987) found that more than half of the children living in shelters in Massachusetts were in need of psychiatric care, based on their responses to scales of depression and anxiety. A similar number suffered from learning disabilities. Researchers from the St. Louis Homeless Children's project found that 45% of the children they tested were at, or below, the borderline range of intelligence (Whitman, Stretch, and Accardo, 1987, as cited in Molnar, in press).

Depression is fairly common among homeless women (Molnar, 1988), and the mothers living in the hotels and

shelters often do not have the emotional resources or energy to provide their children with a warm, nurturing environment. This task is made all the more difficult by the dangers and insecurities inherent in most of the hotels, and by the overcrowded living conditions which leave little room for a mother and child to have private moments together. As a result, attachment patterns between homeless mothers and their young children are often disrupted or more permanently impaired, and as a number of researchers and clinicians have noted, there is an unsettling degree of ambivalence in their relationships (Molnar, 1988; Phillips and Hartigan, 1984, as cited in Molnar, in press).

Drawing from his observations of life in the emergency shelters and welfare hotels in New York, Kozol (1988) argues that homelessness has created a "lost generation" of children who have been irreparably damaged by the chaotic, frightening and depriving environment in which they live. Though such labels are useful for the advocate for the homeless, and seem well-supported by the conditions described above, this blanket pathologizing obviates the necessity for examining the problem more carefully, and prevents us from discovering the interactive determinants of the children's developmental disorders. More importantly, by ignoring individual differences, Kozol neglects a crucial fact: some children do survive. Though difficult to comprehend, there are children who cope, and sometimes flourish under these harshest of circumstances. There are now a number of reports of

individual successes-the honor student, the budding artist, and the television actor. Molnar (1988) described the behavior of one 3 year-old girl who lives in a hotel with her depressed mother:

> Wanda is a child who challenges the odds. She is spunky, talkative, personable. She easily switches from Spanish to English when interacting with non-Spanish adults. She can play alone for extended periods, building complicated structures with Legos, playing in the sandbox, looking at books. She enjoys singing and fingerplays. Her social interaction skills with peers are among the most competent that we observed. She approaches children to play with them, to interact with them, if they are unhappy. A natural leader, she often initiates activities. She is also independent, not easily frustrated, and can negotiate many self-help tasks without help. She is a child who has flourished in a developmental day care program (p.84.).

Who are these children who challenge the odds? What skills and capacities allow them to cope? In recent years, numerous researchers have attempted to answer these questions by studying children who have survived other traumatic situations. Most investigators have attributed their successes to their ability to avoid or insulate themselves from noxious stimuli in the environment. These children are able to draw on resources in their family and beyond, and they have developed adaptive cognitive and interpersonal skills that help them fend off dangers and stressors.

In this study it will be argued that this picture of the invulnerable child, though accurate as far as it extends, is an incomplete one. True resilience, as defined here,

involves not only the ability to withstand external pressures, but also the capacity to transform painful experiences through the use of internal representations and adaptive fantasy. This study is designed to provide evidence that the ability to create other worlds internally serves self-protective functions, and enables the resilient child to actively engage, interpret, and respond to crises and stressors in his environment. It will also be argued that having well-developed fantasies does not limit children's interpersonal contacts, but rather, that these fantasies serve to strengthen their relationships with their peers and adults, and enable them to look with hope towards the future.

In the following discussion, I will review the literature on coping with stress in childhood, and examine the factors that have been identified as contributing to resilience. I will then discuss some of the shortcomings of this research, and present the context in which the study of symbols and fantasy can potentially provide insight into children's ability to adapt to difficult situations. After examining some of the theoretical positions on symbols and fantasy in childhood, I will review the recent research on their role in development.

CHAPTER 2

Literature Review

Review of the Literature on Coping with Stress and Trauma in Childhood

In his review of the literature, Rutter (1983) reports that children under stress are susceptible to depression, enuresis, and psychiatric disorders. Yet many of these studies failed to specify the nature of the stressor, or did not differentiate among them. Recently however, research on children's response to stress has become more focused, and many studies have yielded surprising results. By examining the effects on children of separation and loss, economic disadvantage, child abuse and neglect, parental schizophrenia, and war, psychologists have identified a number of variables which contribute to successful coping.

Effects of Separation

A number of developmental psychologists (Bowlby, 1973; Mahler, Pine, and Bergman, 1975) point to separation as one of the key conflicts that must be negotiated by the young child. It is a difficult and often painful experience under the best circumstances, and it can easily be exacerbated by unexpected events or circumstances that are beyond the infant's control. Hospitalization is one such event, and it is particularly traumatic for children between the ages of 6 months and 4 years, because they are not yet able to maintain their relationship with the mother in her absence. Studies

indicate that these effects can be minimized by daily family visits or by the attentive care of a consistently available nurse (Rutter, 1983). Children also seem to be affected by their parents' mental state, and adapt much better when their parents remain calm. Pre-admission preparation also seems to improve adjustment. Other research however, suggests that it might be more adaptive for the child to cognitively reorient themselves away from the hospital situation (Santostefano, 1978). In any case, most children do learn to cope, and hospitalization does not prove to be a traumatic experience for them.

The birth of a sibling often disrupts a child's life. Most of these disturbances are related to the mother's negative reaction to the older sibling or her depression after the birth. Young children again seem to be more vulnerable, as parents do not yet have well-established interaction patterns with them. Boys seem more susceptible than girls to a negative reaction to this experience, and are more likely to withdraw into themselves (Rutter, 1983).

With the changing demographics in this country, research on the effect of divorce has begun to proliferate. Again boys seem more likely to suffer ill effects from this event (Hetherington, Wallerstein and Kelley, cited in Rutter, 1983). Age is not a significant outcome variable, as children of all ages wish to change the results of the divorce, and feel at least partially responsible for the dissolution of the marriage (Wallerstein, 1983). Many

children also find it difficult to bring closure to the situation, and their attempts are often confounded by extended periods of economic and social transition. Wallerstein points out that divorce might be too difficult to manage in fantasy. Even when the child is forewarned, the images of reunion are often too potent and lasting. Despite these difficulties, most children go through a series of steps that eventually allow them to adjust to their new situation. Those who do not are often the victims of neglect after the divorce. Children with low self-confidence and those who cannot overcome their anger and aggression also fare less well.

Effects of Early Loss

The death of a parent is a traumatic event for all children, and it may have long lasting consequences. Bowlby (1969) argues that early loss often leads to depression and failure to learn in childhood, and that the death sensitizes children to later setbacks or threats of loss. The young child is limited by his cognitive inability to understand the finality of death, and usually has little opportunity to anticipate its occurrence (Cohler, 1987). Some researchers predict dire outcomes in the later years of childhood (Arthur and Kernan, 1964), while others claim that early loss can be linked to adult depression, at least in women (Brown and Harris, 1968).

Contradicting these findings are studies that claim that the emotional shock, depression, and school difficulties which follow the death of a parent are short-lived phenomenons. Though not easily comprehensible to the younger child, the reality of death is eventually accepted as one the universals of life (Wallerstein, 1987). The effect of the loss can be mitigated by the strength of the relationship to the remaining parent or the parental substitute. Few children suffer from psychiatric disturbances for long periods after the death, though they may be more vulnerable to the effects of multiple stressors later in childhood. In some instances, the death of a parent seems to enhance a child's resources. In a fascinating study, Fogelman (1987) discovered that a high proportion of the people who risked their lives to shield Jews from the Nazis had endured an early loss. She suggests that this event acts as a "catalyzing force, which awakens one's sensitivity to the need for life-enhancing actions" (p. 210).

Effects of Poverty

The effects of poverty on children have come under increasing scrutiny in the past 20 years, and should prove relevant to a discussion of homelessness. The relationship between socioeconomic status (SES) and psychological functioning is a controversial and confusing topic, as various researchers have focused on the social, economic, and educational components of being poor. Chiland (1974) cites

research linking economic status to physical illness, and bases this relationship on the "working-class preoccupations." She includes "job insecurity, little time at home, and uncomfortable living conditions" under this umbrella, and she argues that they limit linguistic play and "parent-child playfulness." Hers is a broad deprivation model which fails to separate economic and social realities from the quality of the parent-child relationship.

Some researchers have attempted to clarify this issue. In attempting to explain the correlation between social class and schizophrenia, Kohn (1973) argues that economic adversity fosters a limited view of social reality. He claims that impoverished adults do not feel a sense of agency, and do not believe that they have much impact on the events or people in their lives.[1] Consequently, they are particularly vulnerable to stress. They are less able to help their children negotiate problems or to form a protective shield around them. Research results, however, are less clear-cut. Though poverty is correlated with emotional disorders and cognitive impairment, this relationship does not hold for the first two years of life, when parental influence is at its height (Escalona, 1974). It may be that the adult's feelings of helplessness have not yet been transmitted to the child. Conversely, parenting might be one of the areas in which

[1] Kozol (1988) observed this pattern in the shelters of New York, and he reports that many homeless adults seem to be in a state of learned helplessness after continued failures in dealing with the bureaucratic morass of the welfare system.

poorer adults feel competent and secure, and their caretaking behaviors may help maintain their self-esteem.

Effects of Child Abuse and Neglect

Research on child abuse and neglect is less discrepant. Abused children generally have poor self-images and feel like they have little control over their lives. They are often anxiously attached, and show little emotion in their interactions with their mothers. Even if they are securely attached, their competence and social skills tend to decline in the pre-school years (Farber and Egeland, 1987). After their earliest bonds are shattered, they have little hope of escaping unscarred.

Yet there are children who learn to cope with this trauma. When their mothers are supportive and take an active role in their instruction, some abused children are able to develop effective learning strategies (Farber and Egeland, 1987). Good quality day care also seems to mitigate the effects of the abuse. Some of the more competent children develop idiosyncratic coping skills as a response to their experience. Farber and Egeland describe the behavior of one girl who had been physically abused in infancy. She became hypervigilant in pre-school, and tried to learn as much as she could about her new environment. Though they remain pessimistic about the future of these children, these researchers do believe that by actively restructuring the environments of abused children, they can temper some of the effects of their early trauma.

Effects of Parental Psychosis

The original studies of vulnerable children focused on the offspring of psychiatrically impaired adults. Recent reports suggest that these children have more emotional, academic, and behavioral problems, and lower intelligence (Worland, Weeks, and Janes, 1987). Studies conducted as part of the St Louis Risk Research Project indicate that these children show more primitive content on the Rorschach, and have higher overall pathology scores. Anthony (1987a) reports that even well-adjusted children of schizophrenics use distancing and withdrawal as defenses.

For children who can maintain warm relationships with the non-disturbed parent and other adult role models, the prognosis is less grim. In a certain sub-group, the illness seems to have a "steeling" effect (Bleuler, 1978), and these children appear hardened to the reality of the disease and determined not to fall prey to it. They are able to objectify the illness, maintain distance from it (in this instance, an adaptive coping mechanism, not a pathological defense), and establish internal control over their own lives (Cohler, 1987). By creating a clear distinction between their own reality and their parent's unreality they avoid getting pulled into the delusional system.

Effects of War

Research on the effects of war on children have frequently yielded surprising results. In their studies of

children who survived the Blitz during World War II, Freud and Burlingham (1943) reported that they exhibited fewer neurotic symptoms than their counterparts who had been evacuated from the cities. They experienced this event not as a trauma, but as an "accident, in line with the other accidents of childhood" (p. 21). Children who had been interned in concentration camps fared less well, and many remained hostile, anxious, and vengeful long after their release. They tended to be more trustful of each other, and were reluctant to interact with adults (Freud and Dann, 1951). Most of these children remained vulnerable to environmental changes, yet 60% of them failed to develop any significant psychiatric symptoms. Those who did develop disturbances were likely to have been maladjusted prior to this experience. Even these children seemed capable of recovering if they received nurturant care and emotional support.

More current studies have confirmed these favorable prognoses for children living in war zones. Few children have experienced psychiatric difficulties during the periods of unrest in Northern Ireland (Garmezy, 1983). Children living in an Israeli kibbutzim that came under enemy fire showed no more anxiety than their peers (Ziv and Israel, 1973). Baker (1990) reports that Palestinian children who have been active participants in the Intifada have greater self-esteem than other Palestinian children, though they also exhibit more symptoms of depression and anxiety. Social

desirability factors may have impacted on these results, but the children in these studies appear to have been genuinely shielded by the strength of the shared community ideology and their parents' sense of security and support.

Response to Stress: The Child's Perspective

Taken as a whole, this research on stress in childhood calls into question many assumptions regarding children's vulnerability. As Garmezy (1974) argues, "more children, when followed to adulthood, are likely to escape our dire predictions than fall victim to them." Far too often, clinicians judge children's reactions in terms of adult schemas and constructs, and ignore the fact that events that are stressful for adults do not necessarily have the same impact on children. When asked to rate a number of events by the amount of anxiety they caused, one group of children put "getting lost," "a poor report card," "not making a 100," and "being picked last on a team" on top of the list (Yamomoto, 1979). Though these responses certainly have a defensive component, and come from children who are not under any particular pressures, it is still difficult for adults to relate to their concept of stress. Most psychologists have also been inhibited by their tendency to focus on psychopathology. Fortunately, the burgeoning literature on the "invulnerable child" has helped to expand this lens, and has proven that the study of competence and survival strategies is an equally worthy endeavor.

Factors Contributing to Resilience in Children

The coping research allows us to reflect on the factors which contribute to individual differences in development under stressful conditions. Though they recognize a number of influences, most researchers are able to attribute their results to three variables: temperament, mother-child interactions, and social supports. Survivors are apparently insulated by the advantages provided by favorable outcomes in these three areas.

Temperament

There is increasing evidence that the behavior styles of infants differ markedly (Chess and Thomas, 1973; Stern, 1985), and that temperamental influences continue to influence development throughout childhood. From birth, some children are more robust, energetic, and curious. These strengths help to limit their stress reactions to new experiences, such as birth of a sibling (Rutter, 1983), and seem to contribute to their resilience to psychiatric symptomatology. More importantly, temperament impacts significantly on the early mother-child relationship. As Anthony (1974) explains, vulnerable children are less likely to develop a warm bonding relationship because of their "low sensory receptivity and their congenitally or defensively raised threshold, and lower motor activity." Unlike their more active peers, these children are unable to initiate and sustain eye contact and smiling (Stern, 1974), and do not give their parents many opportunities for enjoyable, playful

interactions. This can put them at a significant disadvantage, since children whose mothers enjoy them are more trusting and spontaneous, and have better self-images and more adaptive coping skills (Murphy and Moriarity, 1976).

Mother-Child Interactions

As the studies of temperament indicate, the mother-child relationship usually figures prominently in research on resilience. The readjustment of hospitalized children is related to parental behavior after discharge (Rutter, 1983). A similar effect can be seen in children who experience divorce or the death of a parent. They are likely to adjust more quickly and easily when the remaining parent is supportive and comforting (Rutter, 1983; Wallerstein, 1983). Anthony (1987a) has observed that children of schizophrenics often relate better than children with depressed parents, because their mothers can still interact warmly with them. Resilient low-income children usually have parents who are concerned with their education, and provide a warm and encouraging home environment (Garmezy, 1983). In wartime, children cope better when they remain with parents who act as strong role models (Freud and Burlingham, 1943; Garmezy, 1983).

A positive mother-child relationship offers the child protection and the room to grow. A parent who can maintain a consistent, warm environment reduces the potency of external threats and protects the child from becoming overly anxious

(Winnicott, 1965; Anthony, 1987b). Unhindered by the burdens of a painful reality, he is free to exercise his cognitive and motor capacities. Attachment theorists, including Bowlby (1969, 1973) and Ainsworh (1979), argue that the earliest bonds give an infant a sense of security which permit him to venture forth and explore the world. According to Mahler, (Mahler et al., 1975) and Murphy and Moriarity (1976), the imagined presence of the mother allows the child to take risks without fear of punishment or abandonment. Mothers who are themselves secure are more likely to encourage their child's efforts at separation and to allow them to receive care from non-family members (Musick, Stott, Spencer, Goldman, and Cohler, 1987).

For many parents, this is a difficult step to take. Those who are insecure about their own relationships often need to receive as much or from their children as they give to them. Mothers who are emotionally unavailable can not provide their children with a secure base to explore the world (Cicchetti and Aber, 1986). Some parents lack the skills to successfully negotiate the tasks of daily living. They cannot mediate between their children and the environment, and may increase the likelihood of crisis situations. Patterson (1983) observed that parents of anti-social children are ineffective problem-solvers, and tend to deliver punishment instead of helping their children to resolve their conflicts. These mishandled situations typically initiate a circular reaction, further damaging the

relationship and opening the child to additional insults from his environment. In most families, this cycle is not easily broken.

Social Supports

Social supports can also help shield a child from the effects of potentially stressful situations. Gore (cited in Anthony, 1987b) argues that it is the "transactions set in motion by the support networks" which determine survival and not the individuals themselves. A nurturant school environment and peer support can help children through difficult situations (Freud and Dann, 1951; Rutter, 1983). Studies of children living in kibbutzim in Israel provide evidence that the community can also serve as a source of strength. Most researchers, however, emphasize the significance of a strong relationship with one adult during times of upheaval. Studies of resilient disadvantaged children point to the importance of their having one identification figure (Rutter, 1983). Children whose parents divorce adjust better when they can draw support from adults outside of the family (Wallerstein, 1983). Anthony (1974) found that resilient children of schizophrenics were differentiated by their ability to use other adults as substitutes for their parents. These relationships seem to provide an extra buffer for children who resist stress. In some cases, they serve as their primary means of defense against hostile forces that are beyond their control.

Emotional and Intellectual Functioning of Resilient Children

Stress-resilient children are generally high functioning. They are emotionally secure and have positive self-images (Garmezy, 1983). Though often in the midst of chaos, they feel in control of their lives and rely on their own self-comforting mechanisms (Anthony, 1987; Cohler, 1987). Despite their self-reliance, resilient children are usually cooperative and friendly, and have good social skills (Freud and Burlingham, 1943; Garmezy, 1987; Murphy and Moriarity, 1976).

More often than not it is their cognitive skills which separate survivors from their less adaptive peers. Though not necessarily more intelligent, they are more alert and have greater perceptual abilities (Murphy and Moriarity, 1976). Good copers are able to delay gratification, and are less impulsive than their counterparts (Kagan, 1966; Murphy and Moriarity, 1976). They are also capable of planning ahead and utilizing mental trial and error (Cohler, 1987).

These cognitive capacities allow them to realistically appraise their situations. Well-adjusted children of schizophrenics and other survivors of trauma are able to separate reality from fantasy, and maintain an objective stance. Vulnerable children are often hampered by their inability to represent reality clearly and authentically, and they are less successful in evaluating the actions and emotions of others.

Resilient children use their cognitive skills to understand and master their situations. Murphy and Moriarity (1976) observed that good copers could maintain an internal equilibrium and actively respond to problems. This dual capacity gives the them the strength to resolve conflict, and allows them to look with hope towards the future.

When their pragmatic attempts at mastery fail, these children create alternative realities. They may restructure their environment to protect themselves from an intolerable reality or a situation over which they have no control (Anthony, 1987b; Murphy and Moriarity, 1976). Murphy (1987) contends that these transformations of limits are "strategic withdrawals," effective means of reducing tension. Other researchers argue that this escape into fantasy might prove productive, particularly for those with artistic inclinations (Kris, 1952; Anthony, 1987b). The crucial achievement of copers is their ability to maintain distance from their productions.

With a few notable exceptions, this last factor has been largely ignored or delegated to an auxiliary role in discussions of resilience. The prevalent belief that fantasy is a form of escapism has limited further consideration of its function in helping children to overcome stressful situations. This relegating of fantasy stems from two trends in psychology. First, there is the traditional notion that children should focus primarily on reality concerns as they grow older. In addition, most research on stress is based on

a developmental, trauma model. In this conception, early emotional insults have a direct link to later psychopathology. Few therapeutic options remain after the initial experience beyond the prevention of additional traumas and the maintenance of a warm, caring, protective environment. The idea that fantasy can provide a means of reworking or transforming early painful experiences cannot be easily reconciled with this model.

Limitations of the Developmental Model

Many researchers have noted the difficulties inherent in attempts to predict a life course based on a single stressful event in childhood. But basing our judgements primarily on the "quality" of early experiences proves equally problematic. In this model, death of a parent should be a catastrophic event. By and large however, children who endure early loss show little long-term effects, particularly when they are younger at the time of the death (Cohler, 1987). These results suggest that the strict developmental model needs to be reexamined and that new variables need to be teased out of the data that we now possess.

Attachment theory is a useful case in point. Bowlby (1969, 1973), Ainsworth (1979), and their colleagues argue that the nature of the bond formed between mother and child correlates with the child's emerging sense of self, and his later school performance and social behavior. A large body of research proclaims the severe and lasting effects of early

separation on child development and adult adjustment. Yet a number of recent studies refute these claims. Escalona (1974) argues that children who experience early loss exhibit few differences in their cognitive and emotional functioning by the time they reach school-age. Conversely, Farber and Egeland (1987) found that the most securely attached abused children were no longer competent in pre-school. The retrospective research of Goertzel and Goertzel (1962) adds more confusing evidence. In their study of the early experiences of 400 famous men and women of the 20th century, they found that over three-quarters of them were "highly stressed as children by poverty, broken homes, rejection, overpossessive mothers, estranged or domineering parents, and handicaps such as blindness, deafness, crippling conditions, small size, chronic illness, and special defects." Clearly other factors besides constitution and family support must have played a role in their triumphs.

The problem with attachment and other developmental models is two-fold. Firstly, they suffer from the traditional focus on psychopathology, which requires researchers to identify the points in development to which later pathology can be traced. These are labeled "fixations" or "critical periods," and are assumed to have a direct linkage to adult disturbances. This assumption of linearity is equally troublesome, for it disregards the potential impact of other factors, including evolving family relationships, cognitive development and changing life circumstances.

Reevaluating the Coping Mechanisms of Resilient Children

A comprehensive model of the development of resilience must take account of social factors, the evolving parent-child relationship, cognitive growth, and environmental contingencies. It must also consider the effects of experience. As Murphy and Moriarity (1976) have found, children's need for achievement is based less on early interactions than on the outcomes of their attempts at coping behavior. Feedback it seems, is essential to the child's developing sense of self.

Maccoby (1983) has observed that children rely less on their attachment figures as they grow older, when they have developed "situationally relevant coping behaviors." It seems crucial to determine at what point they can make this transition. We must also look at the changing representations of the parents as the child grows older, and evaluate the role that these more distant linkages play in coping with stress.[2]

Only by studying the symbolic processes of children can we satisfy these requirements, and learn how resilient children make sense of their world. As Cohler (1987) argues, unlike the predictive approach of developmentalists, an investigation of symbolic processes allows us to examine the "shifting meanings" that children attribute to their

[2] See Main, Kaplan, and Cassidy, (1985) and Slade and Aber (1987) for discussions of internal working models of attachment.

experiences as they continue to replay them (see also Santostefano, 1988). Symbols and fantasy allow children to transcend their situations and to mentally rehearse solutions to their problems. This capacity, it seems, may well be one of the key differentiating variables in good coping, and not an ancillary phenomenon.

Review of the Theoretical Literature on Symbolic Play and Fantasy

Symbolic Development in Infancy

Infant researchers continue to focus on the interaction between mother and child as the basis for the child's earliest knowledge of the world. Winnicott (1965) stresses the mother's role in providing a warm, nurturant "holding environment" that fosters the child's cognitive and emotional growth. Symbolic forms develop in the playful intimacy between mother and infant, and they provide the basis for the child's early autonomous strivings. The symbols serve a double function, strengthening the bond with the mother, and allowing for the recognition of her soothing presence in her absence. Later these symbols develop in play with transitional objects. In this framework, the critical feature of the early attachment bond is its role in creating an atmosphere in which symbols can emerge. Recent research linking secure attachment to the development of symbolic play supports this hypothesis (Bretherton, 1979; Slade, 1986; Slade, 1988).

Cognitive psychologists have also emphasized the role of symbols in early development. Like Winnicott, Werner and Kaplan (1963) stress the social development of symbols. They contend that they emerge within the "primordial sharing situation" in which the mother meets the child's gestures, and they begin to reflect on the world together. In this context, the early sensory-motor experiences of the infant undergo a "shift of function," mediated by symbols, which allows the child to "know objects, reflect on them, and present them to himself" (p. 18). The representations that are formed include the infant's bodily state and actions and reactions to external forces.

Stern's (1985) recent study of infancy confirms this conception. He has observed that infants learn about the world primarily through interpersonal experiences with their mothers. These experiences are encoded in their entirety, as the cognitive, affective, and perceptual components of events are all taken into account. The infant's knowledge base is composed of symbolic abstractions of these experiences, which he applies across similar situations. These representations provide the infant with the means for knowing the world, for sharing with others, and for comforting himself through play with objects that evoke the image of his mother.

In these discussions of early development, it is the symbolic forms which give children a means of coping. The infant's bond with the mother provides the context for

these representations, which are then used to maintain comfort and security during her absence. The symbols also form a bridge to the external world, and allow the child to explore new objects, compare his perceptions to earlier experiences, and choose a course of action. This process enables the child to function in a world that is often frightening and overwhelming to him. The next section will address the transformation of symbols in development, and the function that they serve later in childhood.

Symbolic Development in Childhood

Contributions from Psychoanalytic Psychology

Psychoanalytic theorists have frequently commented on the symbolic aspects of children's play. Freud (1922, 1926) believed that play was motivated by the child's unconscious wish to gratify his instinctual urges. He maintained that children use play to repeat and master early traumas by turning the originally passive experience into active assimilation. Waelder (1932) expanded upon Freud's notion of play, though he too emphasized its role in the child's attempts at reducing tension and gaining mastery over experience. In his conception, play serves both inner (instinctual) and outer (assimilation of disruptive experiences) regulatory functions. Despite these benefits, both Freud and Waelder stressed the necessity of children's eventual giving up of play so that he may turn to the reality-based concerns of the ego.

Anna Freud (1939, 1943, 1965) proposed a similar model of play. In her studies of children during World War II, she observed that play could serve effective defensive functions, and protect the child from overwhelming anxiety. She believed that children's fantasy could serve similar purposes, and could also provide a context for wish fulfillment and attempts at mastery. Yet she too argued that play and fantasy must be relinquished, for the "ego's capacity for denying reality is wholly inconsistent with another function, greatly prized by it- the capacity to recognize and critically test the reality of objects" (1939, p. 80). She contended that the continued use of symbols in latency constituted an abnormal character trait, akin to the delusions of the adult psychotic. She believed that most older children reach a compromise and are able to satisfy their wishes in conscious daydreams.

The growth of ego psychology has led to an extension of the role of symbols and unconscious fantasy. Kris (1952) argued that the beneficial aspects of play, including instinctual gratification and the repetition of trauma for the sake of mastery, could be adaptively maintained in later childhood, as long as the play remained "in the service of the ego." He contended that these functions were often transferred to children's stories and fairy tales. A similar process could be engendered by the "aesthetic illusion" of mature art forms, which protects adults from the intrusions of reality. In the individual with a durable ego, the

relaxation of its control brings gratification. For those with more tenuous structures, the regressive act can lead to magical or psychotic thinking. Ideally, one has the strength and flexibility to move back and forth with impunity. For Kris, the best artist is one who can draw his inspiration from his internal psychic apparatus and use his logical thought processes to critically appraise his creations.

Though not explicitly addressed in his model, Hartmann's (1950) reformulation of the ego expanded the potential role of symbolic play. He argued that there are certain ego functions that do not arise out of conflict. Other aspects of the ego apparatus which may have originally served defensive purposes could later be transformed and gain "secondary autonomy," contributing to the individuals adaptation and organization. George Klein (1976) extended Hartmann's notion of the ego, and argued that crises and conflicts are inescapable in normal development, providing conditions not only for psychopathology but also for psychological growth. These theoretical advances allow for the possibility that symbolic play may be used as a means of adjustment, as well as a response to conflict. Erikson (1950) took this route, and he proposed that play represented the ego's attempts at synthesis as it seeks to "master the various areas of life, especially those in which the individual finds his self, his body, and his social role wanting and trailing" (pp. 211-212). In his formulation, play is no longer solely a means of mastering conflict, but

it also contributes to the ego's attempts to master reality, giving the child the opportunity to plan and rehearse actions, and evaluate and respond to experience.

By proposing an independent drive for mastery and competence, White (1959) placed play squarely in the non-conflictual sphere. Previous theorists, including Kris and Waelder had spoke of the "functional pleasure" in play, but White focused on the child's desire to play "for its own sake." He believed that this urge to seek efficacy originated as a survival instinct, that compelled man to explore his environment and to assess the potential impact he could have upon it. Only through continual interactions can the child learn to adapt to its surroundings. It is the drive towards efficacy which permits him to gain experience in fending off danger and coping with crises.

In sum, recent psychoanalytic conceptions of symbolic play have gone well beyond the original notions of wish fulfillment and mastery of conflict. The new theorists recognize that play has a number of adaptive features, even when its content is "regressive." Play has gained importance as a proactive means of regulating internal distress, understanding experiences and mastering new situations. As Winnicott (1971) proclaims, play is "a creative experience, ... a basic form of living."

Contributions from Cognitive/Developmental Psychology

Cognitive developmentalists have generally not addressed the emotional aspects of symbolic play, but have focused

instead on its role in intellectual development. Piaget (1942) observed that symbols, arising out of habitualized movements and ritualized games, allowed infants and toddlers to abstract out the key elements of play. He believed that symbolic play was "pure assimilation," which helped the child integrate his perceptions of motor activities into a limited number of schemas, but did not provide him with new structures. Like the early Freudians, he too felt that the child should soon turn his attention to the external world where the real demands of intellectual adaptation could be met through the imitation of role models.[3]

A broader view of play was proposed by Vygotsky (1978), the influential Russian psychologist. Like the psychoanalytic theorists, he believed that play was a means of gratifying desires that arise when the child begins to experience "unrealizable tendencies." Contrary to Piaget, Vygotsky argued that play was crucial to the development of logical thought. In his conception, play is a transitional step towards more developed abstract thinking, which reaches its peak in the symbolic forms of language. Play provides the first opportunity for children to separate objects and thoughts from their meaning. Like White, he believed that play was a spontaneous way for children to practice forming definitions and concepts of objects. For Vygotsky, play and

[3] Part of the difficulty in comparing Piaget to other theorists is his limited notion of symbolic play, which does not include role playing or games of imitation.

other intellectual activity could only develop within an interpersonal context, as he maintained that "all the higher functions originate as actual relations between human individuals." (p. 57).

However, Vygotsky did not believe that the urge towards mastery or competence were essential features of symbolic play. In his theory, reality constructs are irrelevant in "the field of meaning," where actions and objects exist primarily as experiences to be manipulated and abstracted from. Nonetheless, Vygotsky celebrates symbolic play as the "highest level of pre-school development," and he gives it a central role in the creation of real life roles and plans. Play provides a "new relation between the field of meaning and the visual field (p. 104)," though this relationship is not fully understood until the child acquires a broader grasp of language. For Vygotsky, as with Piaget, play serves its purpose early, and then must give way to more socially productive, rule-based games.

Recent advances in developmental theory have extended these early formulations. Though she does not specifically address the implications of symbolic play, Nelson (1982) has observed that children's representation and replaying of events have adaptive consequences. She maintains that event representations develop over time, and are inevitably reformed by experience. In the same vein as Stern, she argues that children record events holistically, and include the interpersonal context and their cognitive and affective

state in their representations. In her study of script development, Nelson has found that a child, under the guidance of an adult role model, can participate in and represent an event at the same time, a process she labels "participatory interaction." The child uses these representations in similar situations to establish a cognitive context that allows for more effective interpretations of persons, objects, and events.

Bretherton (1984) also stresses the role of repeated experience of similar events in the formation and transformation of representations. In her framework, "event schematas" include goals and motivations, and serve in the interpretation of experience and in the planning of future actions. She contends that symbolic play is an adaptive means of gaining perspective on reality. In contrast to the Freudian position, she defends the blending of non-reality and reality elements as a creative way of considering alternative modes of behavior. Bretherton believes that this function may be linked to an imaginary predisposition in people who are less "object dependent." This capacity gives them more interpersonal flexibility, as they are more capable of sharing their inner world with others.

To summarize, cognitive developmentalists have placed the symbolic function within an adaptive model of intellectual growth. Though symbols may develop out of conflict, their primary task is to help the individual interpret his experiences and plan for the future. These

representations have a feedback mechanism and are continually reworked by the outcomes of actions. Although they contribute to more autonomous functioning, the symbolic images are originally formed in an interpersonal context, and they continue to provide opportunities for intimate experiences with others.

Attempts at Integration

In recent years, a number of theorists have tried to integrate the cognitive and psychoanalytic notions of symbolic processes into a unified conception of adaptation in childhood. E. J. Anthony (1987a, 1987b) has attempted to fit the notion of "creative competence" into Piaget's framework of intellectual development. He regards fantasy and symbolic activity as an effective means of making sense of traumatic events, such as parental schizophrenia, and integrating them into existing schemas. He contrasts this process with "constructive competence," a more reality-based approach to problem solving. Anthony cites as examples a number of writers, including Hans Christian Anderson, Virginia Woolf, and Franz Kafka, who were able to use fantasy as a means of escaping their painful existence. They had the capacity to transform difficult realities and reshape them into universals, a process typified by Anderson's ugly duckling/beautiful swan.

Yet According to Anthony, this relief is short-lived, and the creative artist often slips into depression after the

completion of a work. This process is particularly destructive for the person with thin ego boundaries, which may disintegrate in the course of multiple shifts between reality and fantasy. Resorting to fantasy constitutes a "pseudoresilience" in which there is an "illusion of powerfulness, of immunity from stresses, and of well-being" (Anthony, 1987b, p. 26). It also disrupts healthy object relations. Anthony remains tied to the traditional psychoanalytic notion of "regression in the service of the ego" that eventually must be replaced by more goal-oriented actions. His conception, in fact, is less an integration than an either/or proposition, in which the child must choose to accomodate to the world or escape into fantasy. Ultimately, like Piaget and Freud, Anthony comes down on the side of reality.

Klinger (1973) draws a broader picture of the role of symbolic activity in development. He accepts the analytic proposition that play and fantasy can be motivated by unconscious conflict, yet he argues that most fantasies of children and adults involve "current concerns." Like White, he believes that fantasy is a baseline process, performed for its own sake. It can occur in the absence of need, and may help an individual maintain an optimal level of arousal. In his model, play and fantasy give children the opportunity to combine internal productions in a manner that may influence problem solving activity and subsequent behavior.

Yet Klinger does not believe that this feedback loop is a purposeful one, with specific motivations or intentions. Rather, he argues that the constant level of fantasy produces a "combination and recombination of sequences that sometimes yields solutions" (p. 294). In his framework, it is not an integrated system designed for interpretive activity. Klinger thus retains the same dual system as Anthony. Though he does allow for the possibility of creative solutions to problems, he too believes that individuals with "serious current problems who engage excessively in fantasy may simply be those whose problems have overwhelmed their ordinary problem-solving capacities" (p. 294). Again the symbolic process is relegated to a secondary line of coping that may be employed in extreme cases.

By adding emotion to the child's cognitive strivings, Singer (1973) attempts to integrate the traditional cognitive and psychoanalytic points of view. He claims that the child will exercise his functions and seek novel stimuli as long as he enjoys these pursuits. He attends to information that is meaningful to him, and "labels it as more or less relevant to particular urgent issues" (p. 195). Pleasurable affects also help sustain fantasy behaviors, and allow the child to move back and forth between accomodation and assimilation of new material. This process expands the child's schemas and enhances his self-concept. It gives him a chance to compare the real with the possible so that he might test a number of "trial selves." In this conception, symbolic actions and

fantasy are no longer an illusion or an escape. Singer believes that they form the basis for future excursions and a richer experience of life.

In recent discussions, Santostefano (1985, 1987, 1988b) has elaborated on previous notions of the role of symbolism and fantasy in development. Like Stern, he too maintains that symbols have their roots in early bodily experiences, are formed within interpersonal contexts, and include actions, emotions, people, and objects in the infant's environment. Though he does not propose a strict conflict model, he believes that symbols are formed around key developmental issues, including separation/individuation, attachment/loss, and aggression/competition. In accordance with cognitive theorists, he argues that complex symbolic constructions, or metaphors, are continually reformed in development, and take account of actions, events, and shifting environmental contingencies. Consistent with the models proposed by Cohler (1987) and Ricouer (1978), he too stresses the need to look at the present constructions of past experiences. He believes that a child's metaphors serve numerous functions, providing the interpretive context for interpersonal events, prescribing behaviors, and checking the results of actions to ensure their effectiveness or suggest modifications. This model is a far more purposeful one than previous conceptions of the symbolic function in childhood.

As Singer has done, Santostefano also emphasizes the influence of cognitive style in the creation and utilization

of symbolic forms. Effective use of metaphors depends on the person's ability to select and process information from the environment and compare it to his internal representations of experience. In the ideal situation, a child can employ his cognitive apparatus to draw from both realms, and coordinate his external experience with his internal structures to determine a course of action (a process not unlike Kris' description of artistic inspiration and creation). Santostefano argues against a trait-like conception of cognitive orientation. In fact, it is the inflexibility of the cognitive structures which often contributes to the creation of pathological metaphors. His research has shown that children with rigid inner cognitive orientations are more prone to violence, as they are unable to realistically test their aggressive fantasies. Outer oriented individuals on the other hand, do not have the opportunity to engage in mental trial and error. Meaning for these people remains "out there," and they are less able to regulate their activity or delay gratification. Children with a cognitive orientation that shifts excessively are unable to maintain internal images or contextual cues, and their attempts at coordination frequently become confused or disjointed.

These contributions help us to formulate a more precise and optimistic picture of the role of symbols and fantasy in development. These researchers have shown that symbolic representations continue to perform an important function in

adaptation throughout childhood. Formed and maintained in interpersonal contexts, the symbols provide a bridge between early mother-infant interactions and later object relations. They provide the representational capacity that allows individuals to continually rework and reshape their experiences. For the child with flexible and efficient cognitive structures, they give him a chance to interpret the world and plan for future action.

Review of the Empirical Literature on Symbolic Play and Fantasy

Introduction

Research studies of fantasy and symbolic play have provided ample evidence of their adaptive role in development. Most studies support Singer's assumption that fantasy behaviors increase with age. Morrison and Gardner (1978) attribute this growth to older child's ability to distinguish between reality and fantasy. Gottlieb (1973) takes a more proactive approach, and in her discussion of the role of models in symbol development, she argues that fantasy is an "adaptive skill, differentially developed in childhood" (p. 170). Most researchers have found, however, that fantasy production is not a function of intelligence (Connolly and Doyle, 1986; Freyberg, 1973; Johnson, 1976; Singer, 1973; Smilansky, 1968).

Measuring Fantasy Activity: The Rorschach Movement Score

In the studies cited below, a number of variables have been used as criterion measures of fantasy. These include children's scores on tests of associative fluency, their story-telling abilities, and the level of symbolism in their free play. Projective tests, particularly the Rorschach, have long been used in this regard, and they are still frequently utilized to assess children's access to fantasy.

In his most detailed discussion of the test that he had developed, Rorschach (1942) argued that movement, and particularly human movement responses (M) are indicative of creative potential and imaginativeness. To perceive movement, the individual must go beyond the spatial and temporal limitations of the ink blot and imbue the static image with new dimensions. These extensions suggest that the individual has a productive fantasy life, and feels free to exercise his imagination in unstructured situations.

Numerous studies have supported Rorschach's hypothesis. A number of researchers have reported correlations between creative story-telling on the Thematic Apperception Test and number of M responses (Singer and Herman, 1954; Singer, Wilensky, and McCraven, 1956; Verner and Kendig, cited in King, 1960). Investigators have also found evidence linking M responses to imaginative behavior. In her longitudinal study, Shmukler (1982) found that pre-schoolers' M scores accurately predicted their level of imagination in the third grade. Meyer and Tuber (1989) reported that children with

imaginary companions produced significantly more movement responses than a normative sample. Schonbar (1965) found that people who recalled more of their dreams had a lower threshold to movement responses on Barron's inkblots. Page (1957) discovered that daydreaming was also significantly correlated with the movement response. In an unpublished paper, Brenner (cited in Singer, 1968) reported that persons who were encouraged to assume creative attitudes produced more M responses, a finding that suggests possibilities for imaginativeness training.

Fantasy and Creativity

Children with high levels of fantasy generally have greater creative abilities than their peers. Using standard creativity tests developed by Guilford and Torrance, several researchers have shown that imaginative play is correlated with divergent thinking in pre-schoolers (Hutt and Bhavani, 1976; Johnson, 1976; Lieberman, 1965). In a review of studies using the Torrance Tests of Creative Thinking, Torrance (1972) reported that high scores on these measures have also been correlated with elementary school children's imaginative story-telling and their creative ideas about toys. In a series of investigations, Dansky demonstrated that play training using common objects enhanced children's associative fluency with those objects and other household items (Dansky, 1975; Dansky, 1980; Dansky and Silverman, 1973). Feitelson and Ross (1973) found that children in a

play tutoring group showed significantly greater increases in their creativity on the Torrance tests than their non-tutored classmates.

Investigators have also found that projective tests of imaginative disposition correlate highly with measures of creativity and divergent thinking. In a sample of highly intelligent children, Weissberg and Springer (1963) reported a significant correlation between human movement responses on the Rorschach and the total creativity score on the Torrance tasks, and more recently Russ (1987) found a similar relationship between primary process thinking on the Rorschach and performance on a test of alternate uses. Moran and his colleagues (Moran, Sawyers, Fu, and Milgram, 1984) found that both the Holtzman M response and a measure of ideational fluency accurately predicted imaginative play behavior in young children.

Taken as a whole, these data suggest that there is a particular cognitive style that underlies both the process of fantasy production and creativity. Individuals with an inner or reflective orientation are far more likely to engage in imaginative play and to use their imagination in a wide variety of circumstances. Studies on the effects of play training, however, indicate that this cognitive predisposition is at least partially a learned phenomenon, for children trained in imaginary techniques subsequently display gains in their access to fantasy and creativity.

Fantasy and Cognitive Development

Information Processing

Studies have shown that children who engage in fantasy play have more highly developed means of organizing and integrating new information. Rubin and Maioni (1975) have observed that children who tend to play dramatically have greater classification skills than children who favor other forms of play. Dansky (1979) found that economically disadvantaged children in an imaginative play training group were better able to comprehend and recall information from a story-telling task, and were also more adept at sequentially arranging thematic elements of stories. Training in fantasy play can also increase the number of original constructs children produce on a sorting task (Ghiaci and Richardson, 1980), enhance children's conservation of quantity (Golumb and Cornelius, 1977) and improve social role conservation and comprehension of kinship relations (Fink, 1976). Given these experimental findings, there is a distinct possibility that a similar process is involved in both play transformations and the abstract conceptualizations of the form and function of objects and the role and relations of individuals.

Concentration and Attention

Children with well-developed imaginations generally have greater impulse control and longer attention spans. The concentrate more intently in both free play (Freyberg, 1973) and structured matching tasks (Nahme-Huang, Singer, Singer,

and Wheaton, 1977; Saltz, Dixon, and Johnson, 1977). Singer (1961) found significant differences between high and low fantasy children in their ability to sit quietly for extended periods of time. Using a similar measure, Saltz et al. (1977) observed that children's ability to wait improved dramatically after an extended period of thematic play training, but only when they were instructed to fantasize while they were waiting. The relation between imagination and attention seems to hold true for clinical groups, including severely disturbed preadolescents (Nahme-Huang et al., 1977).

Behavioral Correlates of Fantasy

Children with active imaginations are less likely to respond aggressively in social situations. Biblow (1973) reported that children with an imaginative predisposition, as measured by the Holtzman Inkblot Test and one of Torrance's creativity measures, were less likely to display overt aggression after being frustrated than less imaginative children. They were also significantly less aggressive after watching either a violent or non-violent film, a result she attributes to their ability to manage and diffuse aggression in fantasy. Other studies suggest that disturbed youngsters lack the capacity to use imagery effectively. Townsend (1968) found that the number of Rorschach M responses was inversely proportional to the frequency of overt aggressive acts in a sample of boys in residential treatment.

Chandler (1973) discovered that chronically delinquent adolescent boys were deficient in their role-taking skills. After participating in group training in dramatic techniques their role-taking skills improved significantly, and their anti-social behavior declined dramatically compared to a delinquent control group in an 18 month follow-up study. Recent research has confirmed his notion that role-taking can be enhanced by fantasy play, and can contribute to successful coping in various social situations (Connolly and Doyle, 1984).

Fantasy and Interpersonal Functioning

Children with active fantasy lives tend to have more adaptive interpersonal skills. Despite the stereotype of the lonely, introspective child who is "lost in fantasy," imaginative children are generally more socially active (Connolly and Doyle, 1984; Rubin and Pepler, 1979) more popular with their peers (Connolly and Doyle, 1984; Marshall, 1961) and more cooperative with adults (Singer, 1973; Tower, 1983). Smilansky has observed that imaginative children are more sensitive to the cues and behaviors of other children. Saltz (Saltz and Johnson, 1974; Saltz et al., 1977) has provided evidence that children who have been trained in fantasy play are more empathic than their peers. It seems likely that imaginative children's ability to transform situations and assume another's position enhances their awareness of interpersonal issues and strengthens their emotional attachments to others.

Fantasy and the Pursuit of Novel Experiences

Imaginative children are typically more open to new experiences. Uninhibited by internal restraints, they face a world in which a variety of possibilities are open to them at any one time (Smilansky, 1968; Tower and Singer, 1980). They are more comfortable trying on new identities (Tower, 1983), and exhibit more cognitive and emotional spontaneity (Lieberman, 1965). As Feitelson and Ross (1973) have demonstrated, increases in imaginative play can enhance children's curiosity and their exploratory and innovative behavior.

Fantasy seems to provide both the mechanism for searching out possible courses of action and solutions to problems, and the opportunity for testing and rehearsing these behaviors prior to performing them (Santostefano, 1988b). Since children with well-developed imaginations enjoy exercising this function, and find their fantasy play intrinsically rewarding (Tower and Singer, 1980), they are also self-motivated to seek novel or challenging experiences that allow them to utilize their creative powers more fully. These children are thus equipped with the resources to move beyond the familiar and ordinary, and the incentive to engage in more stimulating intellectual and interpersonal activities.

Fantasy and Parent-Child Interactions

Investigations of fantasy development generally trace its roots to children's earliest relationships. A child first learns to form an image of a parent or other significant adult, and gradually learns to sustain this image for a period of time (Tower, 1983). This process is not however, a uniform one, and the child's caretakers play a crucial role in his emerging fantasy life. Early symbolizing seems to be enhanced by parents who tolerate fantasy behaviors (Freyberg, 1973), and encourage conversation (Fein, 1981). Securely attached children are more apt to symbolize, particularly when their parents strike a balance between encouraging internal thoughts and maintaining a non-directive, flexible stance (Udwin and Shmukler, 1981). Smilansky (1968) found that parents of imaginative children took pains to explain the reasons for their actions, and made attempts to come to a common understanding with them. Parents who encourage children's play tend to be more abstract (Bishop and Chace, 1971), and more accepting of regressive behavior (Weissberg and Springer, 1961). Though expressive and interactive with their children, they do not attempt to dominate them (Smilansky, 1968; Weissberg and Springer, 1961).

Children of neglectful or abusive parents do not have these advantages. Unlike their peers, they do not have an appropriate adult role model, and their limited opportunity for imitation could delay their symbolic development (Gottlieb, 1973). In many cases, even if they are capable of

forming imaginary correlates of their everyday experiences, they refrain from doing so, in order to avoid the painful emotions that these scenes evoke (Tower, 1983). As a result, in comparison with non-abused children, their level of imaginary play and social pretending is severely deficient (Jacobsen and Straker, 1982).

Fantasy and Socioeconomic Status

A review of studies on imaginative play and socioeconomic status reveals contradictory and controversial findings. It is an area that engenders heated debate (McLoyd, 1983; Smith, 1983; Sutton-Smith, 1983). Griffing and her colleagues (Griffing, Stewart, McKendry, and Anderson, 1983) did not find any overall differences in the amount of fantasy among SES groups, but they did report that high SES children had better quality imagery. Smilansky's (1968) research provides some evidence that economics are a factor, as she discovered that disadvantaged children are much less likely to engage in role playing or dramatic play.

In their study of Israeli and South African children, Udwin and Shmukler (1981) found that class differences were a differentiating variable in both countries. They argue that poorer children fantasize less because their parents are unable to help them integrate their experiences. Middle class parents tend to teach their children specific problem-solving techniques, which include fantasy components, while working class children are more likely to be left to their

own devices in forming strategies for understanding the environment. Farran and Haskins (1980) provide some support for these arguments, as they observed that middle class parents were more willing to engage in mutual play with their young children. Smilansky (1968) also attributed most of her findings to differences in parental involvement and the home environment of middle class and working class families.

These assumptions must be examined more carefully. Clearly parental attitudes and availability play a key role in the development of imaginative behavior, but in most studies these variable are distributed widely both between and within economic groups (Fein, 1981; Freyberg, 1973). In addition, there is little evidence that situational variables unique to children living in poverty, such as the availability of toys or adequate play space, are differentiating variables in studies of imaginative play (Bloch, 1984). In her comprehensive review of the literature, Fein (1981) criticizes studies in which broad judgements are made regarding social class for mistakenly treating socioeconomic status as one uniform variable. In her opinion, research that demonstrates no definable class differences in imaginative play in the first two years suggests that poor children's lack of motivation to symbolize might be more of a factor in these studies than any presumed cognitive or social limitations that inhibit their imaginative capacity.

Training in Imaginative Play

Studies on the effects of imaginative play training indicate that fantasy behaviors can be learned in a relatively brief period of time. Though children predisposed to fantasy show greater post-treatment increases in their imaginative play (Udwin, 1982), most children seem to benefit from play training. A number of researchers have demonstrated the positive effects of play training on economically disadvantaged children, further negating the notion that their low pre-test fantasy production is the result of their dysfunctional cognitive development (Dansky, 1975; Freyberg, 1973; Rosen, 1974; Smilansky, 1968; Shmukler and Naveh, 1985). Similar increases in fantasy behavior and positive affect have been observed in abused and neglected children (Udwin, 1982) and severely emotional disturbed children (Nahme-Huang et al., 1977) after periods of play instruction.

Many of these studies have been challenged on the grounds that training in imaginative play is not a distinct treatment. Smith and Sydall (1978) argue that the verbal and social interactions between the experimenter and the children are often the key variables in training studies. They found that children in a skills tutoring group improved as much as children in a play tutoring group on most cognitive and social measures, though the play group did exhibit more fantasy activity and had developed more sophisticated role taking skills. Other researchers have found that contact with adults in movement exercises (Nahme-Huang et al., 1977)

and unstructured play situations (Shmukler and Naveh) are effective in enhancing imaginative play. Though further research is necessary, these preliminary results are provocative, and suggest that active involvement with an empathic adult could be the single most important factor in developing a child's imaginative capacities.

Consistency over time is another troubling issue in this research. Most training studies are time limited and do not include an adequate follow-up to determine the level of fantasy involvement after the training and contact with the experimenter ceases. Most of these studies also involve only pre-school children. At this point, longitudinal studies comparing children with high and low fantasy predispositions in both fantasy play and non-play intervention groups are needed to help determine if increases in fantasy activity can be retained, and if so, to what extent these gains can continue to help children cope with more complex academic and social situations.

CHAPTER 3

Method

This research is premised on the notion that children vary considerably in their ability to create and utilize adaptive fantasy images. It is based on research and clinical evidence which suggest that a certain sub-group of children are more adept at structuring their fantasies, and are more likely to draw on them in a wide variety of situations. For this reason, the children in the current sample were divided into two groups, "high" fantasy and "low" fantasy, based on their performance on two measures, the Rorschach Test and the Circles Task of the Torrance Tests of Creative Thinking. Level of fantasy was determined by the number of human movement responses on the Rorschach Test, the total number of movement responses on the same measure, and the total creativity score on the Circles Task. Correlation coefficients were calculated for these three sets of scores to determine if the tests were measuring similar capacities in the children. Group assignment was made relative to the median score on each of the three measures; subjects scoring above the median were placed in the high fantasy group and those scoring at or below the median were placed in the low fantasy group.

Hypotheses

1a. High fantasy children would perform better on cognitive tasks than low fantasy children. They would be more adept at

processing and copying information on a test of perceptual-motor integration used in this study, a modified version of the Block Design sub-test of the Wechsler Intelligence Scale for Children-Revised. They would also be better equipped to maintain their concentration during a test of selective attention, the Fruit Distraction Test (Santostefano, 1988a). It was assumed that these differences would be a function of their ability to maintain an inner equilibrium, such that they can remain focused on external tasks, and would not result from varying levels of intelligence. The Raven's Colored Progressive Matrices Test was used as a control measure of perceptual intelligence.

1b. On measures of their object relations, high fantasy children would produce healthier images of interpersonal relationships and would be more attuned to the emotional and cognitive aspects of social interactions. Two scales of object relations were used: Westen's Object Relations and Social Cognition Scale, applied to the Thematic Apperception Test, and Urist's Mutuality of Autonomy Scale, applied to the Rorschach Test. It was predicted that their ability to access and organize their fantasies would enable them to maintain positive images of relationships and strengthen their internal bonds with significant people in their lives.

1c. High fantasy children would seek out more challenging stimuli when presented with visual-spatial tasks of graded difficulty, drawn from the Block Design Test. It was

predicted that their imaginative capacity would give them more opportunities to test out possible solutions to problems, and would help motivate them to attempt to master material that was at or beyond their ability level.

1d. High fantasy children would be rated higher on the Teacher's Rating Scale of the Self-Perception Profile for Children, a measure of their social acceptance and behavioral functioning. It was predicted that these children would be more adept at regulating their behavior because they have more developed internal means of managing their impulses and controlling their motor responses.

2. High fantasy children (designated solely by total movement responses on the Rorschach) who could produce well articulated and differentiated form responses on the Rorschach Test would display greater aptitude on measures of their cognitive, emotional, and behavioral functioning than other high fantasy and low fantasy children. It was assumed that this flexible cognitive orientation would allow these children to benefit more fully from their greater imaging and creative capacities, and to use them adaptively in a wide range of situations.

3. Children who had had some continuous contact with an adult role model would score higher on the fantasy measures. It was hypothesized that having a relationship with an adult figure would provide these children with the interpersonal

context and security necessary for the development of an active fantasy life.

Subjects

Subjects were drawn from an after-school program at one of the large "welfare" hotels in mid-town Manhattan. A total of 46 children were tested, ranging in age from 5 years 8 months to 13 years, with a mean of 9 years 5 months. Of this group, 24 were black and 22 were Hispanic. The sample included 24 boys and 22 girls. On average, the children had 2 siblings. The sample included 9 sibling or half-sibling pairs, and there were 3 families that had three children participating in the study.

The length of time the children had been homeless and the duration of their stay in the hotel varied markedly. The mean length of homelessness was 10 months, with a range from 1 to 26 months. The mean length of stay in the hotel was 7 months, with a range from 1 to 22 months. Most of the children and their families had already spent a few months in the emergency shelter system before they were placed in their current residence, though some families had been transferred to the hotel almost immediately.[1]

Little information about the subjects' parents was available, however the hotel records did indicate that nearly all of the children lived with their mothers. The mean age of

[1] For a description of the complex and often bewildering emergency shelter process see Kozol (1988).

these mothers when they gave birth was 20 years 9 months. For the 43 children for whom records were available, only 2 had fathers who were currently living with the family. Five children had another male present in the household. These records only included men in residence and did not include fathers and other males who had regular contact with the children but did not live in the hotel.

Participation in the testing was voluntary, and all children were eligible as long as they had signed permission from one of their parents. The children generally enjoyed the testing, and most of them were eager subjects. Two of the children left the hotel before they completed the second half of the testing.

Procedure

Setting

All of the testing sessions were held in an office down the hallway from the main classroom on the second floor of the hotel. Most of the children had visited the room previously, as it was considered part of the after-school program's facility. The office was partitioned with a large screen so that two testings could proceed simultaneously. The majority of the sessions were conducted without incident, but on occasion there were disturbances in the hall that disrupted the testing, and in a few instances, the sessions had to be postponed temporarily. Relative to the chaotic and tense atmosphere in much of the building however, the

classroom and the testing area were remarkably calm during most of the testing period.

Testers

Four female testers collected the data in the hotel. All were advanced doctoral students in clinical psychology. Two of the testers administered the majority of the batteries. Each of them spent at least two afternoons per week in the hotel for 8 to 10 weeks. During an orientation period, all the testers spent time visiting with the children in the after-school center, and after the testing had commenced they continued to spend time in the classroom before and after their sessions. All of the testers had a good rapport with the children, and they encountered few difficulties in encouraging the children to accompany them to the testing room and to complete the tasks. Only three children were deemed unmanageable by the testers, and in each of these cases, their observations were strongly supported by the staff members in the classroom.

Independent Measures

Rorschach Test

The Rorschach test was administered according to the guidelines provided by Ames (Ames, Metraux, Rodell, and Walker, 1974). Except where indicated, the protocols were scored according to the method outlined by Klopfer and Davidson (1962). Two scores were given special emphasis: the number of movement responses and the form quality of the

responses. The Rorschach is particularly well-suited for young and disadvantaged children, as it requires little verbal elaboration.

Movement

As discussed in the previous chapter, the Rorschach human movement score has often been used as an index of adaptive fantasy. In this study, it served as one of the primary independent measures. Since children typically produce more animal responses, the total movement score was used as an additional measure of the children's access to fantasy.

Form Quality

High form quality (F+) responses are indicative of an individual's ability to concentrate on the ink blots, to attend to memory images, and to select from them a response that is fitted to the stimulus. A substantial body of clinical evidence (Rickers-Ovsiankina, 1977) and recent factor analytic studies (Blatt and Berman, 1984) support the notion that the percentage of F+ responses is a measure of the subject's ability to critically evaluate and respond to the reality demands of the task. Form quality can be reported for both pure form responses (F+ percentage) and all responses with definite form, including movement, color, and texture responses (extended F+ percentage). In this study, the form quality of the responses was rated according to the system devised by Mayman (1960).

Torrance Tests of Creative Thinking- Circles Task

The Torrance Tests of Creative Thinking (TTCT) (Torrance, 1974) are among the most valid and reliable measures of creativity and imaginativeness, and are widely used in educational and psychological research. The Circles Task is drawn from the non-verbal Figural Form B of the TTCT, which has proved to be an effective means of tapping the creative potential of minority and disadvantaged children (Torrance, 1971). The test requires the child to draw pictures from a number of different circles, and it provides four scores: originality, elaboration, flexibility and fluency. For this study, the sum of these four categories, the total creativity score, was used as an index of access to fantasy.

Dependent Measures

Raven's Colored Progressive Matrices

The Raven's Colored Progressive Matrices (Raven, 1977) has been widely used as a brief non-verbal measure of intellectual ability. Researchers have found that it correlates highly with the Wechsler Verbal (Martin and Wiechers, 1954) and Performance IQ's (James, 1984; Martin and Wiechers, 1954) and the California Achievement Test (Power and Barker, 1986). The Raven's is less culturally biased than most cognitive instruments, and does not appear to discriminate markedly between minority and non-minority groups (Power and Barker, 1986).

Block Design Test

The Block Design sub-test of the Wechsler Intelligence Scale for Children-Revised (Wechsler, 1974) measures children's ability to form geometric patterns with blocks that match a pictorial representation. In this study, 5 patterns of graduated difficulty were used to obtain a measure of children's visual-spatial capacities. The Block Design measures not only abstract reasoning, but also the child's motor coordination, planning capabilities, and motivation. For these reasons, it was predicted that the high fantasy children would outperform the low fantasy group on this task, even though the Block Design has correlated highly with the control measure of intelligence, the Raven's Colored Progressive Matrices, in previous studies (Martin and Wiechers, 1954).

Level of Aspiration

After completing the five designs, the children were asked to choose the pattern that they would like to attempt again. Their level of aspiration was determined by examining the relationship between their ability level and the difficulty of the task that they sought out. A differential score, calculated by subtracting the number of the chosen design from the total number correct, was used in the analyses. The design of this task follows from the work of Susan Harter (Harter, 1978; Harter and Zigler, 1974), who has attempted to quantify White's theory of effectance motivation. In a similar experiment, using puzzles of graded

difficulty, she compared normal children with institutionalized and non-institutionalized retarded children who were matched for mental age. She found that the non-retarded children preferred more challenging tasks than the two groups of retarded children, a finding she attributes to differences in their "urge towards competence" (Harter and Zigler, 1974).

Fruit Distraction Test

The Fruit Distraction Test is designed to measure field articulation, the ability to selectively attend to a particular stimulus while ignoring irrelevant information. The test requires that the child quickly name color patterns on a series of cards while ignoring peripheral stimuli. The first card serves as an introduction to the task. Card 2 serves as a baseline measure, and the time and error differentials between this card and the two experimental cards provide the key scoring indices. Card 3 is designed to measure a child's ability to handle external distractors and Card 4 is intended to be an index of a child's capacity to manage internal stimuli.

In his summary of the research on the Fruit Distraction Test, Santostefano (1988a) reported that young children tend to be distracted by irrelevant data, while older children are better able to maintain their focus on the task. He also found that this test successfully distinguished between normal and learning disabled children. In factor analytic

studies, The Fruit Distraction Test has loaded with other tests of selective attention. Children's scores on the test have also correlated significantly with performance on the Marble Board Test and the Benton Visual Memory Test, both of which require children to attend to select information for extended periods of time.

Object Relations Measures

The nature of individuals' internal images of self and other has attracted widespread interest in recent years, especially in psychoanalytic circles. The ability to maintain stable and differentiated internal images of people in relationships is now considered a cornerstone of adaptive functioning, that is directly related to one's capacity to become involved with others and interpret interpersonal events. Numerous researchers have attempted to quantify this capacity, and a number of object relation measures have appeared on the scene in recent years (Stricker and Healey, 1990). Two scales with somewhat different emphases were employed in this study, the Object Relations and Social Cognition Scale, developed by Westen, and the Mutuality of Autonomy Scale, designed by Urist.

Object Relations and Social Cognition Scale

The Thematic Apperception Test (TAT) (Murray, 1943) requires children to create stories to a number of pictures in which persons are depicted. Westen (1989a) has developed

a scoring system for the TAT which includes 4 measures of interpersonal relatedness: affect-tone of relationship paradigms, complexity and differentiation of representations of people, understanding of social causality, and capacity for emotional investment in relationships and morals. Each category is scored on a 5 point scale, providing individual scores and a composite picture of a person's internal repertoire of relationships.

In his research with the scale, Westen (1989b) has found developmental differences between children in grades 2 and 5 on all the scales except affect tone. In their recent review of Westen's research, Stricker and Healey (1990) report that he has also used the scale to successfully discriminate between depressed subjects and borderline patients, and to differentiate borderline adolescents from psychiatric controls, normals, and borderline adults.

Mutuality of Autonomy Scale

The Mutuality of Autonomy (MOA) Scale was developed by Urist (1977) to assess the extent to which a person's internal images of relationships reflect mutually satisfying interactions in which the participants maintain their separateness and their individuality. The scale was designed specifically for the Rorschach, and it is particularly useful for rating children's protocols, for unlike many rating scales which focus on human responses, the MOA Scale also evaluates animal and inanimate images. There are seven scale points of the MOA scale, ranging from mutual relatedness (a

score of 1) to overwhelming destructiveness (a score of 7). The mean score of all scoreable responses is typically used in data analyses, though the minimum and maximum scores are also cited frequently.

A number of researchers have used the MOA Scale in research with children. Tuber (1983) has reported using MOA scores to successfully predict rehospitalization of child psychiatric patients when they reached adulthood. Researchers have also used the MOA Scale to delineate differences in the object relations of boys with Gender Identity Disorder (Tuber and Coates, 1988) and Separation Anxiety Disorder (Goddard and Tuber, 1989). In a study with a non-clinical sample, Ryan, Avery, and Grolnick (1985) found significant correspondence between subjects MOA scores and independent ratings of their interpersonal functioning and their school performance.

Teacher's Rating Scale: Self Perception Profile for Children

The Teacher Rating Scale (Harter, 1985) provides measures of children's scholastic competence, social acceptance, athletic competence, and behavioral conduct. Each item on the questionnaire is rated on a 4 point scale. In two studies using an earlier version of the scale, Harter (1982) found that the teachers' ratings showed high internal consistency in each domain, and consistently produced 4 distinct factor loadings.

Relationship with Adult Role Model

To qualify for this categorization, a child had to have been involved in an ongoing relationship with a volunteer mentor for at least one month. At the minimum, the volunteer had visited the child for at least 1 hour per week, and spent that time alone with the child in either educational or recreational activities.

Reliability

Three of the procedures, the Rorschach, the TAT, and the Circles Task, involved rating scales and required independent reliability scoring. All raters were advanced doctoral students in clinical psychology, and all but the author, who participated in the scoring of the TAT protocols and the Circles Task data, were blind to the nature of the study. Because of the nature of many of the responses, the raters did become aware that the children were homeless.

The Rorschach protocols were scored by two raters who participated in training sessions with the author. Their reliability score for the number of responses across all subjects was .92, and for F+ responses, .87. For identifying responses that qualified as movement their level of agreement was .69 for all movement responses, and .72 for human and animal movement only. For the Mutuality of Autonomy scores, their reliability score was .62 for exact agreement and .88 for agreement within one scale point.

On the Scale of Object Relations and Social Cognition, the author participated in scoring with another doctoral student who had been trained by Westen and was part of his original scoring team. The reliability scores varied somewhat across the 4 sub-scales: .60 for affect-tone of relationship paradigms, .68 for complexity and differentiation of representations of people, .79 for understanding of social causality, and .72 for capacity for emotional investment in relationships and morals. For all the sub-scales, however, rater agreement within one scale point was above .95.

The author also participated with another advanced doctoral student in the scoring of the Circles Task. The reliability coefficients were fairly high for all 4 scoring categories. For frequency and flexibility, rater agreement was .86, and for originality, .87. The scores for elaboration of each response were an exact match at a rate of .72, but this figure rose to .96 when allowing for a discrepancy of one detail per response.

CHAPTER 4

Results

Level of Fantasy

As discussed above, the children were divided into three separate sets of high/low fantasy groupings based on their performance on the Rorschach and the Circles Task.[1] As predicted, the distribution of scores on each of these measures was discontinuous, with most of the subjects clustering on either end of the scales. Table 1 lists the mean scores for the high and low fantasy children on each of the three variables that were used to create the groupings. These means indicate that the children in the high and low groups did have distinctly different levels of fantasy production. Though there was more variability in the means of the high fantasy groups, particularly those derived from the Rorschach total movement score and the Torrance creativity index, the differences in the standard deviations were not large enough to warrant concern that they would bias the results of the statistical analyses (McCall, 1980).

Group 1: Rorschach Human Movement

An even division of the sample based on the human movement response was not possible without randomly assigning

[1] It should be noted that although frequent references will be made to the three groupings of high and low fantasy children, these groups overlap to a significant extent, as they were all drawn from the same sample.

Table 1

Group Means on Fantasy Measures

	Low Fantasy		High Fantasy		
	Mean	S.D.	Mean	S.D.	F
Human Movement	1.36	0.85	4.60	1.35	2.48*
Total Movement	3.28	1.93	11.20	2.93	2.40*
Creativity Index	-2.72	1.44	2.86	2.92	4.11**

* p<.05; ** p<.01

subjects who had fallen just below the criterion level to the high fantasy group. The author decided instead to accept two slightly unequal groups, with the high fantasy numbering 20 and the low fantasy group numbering 25. The high fantasy group was comprised of 12 boys and 8 girls, and the low fantasy group included 11 boys and 14 girls. The mean age of the high fantasy group was 9 years, 7 months, and of the low fantasy group, 9 years, 3 months, a difference that was not statistically significant.

Group 2: Rorschach Total Movement

This division also produced a high fantasy group with 20 children and a low fantasy group with 25 children. The high fantasy group included 11 boys and 9 girls, and the low fantasy group was made up of 12 boys and 13 girls. The mean age of the high fantasy group was 10 years, 0 months, and the mean age of the low fantasy group was 8 years, 11 months. This difference also did not reach statistical significance.

Group 3: Torrance Creativity Index

As this score was derived from the combined z-scores of the Circles Task, an exact division of the sample was possible; 21 children were deemed high fantasy and 22 were designated low fantasy. The groups were nearly evenly split along gender lines, with 11 boys and 11 girls in the low fantasy group and 11 boys and 10 girls in the high fantasy group. The average age of the high fantasy group was 9 years, 11 months, and for the low fantasy group, 9 years, 0 months.

Correlations between Fantasy Measures

The Pearson correlation coefficient between the human movement score and the total movement score indicated that there was a strong relationship between these two variables ($r=.82$; $p<.001$). Given the fact that the human movement responses comprise a significant portion of the total movement score, this was not unexpected. The total movement score was used in separate analyses however to account for the large percentage of animal responses typical of children, and these analyses did produce some findings not captured by the groupings established solely by the human responses. The animal movement responses were not used independently to create another category of high and low fantasy children, as preliminary analyses based on this division did not produce any additional significant results.

The creativity index derived from the Circles Task was significantly correlated with both the human movement

score ($r=.47$; $p<.01$) and the total movement scores ($r=.42$; $p<.01$). These correlations partially corroborated one previous study (Weissberg and Springer, 1963) which provided evidence that the movement scores and the Circles Task measure similar capacities.

Main Effects: Level Of Fantasy

Hypothesis 1a.

Results from a series of ANOVAs indicated that the high fantasy children had more developed cognitive skills than the low fantasy children. In an unanticipated finding, Group 1 (Rorschach human movement) high fantasy children had higher F+ and extended F+ percentages on the Rorschach Test. Contrary to expectations, these high fantasy children also scored well above the low fantasy group on the Raven's Colored Progressive Matrices. The two groups were not distinguished by their performance on the Fruit Distraction Test or the Block Design Test.

Group 2 (Rorschach total movement) high fantasy children did not differ significantly from the low fantasy children on any of the cognitive tests. The inclusion of the animal movement scores in defining these low and high fantasy children reduced the differences between the two groups.

Group 3 (Torrance creativity index) high fantasy children correctly completed more patterns than the low fantasy children on the Block Design Test. Their Raven's

scores were also well above the low fantasy group, as were their Rorschach F+ percentages. The Fruit Distraction Test did not differentiate these high and low fantasy groups. The results of the cognitive testing are summarized in Table 2.

Hypothesis 1b.

The ANOVAs used to compare the scores of the high and low fantasy children on the Object Relations and Social Cognition Scale indicated that there were no significant differences between the two groups on any of the sub-scales. Level of fantasy did, however, prove to be a significant predictor of the children's scores on the Mutuality of Autonomy (MOA) Scale. Group 1 high fantasy children had lower (more adaptive) mean MOA scores, indicating that their object representations contain more images of people who are able to participate in relationships and still maintain their integrity. In a sub-sample of Group 2 children for whom demographic data was available, the high fantasy children also had lower mean MOA scores. The difference between the scores of the Torrance high and low fantasy groups just missed significance on this variable. The MOA results are listed in Table 3.

Table 2

Level of Fantasy:
Group Means on Cognitive Measures

Group 1: Rorschach Human Movement

Measure	High Fantasy	Low Fantasy	F
Block Design	3.10	2.84	0.85
Rorschach F+	0.63	0.53	3.89*
Rorschach Ext. F+	0.64	0.54	4.83*
Ravens	23.84	19.48	5.35*
FD Time 3-2	-2.90	10.32	2.59
FD Errors 3-2	-0.52	-0.20	0.09
FD Time 4-2	51.70	41.88	0.76
FD Errors 4-2	1.00	-0.12	1.54

Group 2: Rorschach Total Movement

Measure	High Fantasy	Low Fantasy	F
Block Design	3.15	2.80	0.23
Rorschach F+	0.62	0.54	1.63
Rorschach Ext. F+	0.62	0.55	1.13
Ravens	23.05	19.96	1.20
FD Time 3-2	-0.30	1.76	0.81
FD Errors 3-2	-0.35	-0.39	0.09
FD Time 4-2	49.00	44.04	0.50
FD Errors 4-2	1.90	0.04	1.14

Group 3: Torrance Creativity Index

Measure	High Fantasy	Low Fantasy	F
Block Design	3.40	2.59	5.17*
Rorschach F+	0.63	0.52	6.06*
Rorschach Ext. F+	0.62	0.53	1.78
Ravens	24.76	18.23	8.61**
FD Time 3-2	-0.70	9.77	1.00
FD Errors 3-2	-0.35	-0.60	0.42
FD Time 4-2	44.50	48.36	0.00
FD Errors 4-2	0.40	0.05	0.13

* $p \leq .05$; ** $p < .01$

Table 3

Level of Fantasy:
Mutuality of Autonomy Scores

Fantasy Grouping	High Fantasy	Low Fantasy	F	P
1: Rorschach Human Movement	3.03	3.99	7.60	.009
2: Rorschach Total Movement*	3.31	3.76	4.24	.048
3: Torrance creativity Index	3.37	3.97	3.04	.090

*Data drawn from sub-sample (N=39)

Hypothesis 1c.

No significant differences were produced on the ANOVAs used to compare the means of the high and low fantasy groups on the level of aspiration test. The differential scores between the number of correctly formed Block Design patterns and the subjects' choice of pattern to attempt again did not indicate that high fantasy children seek out more challenging stimuli. The results from these analyses are summarized in Table 4.

Hypothesis 1d.

Data from a series of ANOVAs revealed that the high fantasy children were not rated higher on any of the sub-scales of the Teacher's Rating Scale of the Self-Perception Profile for Children. This may have been due in part to the relatively small number of protocols collected, as only 23 of

Table 4

Level of Fantasy:
Level of Aspiration Scores*

Fantasy Grouping	High Fantasy	Low Fantasy	F
1: Rorschach Human Movement	-0.14	0.00	0.09
2: Rorschach Total Movement	-0.27	0.18	0.41
3: Torrance creativity Index	-0.18	0.16	0.28

*Lower scores are indicative of a higher level of aspiration.

the 46 children were rated on this scale. The data from these analyses are listed in Table 5.

Hypothesis 2

The proposed analyses were designed to control for the possibility (and perhaps the likelihood) that the high fantasy children would be less focused on reality (as measured by Rorschach F+ percentage) than the low fantasy children. Two-way ANOVAs were to be used to separate the fantasy groups by their ability to reality test in order to determine if the high fantasy children who could focus and integrate aspects of their environment were more successful in using their imaginative capacities than other high fantasy children and low fantasy children.

However, as reported above, the results of the initial analyses revealed that high fantasy children scored higher on

Table 5

Level of Fantasy:
Group Means on the Teacher's Rating Scale

Group 1: Rorschach Human Movement

Sub-scale	Low Fantasy	N	High Fantasy	N	F
Social Acceptance	9.56	9	10.00	12	0.13
Athletic Competence	11.67	3	11.14	7	0.25
Behavioral Conduct	8.44	9	7.92	12	2.26
Physical Appearance	10.60	10	10.67	12	0.01

Group 2: Rorschach Total Movement

Sub-scale	Low Fantasy	N	High Fantasy	N	F
Social Acceptance	10.18	11	9.40	10	0.46
Athletic Competence	11.80	11	10.80	5	0.72
Behavioral Conduct	8.64	11	7.60	10	2.53
Physical Appearance	10.58	12	10.70	10	0.02

Group 3: Torrance Creativity Index

Sub-scale	Low Fantasy	N	High Fantasy	N	F
Social Acceptance	8.75	8	10.58	12	2.11
Athletic Competence	11.50	2	11.25	8	0.17
Behavioral Conduct	8.75	8	8.25	12	1.42
Physical Appearance	18.38	8	10.77	13	0.09

the measures of reality testing (F+ and extended F+). This finding negated the necessity of computing the two-way ANOVAs, as it indicated that the high fantasy children and the children who are reality-focused are largely isomorphic groups, as are the low fantasy and non-focused groups. The two-way analyses would therefore provide little additional information, and would essentially replicate the one-way ANOVAs already executed.

Hypothesis 3

The children who had an adult mentor scored higher than the rest of the subjects on the measures of fantasy. This was especially true on the Rorschach, both for their human movement scores (Mentor=3.38; Non-Mentor=2.56) and total movement scores (Mentor=8.31; Non-Mentor=6.19). However, in ANOVAs comparing this group to the rest of the subjects and to a randomly selected sub-sample, these differences did not reach statistical significance. Again there were limitations in the analyses due to the size of the population, as only 14 of the children had an adult role model. It is worth noting however, that 62% (8 0f 13) of the children who had an adult mentor were placed in the high fantasy group based on their Rorschach M score, compared with only 44% (12 of 32) of the total population. A chi-square analysis of this data fell just short of significance (X^2=2.16; 1 df; p<.10; one-tailed).

Demographic Variables

There were no differences between the high and low fantasy groups in their number of siblings or in their mothers' age at birth.

In a surprising finding, the analyses revealed that the high fantasy children had spent a significantly longer period of time at the hotel in which they currently resided. This was a consistent result that occurred in all three groupings of high and low fantasy children, with Group 1 and Group 2 high fantasy children having spent an average of over 8.5 months, while low fantasy children averaged slightly over 5 months ($p<.05$ for each grouping). The difference for group 3 was nearly significant, with high fantasy children averaging 7.8 months and low fantasy children averaging 5.9 months.

These results prompted three other sets of analyses. Given the discrepancy in the length of stay, it was suggested that this variable be held constant in a series of covariate analyses between the low and high fantasy groups to determine if it was impacting on the degree of differences in means between the two groups. The results from these analyses indicated that this was not the case, as the differences previously reported between the high and low fantasy groups on the measures of cognition and object relations did not vary, and no new significant differences emerged.

Next a series of ANOVAs using length of time the children had been homeless and length of stay in the hotel as criterion measures were computed to determine if their living

conditions had impacted on their cognitive and interpersonal functioning. A series of two-way ANOVAs were also computed to search for interaction effects between level of fantasy and duration of homelessness. The findings from these analyses will be discussed below, and will be followed by a review of the results of the two-way ANOVAs that were used to test for interactions between fantasy level and age and fantasy level and gender.

Length of Homelessness

The preliminary analyses had indicated that length of stay in the hotel and length of homelessness were correlated with a number of other variables, including level of fantasy. After considering the potential significance of this data, and the strength of the findings mentioned above, these two measures were used as independent variables in a second round of analyses. Two groupings, short and long stay, were established for each variable by dividing the groups at the median. Table 6 lists the mean length of stay in months for each group.

Assignments made by length of homelessness (time spent at all temporary shelters, including the current hotel) produced a short stay group of 20 children and a long stay group of 23 children. There were 8 boys and 12 girls in the short stay group and 13 boys and 10 girls in the long stay group. The average age of the short stay children was 9 years, 10 months, and for the long stay children, 9 years, 2 months.

Dividing the sample by length of stay in the hotel produced a short stay group of 21 children and a long stay group of 22 children. There were 9 boys and 12 girls in the short stay group and 12 boys and 10 girls in the long stay group. The mean age for the short stay children was 9 years, 9 months, and for the long stay children, 9 years, 2 months.

Table 6

Length of Homelessness: Group Means of Short Stay and Long Stay Groups

	Short		Long	
	Mean	S.D.	Mean	S.D.
Length of Time Homeless*	4.70	2.75	14.86	4.78
Length of Time in Hotel*	2.90	1.81	10.18	4.08

*number of months

Main Effects: Length of Homelessness

The children who had been homeless for a longer period of time scored significantly lower on Rorschach measures of reality testing and object relations. Both their F+ and extended F+ percentages were well below the scores of the short stay group. The protocols of the long stay children contained more images of malevolence and domination, and were rated more pathological on the Mutuality of Autonomy Scale. In the only score that contradicted this trend, long stay children were rated higher on a measure of social acceptance,

one of the sub-scales of the Teacher's Rating Scale of the Self-Perception Profile for Children. It should again be noted however, that this rating scale was applied to only a limited number of children, 5 in the short stay group and 12 in the long stay group. Adding sex and age into the analyses did not produce any significant interactions for these variables. The results are summarized in Table 7.

Table 7

Length of Homelessness: Mean Scores of Short Stay and Long Stay Groups On 4 Dependent Measures

	Short	Long	F
Rorschach F+	0.64	0.52	7.56**
Rorschach Ext. F+	0.64	0.53	5.20*
Mut. of Autonomy	3.20	3.93	6.92*
Social Acceptance	8.60	9.75	5.20*

* p<.05; ** p<.01

Main Effects: Length of Stay in Hotel

The length of stay in the welfare hotel also impacted on the children's cognitive functioning and object relations. The children who had been in the hotel for a shorter period scored higher on the Raven's Colored Progressive Matrices. These children also preferred more challenging cognitive situations, and on average they chose to attempt designs that were above their ability level on the level of aspiration test, while the long stay children chose less challenging tasks. The TAT stories of the short stay children contained more complex and differentiated characters, as measured by

the Scale of Object Relations and Social Cognition. Sex and age again did not prove to be significant factors in these analyses. These results are listed in Table 8.

Table 8

Length of Stay in Hotel: Mean Scores of Short Stay and Long Stay Groups On 3 Dependent Measures

	Short	Long	F
Ravens	22.85	19.95	4.03*
Level of Aspiration	-0.56	0.32	4.21*
ORSC: Complexity and Differentiation	24.10	21.71	4.81*

* $p<.05$

Interaction Effects:
Level of Fantasy by Length of Homelessness

There were a number of interaction effects between level of fantasy and the length of time the children had been homeless, but the trends observed on the cognitive measures were contradicted by the results derived from the object relations scores. On the Raven's Colored Progressive Matrices, the long stay, high fantasy children in Group 3 performed better than the short stay, high fantasy children, but the opposite was true for the low fantasy groups, with the short stay children outperforming those who had been homeless for a longer period of time. Both of the low fantasy scores were below the high fantasy means. A similar pattern emerged on the Fruit Distraction Test for Group 1 children. On the key measure of external distractibility,

the differential time score between Card 3 and Card 2, long stay, high fantasy children scored higher than the short stay, high fantasy children, and again the trend was reversed for the low fantasy children. However on this measure the short stay, low fantasy children did score above the short stay, high fantasy children.

An examination of the children's capacity for emotional investment, a sub-scale of the Scale of Object Relations and Social Cognition, revealed that the high fantasy children differed markedly from each other when length of stay was considered, with the long stay children scoring well below the short stay group. The mean of the latter group dipped below the low fantasy children in Group 1 and Group 2. In contrast to their performance on the cognitive measures, the low fantasy children remained relatively consistent across the two time periods, as the means of both the short and long stay groups were nearly equivalent.

The analyses of scores on the level of aspiration task revealed still another trend. For both Group 2 and Group 3 children, short stay, low fantasy children and long stay, high fantasy children chose more challenging stimuli (indicated by a negative score), while long stay, high fantasy children and short stay, low fantasy children chose to complete a task that was below their ability level. In both analyses, the short stay, low fantasy children appeared to have the highest aspirations. The results from these interactions are reported in Table 9.

Table 9

Interaction Effects:
Level of Fantasy by Length of Homelessness

	Short	Long	F
Raven's			
Group 3:			
Low Fantasy	20.33	16.45	3.93#
High Fantasy	23.50	25.33	
Fruit Distraction Time Cards 3-2			
Group 1:			
Low Fantasy	-2.69	25.00	4.66*
High Fantasy	2.57	-6.93	
ORSC: Capacity for Emotional Investment			
Group 1:			
Low Fantasy	20.62	20.64	4.96*
High Fantasy	22.83	17.73	
Group 2:			
Low Fantasy	19.85	19.70	4.82*
High Fantasy	24.50	18.75	
Level of Aspiration			
Group 2:			
Low Fantasy	-0.85	0.56	4.65*
High Fantasy	0.50	-0.11	
Group 3:			
Low Fantasy	-0.87	0.75	7.65**
High Fantasy	0.25	-0.20	

* p<.05; ** p<.01 (#=.056)

Interaction Effects:
Level of Fantasy by Length of Stay in Hotel

The interactions between level of fantasy and length of stay in the welfare hotel resemble those reported above. Again high fantasy children performed at a consistently high level on the cognitive tests, but not on the measures of object relations. On the Block Design Test, the scores of the short and long stay Group 1 high fantasy children were exactly equivalent, and both means were higher than the means of the two low fantasy groups. On the Fruit Distraction Test, the Group 2 long stay, high fantasy children had a lower differential score between their errors on Card 3 and Card 2 than the short stay, high fantasy children. The lowest differential however, was posted by the short stay, low fantasy group. These means are confounded somewhat by differences in the baseline measurement, as short stay, high fantasy children had the fewest errors on Card 2.

The scores on the Mutuality of Autonomy Scale indicated that Group 2 high fantasy children were significantly affected by the duration of their stay in the hotel. The long stay, high fantasy children had less well-developed images of relationships than the short stay group. The scores of the low fantasy group were in the opposite direction, with the long stay group having healthier images than their short stay counterparts. These interactions are summarized in Table 10.

Table 10

Interaction Effects:
Level of Fantasy by Length of Stay in Hotel

	Short	Long	F
Block Design			
Group 1:			
Low Fantasy	3.00	2.56	4.63*
High Fantasy	3.17	3.17	
Fruit Distraction Errors Cards 3-2			
Group 2:			
Low Fantasy	-1.25	0.40	7.78**
High Fantasy	0.14	-0.37	
Fruit Distraction Errors Card 2			
Group 2:			
Low Fantasy	4.14	4.00	6.68*
High Fantasy	3.00	4.45	
Mutuality of Autonomy			
Group 2:			
Low Fantasy	4.13	3.26	6.11*
High Fantasy	2.79	3.65	

* $p<.05$; ** $p<.01$

Age as a Contributing Factor

As would be expected, age was a significant predictor of success on a number of the cognitive tests. The older children (mean age 11 years, 1 month) also scored higher than the younger children (mean age 7 years, 9 months) on three of the subscales of the Scale of Object Relations and Social Cognition (ORSC), supporting previous research with the scale (Westen, 1989). Age was not a factor on the Mutuality of Autonomy (MOA) Scale, as the scores were nearly equivalent for the two groups. Older children did score higher on two of the measures of fantasy, Rorschach total movement and the Torrance creativity index. The age group means are summarized in Table 11.

Interaction Effects: Level of Fantasy by Age

Three of the dependent variables produced interaction effects between fantasy level and age. In all three groupings the young, high fantasy children had a higher Rorschach F+ percentage than the older high fantasy children, and they scored well above other children in their age group. This same sub-group of children had an average stay in the hotel that was several months longer than all the other children, a finding that was also consistent for all three groupings. On the Fruit Distraction Test, the Group 3 young, high fantasy children had a larger differential score between their baseline error score on Card 2 and their error score on Card 4, in which they had to maintain their concentration

Table 11

Age Group Means

Measure	Young	Old	F
Block Design	2.39	3.55	20.11**
Rorschach F+	0.54	0.62	2.82
Rorschach Ext. F+	0.54	0.62	3.67
Ravens	18.32	24.41	11.37**
FD Time 3-2	7.43	11.32	2.56
FD Errors 3-2	0.43	-0.20	2.51
FD Time 4-2	53.78	88.36	1.82
FD Errors 4-2	0.48	0.27	1.54
ORSC:			
Affect Tone	25.05	24.64	0.04
Differentiation	21.27	24.61	9.87**
Emotional Investment	18.45	21.55	7.24**
Social Causality	18.27	22.32	14.29**
Mutuality of Autonomy	3.56	3.55	0.03
Rors. Human Movement	2.48	3.14	0.94
Rors. Animal Movement	2.65	5.41	9.60**
Rors. Total Movement	5.13	8.55	6.52*
Torrance Creativity Index	-1.80	1.65	11.61**

* $p<.05$; ** $p<.01$

while faced with contradictory colors. Their scores were similar to the older, low fantasy children. These interaction effects are listed in Table 12.

Gender as a Contributing Factor

In nearly all the analyses, gender did not prove to be a significant factor. The lone exception was on the Block Design Test, in which the boys correctly completed more patterns than the girls (boys=3.35; girl=2.53; $p<.05$).

Interaction Effects: Level of Fantasy by Gender

On the Fruit Distraction Test, high fantasy girls and low fantasy boys tended to have higher error differential scores when comparing Cards 4 and 2, and thus appeared more distractible. For Group 2 however, this result was skewed by the fact that high fantasy boys and low fantasy girls had more errors on Card 2, the baseline measure.

On the Raven's Colored Progressive Matrices, the low fantasy boys and the high fantasy girls in Group 2 scored above the other two sub-groups. The difference between the low and high fantasy girls was particularly striking. These analyses are listed in Table 13.

Further Analyses

Nearly all the analyses in this study were designed to test for differences between the means of the high and low fantasy groups, primarily by using analysis of variance

Table 12

Interaction Effects: Level of Fantasy by Age

	Young	Old	F
Rorschach F+ Percentage			
Group 1:			
Low Fantasy	0.45	0.63	6.06*
High Fantasy	0.65	0.60	
Group 2:			
Low Fantasy	0.48	0.64	4.53*
High Fantasy	0.65	0.60	
Group 3:			
Low Fantasy	0.45	0.63	5.44*
High Fantasy	0.67	0.61	
Months in Hotel			
Group 1:			
Low Fantasy	5.58	5.08	1.95
High Fantasy	10.78	6.33	
Group 2:			
Low Fantasy	5.43	5.00	4.90*
High Fantasy	12.57	6.18	
Group 3:			
Low Fantasy	5.92	5.75	4.79*
High Fantasy	12.00	5.46	
Fruit Distraction Errors Cards 4-2			
Group 3:			
Low Fantasy	-0.79	1.50	6.21*
High Fantasy	2.00	-0.46	

* $p<.05$

Table 13

Interaction Effects: Level of Fantasy by Sex

	Boys	Girls	F
Fruit Distraction Errors Cards 4-2			
Group 1:			
Low Fantasy	1.55	1.00	10.42**
High Fantasy	0.00	2.50	
Group 2:			
Low Fantasy	1.17	-1.15	4.30*
High Fantasy	0.27	1.67	
Group 3:			
Low Fantasy	1.64	-1.55	8.61**
High Fantasy	-0.60	1.40	
Fruit Distraction Errors Card 2			
Group 2:			
Low Fantasy	3.08	4.85	4.03*
High Fantasy	4.64	3.44	
Ravens			
Group 2:			
Low Fantasy	23.73	16.77	7.66**
High Fantasy	21.55	24.89	

* p<.05; ** p<.01

techniques. They have been described at length in this chapter. As discussed above, dividing the data in this manner could be justified on clinical and research grounds and also by the nature of the distribution of scores on the independent measures.

Nonetheless, more detailed analyses of the strength of the relationships between the fantasy measures and the dependent variables could also prove to be a worthwhile endeavor. Although the initial correlation matrix did provide clues to the nature of these relations, few of the correlations accounted for significant amounts of the variance between measures (most were below .50). A sampling of multiple correlations, using both the Rorschach and Torrance fantasy measures to predict to the dependent variables did produce some promising results, but did not consistently enhance the strength of the relationships. A number of partial correlations, in which either length of homelessness or the Raven's score was held constant, were also attempted. Again the results were mixed, although the correlations between the fantasy measures and selected dependent measures were generally slightly higher when these variables were partialed out.

More comprehensive multivariate analyses of the data are currently being conducted with two goals in mind. A series of multiple regression analyses are being performed to determine the relative contribution of fantasy production and other potential independent variables (including length of

homelessness and Raven's score) in predicting outcome on the dependent measures. A set of discriminant function analyses are being performed to determine if the fantasy groupings as they are currently comprised do in fact constitute separate and distinct entities. The author hopes to report on these analyses within six months of the completion of this dissertation.

CHAPTER 5

Discussion

The present study was intended to test the hypothesis that children with more structured and well-developed fantasies would better withstand the stress of being homeless, and would have more mature cognitive structures and more adaptive internal representations and interpersonal skills than their peers who lived in the same "welfare" hotel. In this chapter, I will discuss the empirical findings from this study in detail by assessing the global functioning of the high and low fantasy groups, and by reviewing their performance on a measure by measure basis. I will then address the findings from the analyses based on the length of time the children had been homeless. Finally, I will seek to reconcile these two lines of inquiry by examining the interactions between level of fantasy and duration of homelessness. In my concluding remarks, I will attempt to place the current research within a larger theoretical framework through a further elaboration of the line of reasoning advanced in Chapter 2.

The Measurement of Fantasy

The two primary measures of fantasy in this study were drawn from quite separate theoretical and operational frameworks. The Rorschach movement response, and particularly the human movement response, has been accorded a special status in the psychoanalytic literature. The M

response is thought to reflect intellectual potential, the capacity for empathy and identification, and the ability to delay impulse expression (Allison, Blatt, and Zimet, 1968). As it involves the projecting of kinesthetic properties that extend the spatial dimensions of a still image, the M response has traditionally been cited as a key index of imaginative thinking and inner reflectiveness. Most theorists contend that M production is a function of both perceptual style and character type, and can therefore be considered a relatively stable index of personality functioning.

Torrance designed his test battery within an entirely different context. He has worked under the assumption that creativity is an important cognitive ability that has been neglected by most students of intellectual functioning and undervalued by most educators and laymen. In his model, imaginativeness is not just a matter of disposition, but is a quantifiable entity that can be expressed and measured in his concrete verbal and non-verbal tasks that are scored for ideational fluency, originality, and elaboration. Torrance convincingly argues that the enhancement of children's creative powers is a legitimate and attainable goal, and can lead to success in academics, to a more efficient handling of everyday tasks, and to an enriched experience of life.

The relatively high correlations between the Torrance creativity index and the human movement and total movement scores in this study suggest that they are measuring similar

or at least overlapping capacities, and the differences in the two tests' construction and intention must be reconsidered in this light. At face value, the Rorschach is a purely perceptual task that allows the subject to impose or "project" his own internal images onto the amorphous shapes of the ink blots, without being inhibited by the structure and organization inherent in most cognitive tests. In contrast, the Circles Task requires the child to actively recollect and then graphically reproduce images onto the circles, and points are awarded for the number, type, and uniqueness of the reproductions, a scoring system not unlike those applied in most academic testing situations. One might suspect therefore that the Rorschach would be a truer index of one's imaginative capacity, while the Circles Task would be more of an estimate of a child's ability to quickly produce alternative or divergent forms, or that differences in performance on the two measures could be better understood as the predicted variance between an innate capacity and the concrete expression of that capacity.

The convergence of the two sets of scores in this study casts doubt on this dichotomy. One must consider that the Rorschach response, and in particular the M response, does require a good deal of analysis and synthesis on the part of the subject. He must after all, perceive the blot, associate to it, and then actively select a moving human form from a list of possible alternatives. Though this is not by any means a new conceptualization of the Rorschach response

process, it does reflect an important shift in emphasis away from the notion of the intelligent, introspective person who in the process of reporting "what comes to mind" spontaneously delivers well-constructed and elaborate images that contain some human forms.[1] Likewise the Circles Task is more than just a cognitive exercise, as its repetitive stimuli is arguably more conducive to the associative process than most projective test material. It does require the subject to work within a definite form and limits his opportunity for gross departures from established figures, yet most Rorschach scoring systems are no less stringent in penalizing poor form quality, and as has been discussed, the human responses in this study were by and large not distorted or fantastical.

Further studies must be conducted to determine the true nature of the shared variance between the Rorschach M response and the Torrance creativity index, and the particular variables that distinguish an individual's performance on the two tasks. The graphomotor component of the Circles Task must be reconsidered, and children who are more comfortable with their drawing skills should be grouped separately. Rorschach studies should be planned to determine if varying the administration method alters a subject's means of associating to the blots. One might hypothesize, for

[1] The reader is referred to Spence (1982) for a similar reappraisal of the role of free association in analysis.

instance, that inquiring immediately after each card (the Rapaport method) may increase the number of movement responses, as the subject would have an opportunity to study the blots for a longer period of time and could continue his examination under the tester's supervision. Were this to be a consistent finding, the link between imaginativeness and "free" association would have to be seriously questioned.

Fantasy as a Measure of Adaptation

Cognitive Functioning

The children who had more developed fantasies were far superior to their peers on a number of cognitive measures, leaving little doubt that they are more organized in their perceptions and in their approach to solving concrete tasks. As has been stated previously, these results were not all in the predicted direction. Perhaps the most surprising finding was the elevated Rorschach F+ percentages of the high fantasy groups, as it was not expected that they would be more attentive to detail than the low fantasy children, who presumably would have been less disrupted by internal stimulation and would have been more focused on the concrete outlines and forms of the blot. It is important to note however that the two-way ANOVAs revealed that this outcome was mainly a function of the young high fantasy children's scores, which were the highest overall, and well above the F+ percentages of the other young children. Though not observed on the other cognitive measures, this trend provides some

evidence that the perceptual and organizational gains associated with an increased imaginative capacity may be more substantial among young children. Nonetheless, the older high fantasy children were still at the same level as the older low fantasy children, a finding which defies the conventional developmental wisdom that children with well-developed fantasy lives will not be able to remain focused and organized on unstructured tasks. That the two can go hand in hand, as seen here, is rarely considered a real possibility.

The high fantasy children's performance on the other cognitive tasks also raises some interesting questions. Though the high fantasy group derived from the Circles Task performed significantly better than their peers on the Block Design Test, as predicted, this difference did not hold up for the Rorschach high fantasy groups (either human movement or total movement). The Block Design was the one cognitive measure which has a motor component, and the children rated higher on the Circles Task, which also requires a motor response, might have been better suited for this task than the other high fantasy children. It can be hypothesized that they were able to employ a visual planning strategy, and then transform this into a motor form, or that they were able to move more immediately into an integrated perceptual-motor approach. Again this speaks to possible differences in the nature of fantasy measured by the two tests, and the applicability of varying modes of creative thinking to certain types of cognitive tasks.

The fact that both the Rorschach human movement and the Torrance high fantasy groups performed better on the Raven's Colored Progressive Matrices offers support for this hypothesis, for the Raven's is also a visual-spatial task, but unlike the Block Design, it requires no motoric intervention. With the exception of the Group 2 high fantasy boys, all the high fantasy children performed well above their peers on this test, which requires the subject to scan a visual field and then select among possible options to complete a logical geometric pattern. Typically subjects respond quickly to the Raven's after scanning the large design and then focusing on the available pieces, and the more imaginative children seem to be more capable of holding the original image in mind as they compare the possibilities presented to them.

It should be remembered that the Raven's was designated as a control measure of perceptual intelligence in the original research design. The strength of these findings, which in retrospect do not appear to be so surprising, force a reconsideration of this issue. One might argue that this was a faulty assumption, and that another perceptual task should have been selected, especially given the fact that the Raven's has correlated highly with the Block Design Test. The real error, however, might have been made in not designating a more verbally-laden test as the control for general intelligence, such as the Peabody Picture Vocabulary Test. As described above, the Raven's requires a cognitive

set that in many ways mirrors the thought processes engendered by the Rorschach and the Torrance test, though the alternatives on the Raven's are limited and presented before the subject. Given the likelihood that the production of fantasy images requires a certain level of visual-spatial skills, it makes little sense to use the Raven's as a control stimulus. Like Torrance, I do believe however, that creativity and imaginativeness are not synonymous with general intellectual ability, and therefore I should have selected a more traditional means of measuring IQ, such as the Peabody. The Raven's originally seemed so appealing because it is a non-traditional test, and has a reputation for being unbiased, an important consideration when dealing with homeless children, who usually score extremely poorly on verbal tasks.

The one cognitive test which did not discriminate directly between any of the high and low fantasy groups was the Fruit Distraction Test. Given the performance of the high fantasy children on the Raven's Test, which also measures the capacity to distinguish between relevant and irrelevant information, this result is a puzzling one. The Fruit Distraction Test does include additional variables however, including the individual's ability to scan across a field of images, and do so in a timely fashion. The fact that this test relies on differential scores might have been problematic, as there was some evidence that high fantasy children had fewer baseline errors, which may have inflated their combined scores.

Unlike their performance on the other cognitive measures, the children's scores on the Fruit Distraction Test were consistently linked to their gender. For all three fantasy groupings, the error differential scores between the card measuring internal distractibility and the baseline card (Cards 4-2) favorably compared the high fantasy boys and the low fantasy girls to their peers, though again the baseline scores were in the opposite direction. These results offer some evidence that boys, who typically appear more impulsive and distractible (and are much more frequently given the label Attention Deficit Disorder) than girls, would be better equipped to maintain their focus when faced with disruptive internal stimuli if they learned to develop their imaginative capacities. Again this connection seems somewhat counterintuitive, as one might suspect that boys with more developed fantasies would be more likely to fall prey to stimulating material like the aggressive and oral distractors pictured in Card 4. Perhaps instead they would develop a system for managing this type of information, and would therefore be less likely to respond impulsively when confronted with exciting or upsetting situations.

Object Relations

The high fantasy children did not differ substantially from the low fantasy children on the Scale of Object Relations and Social Cognition developed by Westen. The strong developmental pull of this measure may provide one

explanation for its failure to discriminate between the two groups. On 3 of the 4 sub-scales the older children scored well above the younger group, and there were extremely significant correlations between the subjects' scores on these scales and their age. The developmental nature of the scales (except for Affect Tone) also served to compress the range of scores, and the original 5-point scales became 2 or 3-point scales for this population. These factors may be responsible for the fact that the high fantasy children did not match expectations on this measure, particularly on the Differentiation and Social Causality sub-scales, which presumably should have tested their ability to use their imaginative capacity to depict distinct individuals in relationships, and to assess their intentions and plans.

The high fantasy children did prove to have more adaptive images of relationships on the Mutuality of Autonomy (MOA) Scale. Given the overlap between the MOA scale and Westen's measure, particularly on the sub-scales mentioned above, one might question the legitimacy of this finding. However it is significant to note that age did not have any bearing on the MOA scores, and the means of the young and old groups were almost exactly equivalent. In addition, the breadth of scores was quite large, with the average subject having a range of more than 4 scale points. As such, one can argue that the MOA scale is a more valid measure of these children's internal representations, and more accurately reflects the association between the children's fantasy lives and their object relations.

The MOA scale measures a person's ability to maintain images of independently functioning individuals who actively relate to each other. Logically, it requires that children must first create, structure, and retain these images, irrespective of their affective content. Children with a more developed capacity for fantasy are ideally suited for this task.

The MOA scale may also may also tap into two other of the high fantasy children's primary areas of strength. Firstly, it requires a good degree of sensitivity to appreciate and respect another's boundaries and separateness, and as the research of Smilansky (1968) and Saltz and his colleagues (Saltz et al., 1977) has shown, imaginative children tend to be more empathic and more attuned to the cues of other children. In addition, they also have the cognitive skills necessary to mentally assume another's perspective and to step into a role that they have occupied previously, and they are more adept at switching back and forth between the two positions without losing a grasp of either one (Tower, 1983). With these advantages, imaginative children should find it much easier to maintain images of people who relate to each other and share a mutual respect for one another. It may be argued moreover that the affective components of such healthy images, including the ability to empathize, might in fact follow from the mental capacity to take up another's role, and that this process does not, as is more frequently posited, flow in the reverse direction.

Level of Aspiration

The level of aspiration test was designed to assess the children's willingness to confront challenging situations. Like the Fruit Distraction Test, it relies on differentials rather than absolute scores to measure the difficulty level of the task that the children choose. As the high fantasy children correctly completed more of the patterns on the Block Design Test that served as the base line, they again might have been penalized by this type of design, as their choice of pattern to repeat would have had to have been more difficult than the low fantasy children for them to receive the same level of aspiration score. This possibility is given more weight by the fact that most of the children selected a design that was within one point of their ability level.

The nature of this task might also have contributed to the minimizing of differences between the low and high fantasy groups. Though the Block Design Test does allow children to play with possible solutions, the designs are not particularly enticing stimuli, and the more difficult ones are particularly intimidating and often leave children feeling frustrated and hopeless. For this study, only a limited number of items from the Block Design were used, and the gradations between the designs on this version were much steeper than on the traditional test. As a result, selecting the next most difficult pattern might have seemed like choosing an impossible task for both the low and high fantasy children.

Nonetheless, one would have expected more of the latter group to make this leap, and the fact that they did not bears further consideration. It may be that imaginative children are more drawn to truly novel stimuli, and do not seek out tasks at which they have already failed. This strategy must be judged in context, and on this version of the Block Design, the high fantasy children may have been wise to stick to more familiar ground. The time limitations on this test might also have diminished their ability to use their creative skills, especially on the more difficult designs, which may be more easily grasped in a ruminative mode of thinking. A more sophisticated testing paradigm would have allowed the children to develop and use any possible strategy for solving the more difficult designs within a much more expanded time frame, and would have formally instructed them to "use their imagination." Only then could one more fully assess the impact of the children's capacity for fantasy on their inclination to attempt and their ability to solve difficult cognitive tasks. Such a design would give children license to use an approach which they might otherwise disregard, for they are usually taught to maintain a concrete, task-oriented focus in their academic work.

Social and Behavioral Functioning

As discussed previously, there were no significant findings on the Teacher Rating Scale of the Self-Perception

Profile for Children. Though it is a possibility that there were no real differences in the social and behavioral functioning of the high and low fantasy groups, it is likely that two other variables contributed to this outcome. Less than half of the children in the study were rated on this scale, and most of the analyses included fewer than 20 children. In addition, the two raters were far from unbiased, as they worked closely with the children in the after-school program at the hotel. Despite being given instructions to place the children on a continuum, the two raters gave most of the children high scores on nearly all the questions. They compensated for this by each selecting a small number of children who were given almost uniformly low scores. Given the limited number of children involved, and the small range of scores, few conclusions can be drawn from this data. In retrospect, it would have been more methodologically sound to have the testers rate the children after observing them a number of times in the after-school classroom, where they could have gained a fair amount of information about their conduct and their social skills.

Adult Role Model

Though the results were not conclusive, there was some indication that the children with an adult role model did have more developed fantasy lives. This sub-group did have higher scores on all three measures of fantasy than the rest of the population, and they were much more likely to have

been included in the high fantasy groups. Much more rigorous research is needed, but these results do provide some support for the view that fantasy and symbolic activity are more likely to occur in an interpersonal context, and can be enhanced by the presence of a consistent, caring adult figure.

Summary of the Empirical Findings on the Role of Fantasy

As predicted, the homeless children in this study with more structured and well-developed fantasies displayed a number of cognitive strengths and a more advanced representational system. The high fantasy children were more adept at handling visual-spatial material, and were more attuned to the perceptual aspects of unstructured stimuli. Their object relations were more intact, and were more apt to include adaptive images of relationships in which individuals retain their autonomy. The high fantasy children were also more likely to have had an adult role model who had an active presence in their lives.

Despite these positive results, one might criticize this study for making claims as to the direction of the findings, as it seems to imply that the children's capacity for fantasy is the linch pin upon which the rest of these faculties depend. I hope not to err in this manner, not only because the statistical analyses do not allow for these conclusions, but also because I do not believe these findings lend credence to a linear model of development that is based on

the attainment of increasingly complex symbolic functioning. I do strongly hold however, that the capacity for fantasy represents a broad-based system of relating to the environment that has relevance for a number of cognitive tasks and for the development of meaningful connections with other people. The results of this study should be seen in this light, for I believe that they bear witness to the fact that children who effectively develop and utilize their creative abilities are more likely to be those who are also successful in meeting new cognitive challenges, managing the requirements of daily living, and maintaining healthy relationships.

Before taking up this issue in greater detail, I would first like to examine the impact of the environment in which these children live. Thus far in the discussion I have focused almost exclusively on the relations between the empirical data, without discussing the particular relevance of these findings for this group of homeless children. I will now try to rectify this situation by examining the cognitive and emotional functioning of children who have been homeless for an extended period of time. At first I will review these effects without reference to the children's capacity for fantasy, and then I will explore the potential role that fantasy can play in mitigating these effects.

The Impact of Homelessness

The results from this study support previous reports of the damaging effects of homelessness on children. Though not

derived from a pre-post testing design which would have allowed for more reliable conclusions, these data strongly suggest that homelessness disrupts children's cognitive functions, distorts their object representations, and diminishes their hope for solving difficult tasks. As discussed previously, an examination of the children's Rorschach protocols revealed that those who had been homeless for longer than 10 months displayed poorer reality testing and less adaptive object relations. There was some indication that these children were more accepted by their peers, though again this rating came from the program leaders, who were likely to have known this group longer. Children who had been in the current "welfare" hotel longer than 6 months scored lower on the Raven's test, a measure of visual-spatial integration, and were less ambitious on the level of aspiration task. The TAT stories of these children contained less differentiated characters who lacked enduring qualities and stable dispositions.

The cognitive delays of the children who have been homeless for an extended period may stem from their being stressed by an overwhelming and bewildering environment, one that few adults can manage without difficulty. As Santostefano (1978) has argued in his work with hospitalized children, their lower functioning may be better understood as a cognitive regression, and may reflect a healthy attempt to adjust to a traumatic situation over which they have no control. Though potentially adaptive for a short period,

this "leveling" of their cognitive apparatus cannot serve them over the long term, and will likely lead to more permanent dysfunctions in their ability to process and encode information. This is particularly true for these latency age children, whose cognitive structures are still developing and evolving. Their hesitancy to attempt more difficult tasks on the level of aspiration test might be just one example of the inhibition of their cognitive strivings, which undoubtedly will have consequences for their future level of intellectual curiosity and academic achievement.

Their current level of object relations may have even a greater correlation with their later interpersonal functioning. Anecdotal evidence and clinical observations suggest that most teenagers in the hotel are well on their way to adulthood, and function independent of familial rules or any larger social structure. Few interventions are attempted with them, and many of the workers at the hotel feel that a large portion of the teenagers are "gone." As a whole, this group seems more fitted to Kozol's description of a "lost generation."

With this picture in mind, it hardly seems likely that the nature of the internal representations of the homeless children in this study will change markedly as they grow older. Unless someone intervenes, their capacity to use their images of relationships to interpret social situations and to form intimate connections with other people will probably remain undeveloped, and they will consequently be

denied the opportunity to have richer interpersonal experiences and a more secure sense of themselves. Despite the obvious trauma of being without a home, this may be the more tragic and enduring legacy of homelessness.

Minimizing the Effects of Homelessness: The Role of Fantasy

The addition of the children's capacity for fantasy into the analyses of the effects of homelessness revealed a dramatic though inconsistent portrait of its potential role in helping children cope with this stressor. The data suggest that children with well-developed fantasies successfully withstand the threats to their cognitive structures that often overcome other children who have been homeless for an extended period of time. As reported above, the performance of the short and long-stay high fantasy groups did not vary markedly on a number of the cognitive tasks, and both groups were at a consistently high level. This could be observed most clearly on the Raven's and the Block Design Test, in which low fantasy children who had been homeless longer or had spent more time in the hotel scored well below all the other groups, while the scores of the high fantasy children either remained perfectly consistent (on the Block Design) or increased slightly (on the Raven's). On the level of aspiration test, the long stay, high fantasy children selected a task above their ability level more often than not, as did children in the short stay, low fantasy group, while children in the other groups generally chose a

less difficult task. A similar trend was observed on the Fruit Distraction Test.

This cognitive resilience of the high fantasy children is fitted with the portrait of them that has been drawn in the preceding pages. As we have seen, they are better able to organize their thoughts and perceptions, to adapt to new visual-spatial stimuli, and to maintain their concentration in the face of distracting material. These strengths are ideally suited to life in the hotel, where one requires an inordinate amount of awareness and attentiveness to interpret and respond to the chaotic and sometimes dangerous events that occur daily. Continued exposure to this environment would allow the high fantasy children the opportunity to sharpen these skills, so that they could continue to utilize them effectively. Low fantasy children, who begin with less ability in these areas, are more likely to feel the sting of their failures, or to be too frightened to practice these skills, as the hotel is far from a facilitating environment for developing mental functions. As a result, they are more apt to seek refuge by shutting down their cognitive faculties, or by refraining from attempting any new means of interpreting this landscape.

The opposite pattern was observed on the object relations measures, a finding that casts doubt on homeless children's ability to use fantasy to preserve their internal representations of people. On both the TAT and the Rorschach, the high fantasy children who had been homeless

for a longer period of time displayed much less adaptive internal representations than the other high fantasy group, which had the best scores overall. The scores of the low fantasy groups were much more consistent. On one sub-scale of the Object Relations and Social Cognition Scale, the long stay, high fantasy children dipped below both of the low fantasy groups.

The inability of the high fantasy children to maintain adaptive internal representations is not altogether surprising, considering the level of violence and anxiety that pervades their environment. There are few children or adults, for that matter, who could remain unscathed by the constant tension in the hotel and the deep-seated mistrust that most residents feel towards each other. In the learning center, children new to the hotel would frequently rush to embrace each person who entered the room, and to beg them to "be my tutor." This scene was often replaced by a less hopeful one, in which the older and more experienced children would remain by themselves, stubbornly independent and unwilling to inquire about the visitor or to give any indication that they were interested in forming a new relationship. The marked difference in the behavior of these children underscores the damage inflicted on the latter group's expectations of people and their curiosity about new interpersonal situations.

In summary, children with a more developed capacity for fantasy continue to process information and respond to the

reality demands of their environment in a more efficient manner than their peers even after an extended period of homelessness, but their representations of interpersonal relationships indicate that they are not able to escape the effects of the bitterness and violence that they witness and experience. This pattern is similar to other accounts of resilient children, who appear competent to face the challenges of daily living, but display little affect and little interest in relating to others. This leads one to wonder if the "steeling" effect discussed in chapter 2 might not be essentially a cognitive phenomenon, that allows children to focus their attention on the tasks in front of them without becoming overwhelmed by the emotional implications of the trauma that they experience, much like a good emergency room surgeon attends to a wounded patient.

Another possible explanation for this group of high fantasy children's lack of internal connection to others may be their limited opportunity to forge real relationships. Many of the children who have been in the hotel for months are cut off from their extended family and their lives revolve around their mother and their siblings. Often their mothers do not appear to have the energy or the time to give them enough attention, and many of these children themselves have assumed responsibility for their younger brothers and sisters. Homeless children are often shunned by other children in school, and most have developed a healthy skepticism about the motives and plans of others. Few of the

children appear to have made close friends among their peers in the hotel.

Unlike their cognitive structures, which are well-suited to the demands of the hotel and put to frequent use, the adaptive internal images that the high fantasy children have created get little exercise, as the children do not find themselves in many situations in which they can access them. One might predict that they will remain stagnant, or, as the learning center image suggests, that they will go underground or be transformed for the worse. Rather than being a reflection of the inherent nature of resilience, the diminished capacity for healthy object relations in these children can be seen as a direct result of their not having the chance to utilize and reform their object representations. Perhaps there is a critical period during which these children are most available for and may actively seek out the interactions necessary to maintain these visions. The craving in the children's voices in the learning center may be a signal of such an attempt. Their desperation may be justified, for in the absence of a meaningful connection to another person, the hopes and possibilities contained in their earlier internal images may be lost.

Final Considerations on the Role of Fantasy in Development

In this section, I intend to address some of the larger implications of this research, and to provide a context for

understanding the potential role that fantasy plays in development. I do not propose to be making direct linkages between the current findings and the theoretical elaborations discussed below.

The results of this study appear to be consistent with a new theoretical trend in psychology that places imaginative thinking on a new level alongside logical reasoning as a means of interpreting and responding to the world. This position is stated most clearly in the work of Jerome Bruner (1986), who has argued that individuals utilize both a "paradigmatic" and a "narrative" mode of constructing reality. The former is more suited to rational and scientific discourse, while the latter allows one to interpret literary texts and more fully appreciate the subtle nuances and evocative gestures that characterize human interactions. An individual in the narrative mode is not bound to test hypotheses or seek truths, and is free to use visual imagery, sensory cues, and personal referents to grasp the intentions and experiences of another person.

In their comprehensive new review of the form and meaning of imaginative play in childhood, Singer and Singer (1990) take Bruner's theory of "two modes of thought" as their starting point. They claim that the play of children is the precursor of the adult narrative, and can be understood as their "practicing mental skills which will later stand them in good stead." They also contend that imaginative processes continue to evolve throughout

childhood, and are preserved in more private forms in the games of adolescence and the solitary ponderings of adulthood, when the demands of reality do not allow fantasy to make too many public appearances.

Despite the apparent logic of Bruner's thesis, the results from the last two decades of research in cognitive psychology call into question his notion of a dual system of thought. In his monumental work summarizing the so-called "cognitive revolution," Howard Gardner (1985) draws on an expansive body of research that casts doubt on the ascendency of logical thinking. He cites numerous studies where subjects disregard the laws of probability and ignore concrete reference points when making decisions, only to rely on their subjective experiences and their familiarity with similar types of situations. Though he proceeds with some trepidation, at least initially, Gardner speculates that mental imagery is a "basic property of human cognition," that can provide clues to this seemingly irrational behavior. He does carefully consider alternative hypotheses, which relegate imagery to a derivative role as a "surface display" of one's fundamental goals and beliefs. Yet in his final analysis, Gardner embraces mental representations as the key mechanism for processing and encoding new information, and he argues that "logic cannot serve as a valid model of how most individuals solve problems most of the time (p.370.)."

The fact that Bruner retains a logical system of thought (despite giving it short shrift in his theory) and Gardner

only reluctantly abandons it is not surprising, given their academic training and the broader traditions of Western thought in which they work. From Aristotle to Locke to John Stuart Mill, reason and the empirical pursuit of truths have held sway over most philosophers of the mind. These principles were held no less firmly by Freud and Piaget and their followers. Yet the successes of the cognitive psychologists have had the paradoxical effect of diminishing the relevance of "pure" reason and jeopardizing the standing of the scientific method. Their work has further legitimized the role of symbolic representations in all types of mental endeavors, and has rebuffed the notion that imaginative thinking is an alternative to rational discourse that should only be applied in humanistic settings.

Though his critique of reason is based on more philosophical grounds and does not rely on empirical evidence, Vanderberg (1984) makes a similar argument, and he has striven to give childhood fantasy and its expression in play a more prominent position in development. He suggests that play involves the child's attempt at myth-making, that allows him to make sense of his experiences and test out new roles. He also argues that fantasy activities do not diminish as a child grows older, but are replaced by the more sophisticated myth systems of adulthood, including the myths about the preeminence of logic and reason. Vanderberg cautions against looking for direct cognitive linkages to imaginative thinking, as he maintains that a child's capacity

for fantasy is his basic mechanism for comprehending events in the world. The exercising of this capacity may provide secondary gains to other mental faculties, but he believes that fantasy should be considered more fully in its own right. For it is in play that the child can begin to appreciate the possibilities that lie before him, and can maintain hope that he will be able to act on his dreams.

It is on this last point that I will dwell for a brief moment longer. The notion of possibility, of future potentials, might well be the central feature of fantasy, and may provide the key to understanding its role in adaptation. Vanderberg adopts the existential model of Rollo May (1969) and Irvin Yalom (1980) to explicate his theory of children's play, and I too believe that their work is relevant to a further consideration of this issue.

In one of his major breaks with psychoanalytic tradition, May took issue with Freud's concept of wish fulfillment. He argued that wishes do not merely reflect instinctual urges, and he maintained that the capacity to wish represents one of the great achievements of the species:

> The human wish, we are saying, is not merely a push from the past, not merely a call from primitive needs demanding satisfaction. It also has some selectivity. It is a forming of the future, a molding by a symbolic process which includes both memory and fantasy, of what we hope the future will be (p.211.).

May believed that much of the psychopathology that he saw in his patients resulted from a failure in their ability to wish, or envision any potential successes for themselves, and

he noted that their lack of hope was inevitably a critical issue in their treatment. In his theory, the capacity to wish represents the first step in man's participating in the world, and provides the vitality and excitement necessary for him to choose to be an active player in it.

Though May did not directly address himself to childhood neuroses, one need not extend his ideas too far to bring them to bear on the importance of child's play in promoting healthy adjustment. In his formal definition of wish, he made a direct connection with fantasy, for he described it as "the imaginative playing with the possibility of some act or state occurring (p.218.)." If we accept the proposition that childhood fantasy is a prelude to the mature adult wish, we can more strongly affirm its status as a progressive, future-oriented endeavor. In May's framework, the imaginative child would be ideally positioned to make the transition to a vibrant adult life in which he continues to play with the options before him, and maintains his enthusiasm for trying on potential roles and responsibilities. He need not leave his fantasies behind or privatize them, as Singer and Singer suggest. Indeed, we should be reminded that some of the most successful thinkers in history have relied heavily on their imaginative faculties, including Einstein, perhaps the greatest scientist of our time. He engaged in frequent "thought experiments" and would often imagine, among other things, what it would be like to ride on a light beam (Cole, 1989).

We must conclude that childhood fantasy is not a diversion, nor is it inevitably a regressive phenomenon that provides clues to past conflicts. Rather, the capacity to fantasize represents a comprehensive system for exploring and interpreting the world, that has applications to a wide scope of mental activities and a broad range of interpersonal situations. In its highest form, it gives children the opportunity to consider the possible, a simple yet noble task that underlies all human intention and action.

We must now consider the consequences of depriving children of the chance to develop their playfulness, and the boundless potential that it encompasses, for in so doing, do we not also rob them of their humanity? When we bemoan the plight of homeless children, and fantasize about finding them a place to live, should we not also seek to give them the know-how to wish? These are not abstractions, and the emphasis of this study is not intended to divert attention from the need to provide these children with food, clothing and of course, shelter. If we ignore the value of their ability to fantasize, however, we must be prepared to cope with a generation that does not know how to dream, how to plan for the future and ultimately, how to unleash the spirit of human potential that lies within them.

Implications for Clinical Interventions

Child psychotherapists have increasingly come to recognize the value of encouraging the fantasies and

enhancing the symbolic play of their patients as ends in themselves. Slade (1988) has argued that one of the major aims of therapy should be to "motivate and interest children in symbolizing." Following in the tradition of Winnicott, most therapists attempt to reach this goal by creating a "holding environment," a safe, secure space in which the child will be able to freely express himself in play. This setting is thought to be especially critical for children who have not had consistent caretaking. In this model, the relationship with the therapist provides the context for a mutual exploration of the child's fantasy life, and the uncovering and reworking of psychic conflicts that are revealed along the way.

Other clinicians have argued that the traditional therapeutic arrangement is not enough to insure that children develop their capacity to fantasize. As Drucker (1988) points out, children are often referred to therapy because of their inability to play and interact with others, and one cannot assume that providing them with a supportive and non-threatening environment will allow this capacity to emerge. Moreover children's lack of fantasy and play is often more than just an indicator of anxiety or insecurity, and could reflect an inflexibility or a deficit in their cognitive apparatus or an insufficient motivation to exercise this capacity.

Regardless of the etiology of this deficiency, it needs to be addressed directly in treatment. Despite the

traditional emphasis on "following the child's lead," the therapist may have to introduce play sequences or initiate some rudimentary symbolic activities with puppets or other material. This may require that the therapist overcome the tendency to reject such interventions as educational devices that belong outside of the treatment room. This barrier might be more easily breached if the clinician can come to recognize, as Winnicott, Slade, and May have, that the therapeutic relationship is the ideal medium for developing one's imaginative self, which can only evolve in a mutually shared experience. As Santostefano (1985, 1988b) has shown, therapeutic interventions that aim to develop the child's symbolic capacities need not sacrifice any of the vitality and intimacy of the traditional therapist-patient relationship.

Recent advances in psychoanalytic theory have provided a new clinical model in which this enhanced capacity for fantasy can be utilized. Schafer (1982) has come to view adult analysis as joint endeavor in which the analyst acts as a co-creator of the patient's reality, and he now sees the retellings within the transference as reformulations rather than reenactments of early situations. In these exchanges, the patient feels as if he is "living the past moment for the first time" (p.129.). Spence (1982) also rejects the traditional notion of reconstruction in analysis, and he claims that the central task of the therapist is to develop a shared language with the patient in which they can "negotiate

an active understanding" of his past and present reality. From his standpoint, the key to a successful treatment lies in the creation of a cohesive narrative, which allows the patient to make sense of his history and to interpret new interpersonal situations.

These revisions of psychoanalysis can easily be adapted to the child treatment situation (Brandell, 1988). It is perhaps more crucial for child patients to develop the story of their lives, as many of them come into treatment after having been recently traumatized, often by forces that they do not comprehend. The therapist has a unique opportunity to serve as co-author of his patient's story, and together they can create a dialogue that includes a retelling of the child's traumas and a reworking of their meaning. This technique is particularly well suited to treatment with children who have endured the loss of a significant figure or have experienced sexual or physical abuse or another violation of their personal integrity, as these incidents often remain unspeakable for months or even years. Verbal interpretations with these children are bound to fall on deaf ears as long as they remain isolated from a metaphorical description of their experiences that has been mutually elaborated and acted out together.

In addition to allowing for a narrative exploration of the past, a well-developed capacity for fantasy also enhances a child's ability to look to the future. Implicit in the discussion of the construction of stories and metaphors is

the notion that the child patient will continue to use them adaptively to interpret new situations he faces, and that they will be continually reformed and reshaped by these experiences (Santostefano, 1988b). Children who have developed stories in which they see themselves as competent and successful are likely to maintain those images in new interpersonal and academic situations. They are also far more likely to be able to project themselves far ahead in time, and see professional and personal relationships that may not have direct referents to their current self-representations. After children have created possible roles to pursue, these visions can, in turn, serve as incentives for them. Other children are not so lucky. Recent research has shown that the long-term rehabilitation of delinquent children will require their developing a less constricted set of options, as a large proportion of them see themselves in criminal roles in the future (Markus and Nurius, 1986).

Further Implications

This research also has implications for the role of educators and others who work with children. Although we are so firmly entrenched in the computer age that the present study may seem like a pleasant anachronism, teachers should not lose sight of the role of fantasy and imaginative play in the classroom. Despite the endless possibilities available to computer literate children, these multiple models will have only a cursory impact on their development as long as they remain outside their own minds.

The reluctance to include fantasy activities in the curriculum beyond the pre-school years, and the emphasis on skills building in even the earliest educational programs, can also be tied to academic traditions in which logic and reason reign supreme. Rather than trying to challenge this system, perhaps we can make more significant gains if we argue that play is one of the primary examples of work in childhood, that has concrete ramifications for later school achievement. It would probably require a much more sophisticated argument however, to convince the elementary school teacher that the class daydreamer may have a distinct advantage over his peers! Encouraging school-wide participation in the creative arts, including drama, story-writing, and poetry, might be the most economical way to insure that all students have at least one opportunity to develop their imaginative capacities.

Given the limited availability of mental health professionals, we must also draw on the larger community to foster the creative talents of children at-risk. When we consider that maintaining a caring, consistent relationship with an adult is one of the crucial variables for enhancing fantasy behaviors, we should welcome without reservation the efforts of non-professionals who accept this criteria. There are a number of organizations which help form these linkages, including the Big Brother and Big Sister programs, which emphasize one-to-one mentoring relationships, the Fresh Air Fund, which arranges for children in New York City to visit a

family in the country for a few weeks each summer, and Scout Reach, a new group that provides homeless boys with a chance to join a Boy Scout troop.

The expressed purpose of all these organizations is not, of course, to enhance the fantasy lives of the children they serve, but to provide them with companionship and an experience of another way of life. Yet in my estimation, the lasting impact of these groups lies in their giving these children the chance to envision other possibilities for themselves, either through identifying with a successful adult or by sharing in the lives of a family unencumbered by the realities of impoverished urban living. As the present study shows, this is no small gift. At this point it is critical that those performing this role hear this message, so that they will be reinvigorated and remain committed to their task. It is also imperative that we reach out to others who would be willing to play this role, but lack confidence in their ability to connect with streetwise inner-city children, and have little hope that their efforts will make any tangible difference in their lives. The message is an urgent one, for as we have seen with this group of children, the effects of homelessness and other ongoing stressors often break the spirit of even the most resilient children who do not have someone to help see them through their current experience and cannot look beyond it to a more hopeful future.

Limitations of the Study

This research was based on the theoretical proposition that fantasy serves a significant function in children's attempts to cope with and master stressful situations. The study did not follow a formal experimental design; placement in the high and low fantasy groups was based solely on the children's scores on the criterion measures, not on any treatment that they received. As a result, the observed differences in the cognitive and representational skills of the imaginative children could not be proven to be causally linked to their capacity for fantasy. As discussed earlier, the Raven's Colored Progressive Matrices was not appropriate as a control measure of general intelligence for this population, and the possibility that there was a disparity in the intellectual functioning of the two groups could not be ruled out. The children in this sample were not pre-screened, and there were little data available on their family history, their academic status, and their physical and mental health. No hypotheses regarding predicted differences between the two groups on any of these measures could be confirmed.

The lack of a control group limits the opportunities for generalizing from this study. It was not possible to compare this group of homeless children to a similar group of economically disadvantaged non-homeless children to determine if the resilience of the high fantasy children was more than just a relative condition. Were their scores to be

comparable to the performance of the upper ranks of a control group, it would be easier to affirm their ability to successfully ward off the dangers lurking in their environment, and to accept that their well-developed capacity for fantasy had allowed them to transform a potentially overwhelming situation into an opportunity for growth and development.

Though the sample size was adequate for most of the analyses that were conducted, the two-way analyses were less robust than they might have been if there had been more subjects in each cell. The three-way analyses, which included information on both age and gender, were also plagued by this problem, and the cell means could not be considered meaningful population estimates. These data were not included in the results.

As discussed previously, multivariate analyses of the data could yield additional data not captured in this two group design. Of particular interest is the relative contribution of fantasy to the children's cognitive functioning and ability to maintain adaptive object representations, when compared with other potential independent variables. These analyses are currently being conducted.

Suggestions for Future Research

In addition to addressing the issues discussed above, future research projects should include attempts to take a

broader look at the functioning of imaginative children. After establishing which children have more adaptive fantasies, it would be important to obtain a detailed description of the ways in which they utilize this capacity in their daily lives, both in their efforts to solve concrete tasks, and in their interactions with other people. It would also be essential to take note of their plans for the future. Bruner's investigation of adult narratives and Nelson's examination of children's scripts most closely approximate this goal, but neither of these research paradigms pays particular attention to those children or adults who have a predisposition to engage in this activity. Focusing on the more imaginative children would allow us to draw more definitive conclusions about the narrative mode. If they do indeed rely on this way of thinking much of the time, their success or failure would go a long way in determining the adaptiveness of this approach to the world.

Unfortunately, there are far too many children who cannot wait for these results, and while we conduct these exploratory studies, we must also attempt to arm homeless and other traumatized children with any weapon that they can use to overcome the stresses that they face every day. We should therefore seek the most efficient means for effectively enhancing children's capacity for fantasy, and continue to assess in concrete terms the advantages that they gain from this training. We must evaluate imaginative play groups and mentoring relationships in this light to determine if they

should be more widely deployed. We must carefully document our successes, and forcefully distribute this information to both clinicians and non-clinicians alike. Given the prevailing trends in psychology and society at large, only a resounding chorus of voices will make educators and policy makers sit up and listen to the potential benefits of these methods.

Concluding Remarks

For the foreseeable future we will continue to be faced with daunting numbers of children-at-risk. Ultimately, we must all take an active role in helping them to combat the ever-intensifying pressures that they face throughout development. We must abandon the myth of irreversability and no longer allow it to guide prevention planning that focuses primarily on the avoidance of negative stimuli. We must instead seek to identify and facilitate those capacities which offer these children new means of coping. This study has been one such attempt.

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