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THE EFFECTS OF PLAY THERAPY ON THE SELF-ESTEEM OF ADULTS WITH DEVELOPMENTAL DISABILITIES

by

Virginia Watts

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Education

MONTANA STATE UNIVERSITY
Bozeman, Montana

April 1994
APPROVAL

of a thesis submitted by

Virginia Watts

This thesis has been read by each member of the thesis committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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Virginia W. _______
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ABSTRACT

This study examined the effects of six sessions of self-directed play therapy on the self-esteem of three adults with developmental disabilities. Battle's Culture-Free Self-Esteem Inventories, form AD, and a staff assessment were used as objective measures of change. Observations in and outside of therapy sessions were also used to determine the effects of the therapy sessions. The participants were three adult, male volunteers, all of whom had developmental disabilities. A single case, repeated measures design across participants was used. Probe measures of the self-esteem inventories and the staff assessment were taken each week of the entire study. The study was divided into baseline, intervention and follow-up. Results from the self-esteem inventories and the staff assessment showed no change in self-esteem overall for participants as a result of the play therapy sessions. Observations, however, demonstrated behavior change for all three participants. A study of longer duration, with a longer intervention phase in particular, may be needed to elicit changes on the objective measures. Recommendations for further research included development of assessment tools developed for and normed on the population of adults with developmental disabilities and further research into therapeutic strategies for adults with developmental disabilities, including replication of this study.
CHAPTER 1
INTRODUCTION

There is a growing population of people with developmental disabilities residing in communities outside institutions. Some of these individuals may benefit from counseling services. Counseling for adults with developmental disabilities, however, has received little attention from researchers. This study examined the effects of play therapy on the self-esteem of adults with developmental disabilities.

The introduction will offer reasons for counseling adults with developmental disabilities and present a rationale for using play therapy with this population, as well as offering a statement of purpose of this research and definitions of variables. Finally, it will present the conceptual framework of the study.

Historical Perspective and Significance of the Problem

According to Speed (1991), for almost 100 years in the United States, people with mental retardation and other neurological impairments were housed in institutions away from the general population. Often warehoused from birth, these people were thought to be incapable of becoming contributing members of society (Dillenschneider, 1983). Hidden away from the public eye, people with developmental
disabilities rapidly faded from public awareness and conscience. Speed describes how in 1962, the President's Panel on Mental Retardation formed to bring this forgotten population much needed attention while the civil rights movement prompted the formation of parents' groups to agitate for recognition of the rights of people with developmental disabilities. By the 1970s, federal law mandated integration of people with disabilities into their communities and mass deinstitutionalization began (Speed, 1991).

The influx of people with developmental disabilities into community living has posed a challenge to mental health providers. For people who are mentally retarded, psychological problems are surpassed in frequency only by "mobility limitations as secondary disabilities" (Jacobson & Ackerman, 1988, p. 377). Unfortunately, mental health professionals have not adequately met the challenge presented by this group of people with a dual diagnosis of mental retardation and psychological problems (Spangler, 1982; Spragg, 1984).

Adults who are developmentally disabled and face problems of mental health have, for the most part, fallen into what Harvey and Schramski (1983) term the "crevasse between . . . mental retardation and mental health services" (p. 44). Schneider (1986) identifies this population of the dually diagnosed as the "most underserved population in the country" (p. 151). Inadequate services are due in part to
myths held by counselors, psychologists and psychiatrists about the developmentally disabled (Schneider, 1986). Myths identified by Schneider include the views that people who are mentally retarded do not experience the wide range of emotional problems found in the general public and that people who are mentally retarded are incurable and are not capable of benefitting from therapy.

Lack of proper training for mental health practitioners is a major contributor to the perpetuation of these myths and to the continuing paucity of mental health services for people with developmental disabilities (Jacobson & Ackerman, 1988; Spangler, 1982). Educating mental health professionals, however, is difficult because researchers have not focused on counseling for adults with developmental disabilities (Spragg, 1983). Spragg points out that lack of research does not appear to be due to a lack of positive research outcomes, to a diminishing need for such research, or to a discovery of all the answers. Furthermore, those researchers who have examined counseling for adults with developmental disabilities often provide only anecdotal information or use faulty investigative design and implementation (Spragg, 1983). Undoubtedly, a contributing factor to the limited quality of research on counseling the developmentally disabled is that outcomes of counseling as well as the actual process of change are difficult to isolate and measure (Spragg, 1984). Outcome measurement is
particularly difficult because the norming process of many assessment procedures has not included samples of adults with developmental disabilities (Spragg, 1983).

The purpose of the present study was to further investigate what methods of counseling benefit adults with developmental disabilities. Psychotherapy, including transactional analysis and reality therapy, has been used in the treatment of adults with developmental disabilities (Spragg, 1983). Developmental disabilities often result in limits in verbal ability and abstract thought, however, and counseling approaches that emphasize emotions, insight and psychological change are now considered inappropriate for this population (Spragg, 1984). As a result of this perception, counseling for the developmentally disabled has focused on teaching new skills, changing behavior through overt behavior management techniques, or providing information for behavior change (Schneider, 1986).

Children and adolescents, however, face similar limitations in verbal expression and ability in abstraction to those faced by people with developmental disabilities (Schneider, 1986). In response to the special needs of children and adolescents, play therapy was developed to help young people benefit from exploring emotions and developing insight (Axline, 1969). Play therapy allows a concrete and nonverbal means of processing internal and external experience and allowing a synthesis of the two (Piaget in
Barlow, Strother, & Landreth 1985; Voyat, 1982). Because play therapy is concrete and nonverbal, it also seems a logical technique for people with developmental disabilities (Broekgaarden, Schenk, de Vries, Wagenborg, & Scholten, 1985).

In summary, adults with developmental disabilities who would benefit from counseling services have been consistently underserved. Lack of services is due in part to inadequate information about this population and to a need for appropriate treatment strategies. Play therapy could prove to be an effective treatment for adults with developmental disabilities.

Statement of Purpose

The purpose of this thesis was to examine the effects of individual play therapy on developmentally disabled participants' self-esteem and on residential staff assessments of developmentally disabled participants' behavior in their own homes.

Objective Description of Variables

Developmental Disabilities

According to Speed (1991), developmental disabilities are neurological impairments that are severe and chronic and appear before the age of 21. Speed states that developmental disabilities do not disappear with time but
are generally lifelong challenges. She describes these impairments as resulting in substantial limitations in several or many areas of functioning. Limits might affect the ability to care for one's self (for example, by interfering with the ability to bathe without help). Limitations may exist in the ability to use language, as a communicator and/or as one receiving communication (for instance, by interfering with the physical production of speech). Impairments may hinder learning (for example, by restricting memorization). Mobility may be affected (by the loss of muscle control in one or both legs, for example). Self-direction may be affected (for instance, by the inability to initiate a behavior without an external cue). Capacity for independent living may be impeded (for example, by the occurrence of severe, uncontrolled epileptic seizures which require immediate medical care). Economic self-sufficiency may also be affected (for instance, by repeated or socially unacceptable behaviors that preclude performance of a paying job). Finally, individuals with developmental disabilities must have some kind of assistance and plan for receiving specific services, usually for the span of their lives (Speed, 1991).

While the examples of characteristics offered above are useful for understanding people with developmental disabilities, it is important to remember that this population is as diverse as the general population. For
example, some people with disabilities work while some do not; some have serious mental illnesses while others do not; some are married, others live alone, while still others live communally.

For the purposes of this study, individuals were identified as developmentally disabled because of their participation in services at Reach, Inc. All clients of Reach have been screened by the Department of Family Services and identified as developmentally disabled and eligible for services at Reach.

**Self-Esteem**

Self-esteem, self-concept, the self and personality are closely related. Rogers (1951) defines self-concept as follows:

> The self-concept, or self-structure, may be thought of as an organized configuration of perceptions of the self which are admissible to awareness. It is composed of such elements as the perceptions of one's characteristics and abilities; the percepts and concepts of the self in relation to others and to the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having positive or negative valence. (p. 136)

Rogers' definition includes components that deal with the perception of oneself as well as those that deal with the value attached to those perceptions. Battle (1982) posits a distinction between self-concept and self-esteem. Self-concept is a broader construct which includes self-esteem. Self-esteem has to do with the value one places on elements
of the self as well as the value of the self in general.

Battle (cited in Battle, 1982) defines self-esteem:

Self-esteem refers to the perception the individual possesses of his own worth. An individual's perception of self develops gradually and becomes more differentiated as he matures and interacts with significant others. Perception of self-worth, once established, tends to be fairly stable and resistant to change. (p. 26)

In this study, self-esteem was measured by scores on the Culture-Free Self-Esteem Inventory. Because, according to Battle (1992), self-esteem affects behavior, an ancillary measure of self-esteem was the staff reports on task-oriented behavior of participants.

Play Therapy

For the purposes of this study, play therapy was defined according to Broekgaarden, Schenck, de Vries, Wagenborg, and Scholten (1985): "A form of therapy in which play is used as a means of realizing changes in the behavior and experience of the client and removing emotional blockades" (p. 2). The following techniques were used (Broekgaarden et al., 1985): motor play (play involving simple manipulation of objects or simple body movement); sand and water play; functional play (for example, assembling a puzzle); constructive play (for example, using a toy cup for pretending to drink tea, or using blocks to build a bridge for toy cars); symbolic play (for example, using a block as a car or using a crayon as a headstone for a doll's grave).
Conceptual Framework

Self-directed play therapy involves the blending of the concepts of two theorists, Rogers and Piaget (Axline, 1969). Rogers (1951) offers a description of the process of nondirective therapy and its effects on the development of the individual, while Piaget (1962) offers an explanation of the origins and importance of play in human development. Axline blends these two theories in self-directed play therapy.

Rogers (1951) focused on the development of self-concept. Rogers recognized the development of a sense of self as a part of the natural maturation of the child. Rogers saw the environment as critical in influencing the rate and direction of the development of self. He asserted that parental denial of the child's experience forces the child to choose a false self that matches parents' expectations but belies the true experiences of the child. Maintaining this false self leads to problems in living and emotional disturbance. Nondirective therapy offers an environment where the true experience of the individual can be reclaimed and a more accurate self-image can develop.

Piaget (1962) described the development of play as a natural process of maturation, just as Rogers (1951) saw the development of self-concept fueled by maturation. According to Piaget, play also serves several functions for the child
including helping the child satisfy needs not met by the environment and helping the child adjust to demands of the environment. Unlike Rogers, Piaget placed less emphasis on environment, identifying the natural development of cognition as more influential than the environment on how play developed.

Axline (1969) recognized play as a natural medium for children to express complex emotions and experiences. She also credited nondirective play therapy with rectifying the self-concept of children, enhancing their self-esteem, and improving their behaviors and interactions outside of therapy. According to Axline, amelioration occurs because play allows children to explore their experiences concretely, understanding what their true feelings are and what are feelings dictated to them by parents and others. Play therapy may also benefit adults with developmental disabilities because of their similar propensity for concrete thought.
CHAPTER 2
LITERATURE REVIEW

This literature review will summarize the theoretical framework of this study, research and other pertinent information related to insight-oriented counseling for adults with developmental disabilities, self-esteem of adults with developmental disabilities, and play therapy. Specifically, the review will include explanations of the theories of Rogers, Piaget, and Axline; various techniques that emphasize insight for counseling people with developmental disabilities; self-esteem of adults with developmental disabilities; and play therapy and its application to individuals with developmental disabilities, as well as its relationship to the development of their self-esteem.

Theoretical Framework

Rogers

Rogers (1951) conceptualized personality development as an interaction of the individual and the environment, fueled by the natural maturation of child into adult. Rogers saw infants as initially unaware of any value of behavior. Infants seek to have needs met based on cues from body, mind and emotions (Rogers called these psychological cues
visceral). As children begin to differentiate, that is to develop a self separate from the environment, they also begin to attach value to actions and feelings. Some things make the child feel bad or agitated while others make the child feel good or at ease. The self is experienced as good and as needing protection.

As children mature, they also form bonds with others, most importantly with the parent figure or figures (Rogers, 1951). Such bonding is important to the child’s development but it can also be detrimental to healthy development of the child’s self. As children’s needs and valuing come into conflict with those of parents, children’s value of self is threatened. (Such conflict is demonstrated in Piaget’s compensatory play, described later, where the child enacts a reality that contradicts the parents' judgment and confirms the positive value of the child’s needs and actions.)

According to Rogers (1951), when parents reprimand children in a way that does not acknowledge or accept children’s needs or subjective values, children are forced to act to protect their delicate sense of self worth from a perceived loss of parental love. Often, children choose not to lose parental love or self worth. They must therefore reconcile these two things. They do so by absorbing parental values, distorting their perception of those values so that they seem to be based on the children’s own experience. Rogers calls this process of absorbing and
distorting, introjecting. (Piaget's liquidating play, explained below, exemplifies this process where children reenact upsetting events but act as if they hold another's view, in other words, the view that they do not experience the event as upsetting.) Serious problems arise as these distorted values conflict with physical or psychological experience. For example, the child feels a strong urge to chase the cat round and round the house. The more the cat runs, the more exciting and pleasurable is the chase. When the parents tell their child to stop chasing the cat because "you really don't want to frighten kitty," the child is faced with a serious dilemma. The child does, in fact, want to frighten the cat. It is great fun. The parents' message is that what the child is feeling and doing is bad, and therefore the child is bad. To defend against this devaluing, the child incorporates parental values into the sense of self, as if the child had developed these values based on personal experience. It is the distortion in the process that causes problems. The next time the child feels the urge to chase the cat, the new sense of self says "you're not the kind that chases cats," while physical sensations of excitement and emotional sensations of eagerness say the opposite. In order to deal with this conflict, the child ignores or distorts the physical and visceral messages that conflict with the new sense of self.
Rogers (1951) contended that this process of ignoring and distorting physical and visceral information becomes more necessary as the sense of self is shaped by the valuing of others in the environment. As more distortion occurs, the sense of self becomes more and more fragile since it is moving farther and farther from the actual feelings and needs of the individual. Eventually, the individual's self-concept is so distorted that the person experiences intense anguish and perhaps mental illness.

Client-centered therapy developed by Rogers (1951) offers a new environment for individuals to explore the sense of self through a relationship with another, the therapist. The experience in client-centered therapy is different from the process of development prior to therapy. In therapy, clients are allowed to express needs, desires, abilities, and emotions without a value being placed on them. In addition, the therapist expresses a constant positive valuing of the clients. As clients begin to recognize that there is no need to protect self-concept from the therapist, they begin to examine some of the feelings and needs that they have ignored or distorted. As they are able to put their own values on the physical and visceral information they have, they begin to incorporate this information into a more accurate sense of self. Clients can begin to recognize what are truly their own values and beliefs about themselves and what are the values and beliefs
they have introjected. Finally, as their self-concept matures, so do their relationships with others.

According to Rogers (1951), the process of self-examination and sorting out is not directed by the therapist. It is fueled, rather, by the natural, maturational urge to develop a positive, differentiated sense of self. The therapist creates an accepting and nonjudgmental environment and the client naturally moves toward a healthier self.

In summary, Rogers (1951) saw development of a healthy personality as a natural drive in human beings. This natural process can be blocked by the effects of socialization. Socialization can force children to choose between the approval of parents and significant others and their own needs and wants. In response to this dilemma, children often incorporate the valuing expressed by parents into their own personality as if the valuing came from their own experiences and needs. The valuing is in direct contradiction to information they receive physically and viscerally. This contradiction, repeated again and again over time, interferes with normal personality development and results in psychological distress. When a person seeks counseling in response to this distress, a client-centered therapist provides an environment conducive to the client's sorting out ignored or distorted information. Once the client has sorted out this information, blocks to normal
development have been removed and normal personality development can proceed. Improved self-concept leads to more satisfying behaviors and relationships.

Piaget

Piaget (1962) saw play as one manifestation of the development of human cognition. According to Piaget, infancy is marked by lack of differentiation. Infants do not see themselves as separate and different from the environment. Mental activity, emotion, physical sensation, physical action, outcome and object are all swirled together. Piaget called these swirls schemata. Initially, schemata grow from certain instinctual actions. Grasping is one such action. Flexing and waving the arm is another. As children grow, instinctive behaviors interact with the environment and schemata develop, combine to form new schemata, and expand to incorporate new elements of the environment. For instance, the infant first grasps, opening and closing the fist over and over, a process Piaget termed a circular reaction. At other times the infant waves its arm to and fro. At some point, quite by chance, the infant grasps a rattle. The schema of grasping is expanded to include the rattle. To the infant, however, there is no differentiation of the feeling of the rattle, the rattle itself, the infant itself, the act of grasping, or the mental activity that accompanies the actions. Later, the schema of arm waving and grasping the rattle are combined to
form the schema of shaking the rattle. The other two schemata exist separately from the new schema of shaking the rattle. Rattle shaking will in turn be expanded, or generalized, to include shaking the guilt, the fist, and so on.

Piaget (1962) maintained that the two processes of cognition that function in the formation of schemata are assimilation and accommodation. Assimilation is the process of fitting external or environmental stimuli into already existing ways of knowing and doing. Accommodation is the process of adjusting ways of knowing and doing to the environment. In infancy, these two processes are also undifferentiated. The processes occur simultaneously and inseparably. In the example above, as the infant grasps the rattle, the rattle is fit into the preexisting schema of grasping, that is, it is assimilated into the grasping schema. Simultaneously, the infant adjusts its hand to fit the rattle and alters its grasping schema to include the rattle, or accommodates the grasping schema to the rattle. For the infant, in its actions and its awareness, accommodation and assimilation are indistinguishable.

As babies mature, differentiation grows (Piaget, 1962). Babies begin to recognize their abilities to act on the world around them. There is still no complete awareness of the separateness of baby and environment, but there is a sense that actions have consequences, separate from one
another. At this time, assimilation is also beginning to differentiate from accommodation and these differentiating processes are manifest in what Piaget termed practice play. When the child masters a particular behavior, the need for circular practice no longer exists. Yet, the child at this stage will often continue the action, frequently in a prescribed way and with great pleasure. This is practice play. For example, the child who has mastered the simple game of looking under the paper for the toy car, no longer needs to be perplexed, ask where the car has gone, hunt for the car, and be surprised and delighted to find it. Yet, that is exactly what the child will do. The child hides the car, knowing full well where it is. Then the child will repeat the question "Where go?" accompanied by an exaggeratedly concerned and confused look. Immediately, the child will whip off the sheet of paper, revealing the car and exclaim, "Here is!" squealing with delight. According to Piaget, the pleasure is not now in discovery or even in the act of mastering but in the power of mastery itself. The child is demonstrating power over reality. Rather than acting in conjunction with reality (the car is covered up and the child must look for it), the child fits reality to his/her uses (the child hides the car, imitates confusion and reveals the car). And this is the manifestation of the beginnings of dominance of assimilation over accommodation, which cannot occur unless assimilation and accommodation are
becoming differentiated. Yet, children’s behavior still closely approximates or imitates reality.

According to Piaget (1962), as children reach the end of the first stage, the sensorimotor stage, of cognitive development, two important maturational landmarks have occurred. Children have learned that people and things exist even when they are not visible. Piaget called this object permanency. As object permanency develops, symbolic thought becomes possible. In addition, assimilation and accommodation become completely differentiated and children develop the ability to indulge in assimilation with little or no accommodation. Piaget called this symbolic play. Symbolic play develops and becomes more intricate as children pass from the sensorimotor stage to the concrete operational stage of development.

In the practice play stage, the child might see an empty cup and play at drinking, over and over (Piaget, 1962). At the end of the sensorimotor stage, the child will use a leaf, a bead, a shoe to be a symbol for the cup. But the symbol is not entirely free from the schema of drinking.

Symbolic play still constitutes repeating the child’s own schemata (Piaget, 1962). As symbolic play and the separation of self and environment continue to develop, children begin to apply the symbolic play to others. Now the child will have mother, father, and cat drink from the shoe or the bead. Next, the child will begin to imitate
others' schemata, sometimes with actual objects and sometimes with symbolic objects. The child will pick up father's hammer and pound on the floor. Then the child will pick up a spoon and pound on a piece of wood. Yet, at this point the symbol is still a part of the schema; action and symbol are still entwined.

Piaget (1962) asserted that, as maturation proceeds, children begin to extract object from action. Children will spontaneously identify an object as a symbol, and play will proceed from there. For example, a piece of bread will become a gun and then a hammer, which the child will use to "fix" a plate. Next, children will symbolically take on the role of other people or things. A child will be a puppy, barking and crawling on all fours. At this point, assimilation is completely dominant over accommodation since clearly a piece of bread is not in reality a gun nor is the child in reality a dog. Reality is subordinated to the will and the needs of the child.

As children separate symbol from action, they become free to combine symbols in an infinite array of combinations (Piaget, 1962). Sometimes reality is reproduced with impossible twists. For example, the child has a cat who talks and drives to the toy store to buy things. Here, the pleasure is in the creation itself.

At other times, symbolic play becomes what Piaget (1962) termed compensatory. That is, it is used to fix
reality to fit the desires and needs of the child. (Rogers emphasized the need for the child to find a way to harmonize subjective experience or personal reality with the environment.) For instance, when the child is scolded for throwing toys, he/she recounts a fictitious story wherein the baby sitter allowed the child to throw toys and even joined in the throwing. The need of the child to obtain what is wanted is satisfied through symbolic play.

Symbolic play may also be used to come to terms with an unpleasant situation (Piaget, 1962). Piaget termed this process liquidating. In this case the child does not intend to change reality but rather to defuse it (again, corresponding to Rogers' conceptualization that the child needs to correlate internal and external reality). For example, the child might play out an unpleasant visit to the doctor, repeating all that happened but using an imaginary friend to replace him/herself as the patient. In this case, the child needs to absorb the event through a less intimidating review of the circumstances.

Finally, children mature toward a balance between assimilation and accommodation (Piaget, 1962). Achieving a balance is only possible once assimilation and accommodation have become completely differentiated processes. Now, play becomes controlled by rules.

According to Piaget (1962), as children move from symbolic play to ruled play, they are also moving into ever
expanding social interactions. Play shifts from solitary or side-by-side play to cooperative play with others. As this occurs, symbolic play becomes even more complex as other people become players. Children begin to accommodate their symbols to mesh with the symbols of others. And, finally, children begin to accommodate themselves to rules. In play with rules, there is still an element of symbol and the individual still has an opportunity to triumph (elements of assimilation), but the child must adjust to the restrictions of the rules and the actions of the other players (elements of accommodation). At this stage, as in practice play, the child works to make close approximations of reality. Games of rules become the predominant form of play for older children and adults in response to the maturational processes of cognition.

In summary, according to Piaget (1962), infants come into the world undifferentiated in experience and in functional processes. As maturation occurs naturally, children begin to differentiate self, experiences, and the internal processes of cognition. All behavior reflects this natural process of maturation with differentiation. Play is one area of behavior that clearly demonstrates the internal maturation of the child. Children progress from functional activity, to practice play of their own behaviors, to symbolic play disassociated from reality, to rule-governed play. This progression corresponds to children's
differentiating self from the environment and their subsequent ability to act in harmony with the environment. In addition, it parallels the differentiation of the processes of assimilation and accommodation and their subsequent balance in affecting behavior. Piaget also saw play as serving the needs of children. Play can be a simple exercise of controlling or creative power. It can give children what they need but cannot attain in reality (compensatory play). It can help children accept unavoidable but unpleasant realities (liquidating play). Play is both the enactment of children's natural maturation and a process to help them cope with the environment.

Rogers and Piaget Compared

Rogers' (1951) theory of personality development parallels Piaget's (1962) theory of cognitive development in several ways. Just as Piaget theorized cognitive development as being powered by the inherent maturational process of human beings, so Rogers saw personality development (that is a striving towards a healthy, whole self) as being an innate process of maturation. Similar to Piaget, Rogers recognized a lack of differentiation in infants and saw a process of differentiation of the personality, or the self, as maturation continued. Rogers also recognized that experiences and feedback from the environment are taken into the self in several ways: they are accepted and used to adjust the concept of self (balance
of assimilation and accommodation in Piaget's terms); they are ignored because they have no immediate importance to the self; or they are distorted to be more acceptable to the sense of self (assimilation in dominance over accommodation). Rogers saw healthy maturation as culminating in a self that is able to accept feedback and experiences from the environment in a free-flowing and spontaneous way, while the self remains fluid but constant. Here again Rogers' theory parallels Piaget's concept of maturation culminating in a balance between accommodation and assimilation. Neither Rogers nor Piaget identified differences in development of self-concept or cognition based on gender.

A major difference between Piaget's (1962) theory and Rogers' (1951) theory rests on the influence of the environment on development. Piaget conceptualized an interaction between play and cognitive development, each shaping the other (Keller & Hudson, 1991). He put much greater emphasis on the role of the internal structure of cognition than he did on the effects of the environment on the process of cognitive development (Piaget, 1962). Rogers, on the other hand, theorized that the environment can block the natural development of the healthy personality.
Axline

Axline (1969) describes the child's development of personality:

Some psychologists might explain [the child's behaviors] as examples of responses to stimuli. The writer prefers to explain them as the reactions of a child who is growing -- growing -- growing in experience, growing in understanding, growing in his acceptance of himself and of his world. He is assimilating all the ingredients that become integrated into the configuration that is uniquely his. It is called his 'personality.' (p. 12)

Axline combines Piaget's and Roger's concepts of development. She sees children assimilating information from the environment and accommodating to that information. She also describes children's sense of self being generated as a part of the maturational process. Likewise, her description of play therapy incorporates Rogers' and Piaget's ideas. Axline emphasizes Rogers' ideas of acceptance and positive regard to set the stage for the child client's efforts at regaining a healthy sense of self. The process for working towards that healthier self-concept is play. Play takes the forms of Piaget's practice play, symbolic creative play, symbolic compensatory play, symbolic liquidating play, and rule-governed play. Also, in play therapy, the parent-child relationship is reenacted with new rules, in the sense that the therapist fulfills a role very similar to a parent's role while children carry out their
own roles by playing as they would at home (Guerney, 1985). The difference is that the parent figure is accepting and the child guides the interactions that occur (Guerney, 1985).

Axline (1969) describes the outcome of play therapy as children's abilities to show their real or inner selves, to accept themselves, and to have feelings of self-esteem and self-confidence. Axline also describes children's increased abilities to accept others and to interact more freely with the environment and the people in that environment. Thus, play therapy affects children's sense of intrinsic value, their value in relation to what they do, and their value in relation to others.

**Counseling for Adults with Developmental Disabilities**

In 1979, there were approximately 4,000,000 adults diagnosed as mentally retarded (Klugerman & Darkenwald, 1982). It is estimated that between 20% and 35% of people diagnosed as mentally retarded also have psychiatric impairments (Lewis, Kleven & Melcher, 1988). This 20% to 35% does not include those individuals who are not diagnosed as having a psychiatric disorder but who are experiencing problems in living. In response to the needs of individuals who are developmentally disabled and have psychiatric disorders or problems of living, several counseling approaches have been developed (Spragg, 1984). Research on
group therapy for this population will be examined first followed by a summary of research on individual therapy for the developmentally disabled.

Group therapy is the most common form of treatment used for adults with developmental disabilities (Spragg, 1984). Many of the behaviors targeted for change in therapy are interpersonal and group therapy can be the most appropriate environment for exploring interpersonal interaction (Spragg, 1984). Schneider (1986) identifies group therapy as an ideal place for catharsis and practice of new skills in a safe and supportive setting. Group therapy can also be an efficient therapy, in terms of economics and time (Spragg, 1984). The abundance of research on group therapy reflects the preference for group therapy for this population (Spragg, 1984).

Papagno (1983) used group therapy to improve awareness of emotions, sharing of emotions, use of a broader range of emotion words, empathy, and use of social skills for children in special education in Boston, Massachusetts. Students had a wide range of developmental disabilities. Groups were on-going, run weekly, with a typical duration of eight to nine months. Each group followed a similar format. Papagno began each group by introducing a feeling word. Several participants volunteered to relate times when they experienced the feeling given. Papagno provided nonjudgmental clarification when needed. When the
volunteers were done, other participants volunteered to summarize what each person had shared, using eye contact, you statements, and correct sentence structure. At this point, another round of volunteers shared, followed by more volunteers summarizing what had been said. Papagno identified the groups as very effective but no assessment of efficacy was provided.

Two male and two female adults diagnosed as mentally retarded received thirty weekly group sessions in a study conducted by O'Neil (1982). O'Neil used open-ended discussion, modeling, role playing, behavioral rehearsal and selective reinforcement to treat depression in the group members. Efficacy of treatment was measured by changes in scores on the Zung Depression Scale (ZDS) and comparisons of results on a behavior checklist completed mid-way through the group and at the end of treatment. No statistical analysis of the results was completed and the design did not control for threats to internal or external validity. Results were mixed (O'Neil, 1982). Two clients' scores on the ZDS showed less depression while the other two clients showed more depression. Behavior checklists were completed on three of the clients and all three showed improvement. Informal reports from people who dealt with the participants outside of the group indicated the participants seemed less depressed and were functioning better. The participants themselves identified the social aspects of the group
Hoshmand (1985) studied 'rap groups' for adults with developmental disabilities. Two matched groups of individuals identified as high functioning (Group One and Group Two) and two matched groups of individuals identified as moderate functioning (Group Three and Group Four) were formed. Group One and Group Two were made up of younger participants (ages 21 to 34) than participants in Group Three and Group Four (ages 30 to 54). Two facilitators ran each group for a total of 15 weeks. In baseline intervention, the facilitators listened, provided moderate structure, modeled participation, and minimally shaped participant responses. This baseline intervention was alternated with treatment one where the facilitators encouraged participants to express feelings and treatment two where the facilitators questioned participants to encourage reflection on issues discussed. Content and participation, as opposed to measures of behavioral or psychological change, were used to measure the efficacy of these counseling approaches. Frequency of each member's participation was averaged for each phase of treatment. Themes were generated through a process of content analysis. Hoshmand concluded that minimal structuring, modeling and shaping, and moderate facilitation produced meaningful
discussion among participants in this group. Interventions did not seem to result in an increase in participation for subjects labeled high functioning, but interventions did increase the frequency of participation for the individuals labeled moderate functioning. Because all four groups were not matched on age, age could be a confounding factor in the differential effects of treatments between Groups One and Two and Groups Three and Four. Themes generated differed as a function of age rather than a function of ability. Themes generated by participants included relationships, independence, self-worth and behavior control. Themes related to self-esteem were important to the participants.

Spragg and Miller (1982) used a group approach for counseling couples who were developmentally disabled. Spragg and Miller identified several elements of group therapy which enhanced problem solving, communication and interpersonal skill acquisition: support from peers, availability of various models, multiplicity of feedback sources and behavior choices. The couples were assessed for entry into the group by means of the Draw-A-Couple and the Couple Problem Identification Inventory. Neither instrument had been validated at the time of the study. Four to five couples, married and unmarried, met with two facilitators for 90-minute, weekly sessions in this ongoing group. The focus of the group was problem solving. Facilitators were nonjudgmental in regard to problems and decisions presented
by the members. Facilitators did structure the group interaction, model appropriate behaviors, modify group behaviors, and lead the discussion of likely consequences for possible choices. Spragg and Miller used games, art, and role-play techniques as well as skill identification and practice to focus on communication and problem-solving. Several changes in group members were noted. Members increased appropriate group behaviors, including participation and openness. Members also followed through and solved specific problems. Members made efforts to use problem-solving techniques independent of the group. Finally, members expressed belief in the efficacy of the group. No post-treatment measure was used. All information on change was anecdotal.

Group counseling for the developmentally disabled frequently emphasizes changing interpersonal behaviors through interaction. Individual counseling for this group often focuses on behavior change through skill acquisition and learning.

Spragg (1984) defines counseling as a teaching process, emphasizing information transfer and communication. Spragg stresses understanding how the client learns. He suggests that treatment be structured according to learning theory including concreteness, repetition of ideas, consideration of client attention span, task analysis, review and practice, and concrete and frequent feedback. Spragg states
that evaluation of therapy should be related to change in behavior of the client, stated in measurable terms, and sees learning as an important component of therapy. Because the client who is mentally retarded often experiences failure in new situations, therapy must offer many opportunities for success. Therapy must also carry sufficient reinforcement to insure continuing participation. Behavior change occurring in therapy must also be related to the client's environment and the natural reinforcers that occur in the environment. Spragg believes that nondirective therapies are unsuccessful for adults with developmental disabilities because they lack structure required for learning, structure offered by learning theory and cognitive therapy. Spragg indicates that counselors must look to other disciplines to develop flexible strategies for counseling adults with developmental disabilities.

Hiebert and Malcolm (1988) studied a particular form of cognitive therapy, Cognitive Stress Inoculation Training (CSIT) in individual therapy for ten subjects, five men and five women. Participants ranged in age from 20-56 years and in IQ from 40-68. All were residents in a community treatment facility in British Columbia. The goal of therapy was anger management. After two weeks of measuring the baseline occurrence of anger outbursts, eight sessions of therapy, one per week, were conducted by Malcolm. In the first three sessions, the concepts of physiological arousal
and self-talk were explained. In the next three sessions, alternative behaviors were taught to participants. The last two sessions focused on transferring the learned behaviors to environments outside of therapy. Hiebert and Malcolm assessed the efficacy of treatment by examining changes in frequency of angry outbursts, in scores on the Incomplete Sentence Blanks (ISB), and in responses of participants to three anger provoking pictures. Participants' angry outbursts were significantly reduced for the group of participants. Participants' scores on the ISB also showed significant improvement. Finally, participants' responses to the pictures indicated a significant increase in nonaggressive behavior and helpful thinking and a significant decrease in aggressive behavior and unhelpful thinking. Without a control group, however, threats to internal validity such as history and maturation and a placebo effect were not controlled for.

Self-Esteem and Adults with Developmental Disabilities

From the discussion of Rogers' (1951) theory of the development of the self and the definition of self-esteem given above, it is clear that self-esteem is an important construct in therapy in general and in nondirective therapy in particular (Battle, 1992). Low self-esteem is related to mental illness and psychological problems, while high self-esteem is associated with healthy adjustment (Battle, 1992).
The perceptions one holds also affect how one behaves (Battle, 1992). Self-esteem, therefore, is also related to behavior. More precisely, low self-esteem is related to maladaptive behavior while high self-esteem is associated with healthy behavior (Battle, 1981). Self-esteem, as a part of the self-concept, develops naturally along with the self-concept as the individual matures (Battle, 1992). Self-esteem develops, as well, through the interaction of the individual with the environment, just as general self-concept does (Battle, 1992). The constructs of self-concept and self-esteem are central to counseling issues. The importance of effecting change in self-esteem and self-concept as a result of therapy can be gathered from their frequent mention as goals or outcomes in research on counseling interventions (e.g., Bleck & Bleck, 1982; Dillenschneider, 1983; Hoshmand, 1985; Roswal, G., Frith, G., & Dunleavy, A. O., 1984; Schmitz, 1989).

Development of self-concept occurs in the same manner in individuals who are disabled and those who are not (Axline, 1969; Rogers, 1951). Zetlin, Turner and Gallimore (1981) examined self-concept of 48 adults with developmental disabilities. The results of the Self-Esteem Inventory for Adults, 'The Way I Feel About Myself' Self-Concept Scale, and eleven Sentence Completion Stems adapted from the Shorr Imagery Test, were combined with staff reports on the Behavior Rating Form, systematic behavioral observations,
and information from previous participant observations to develop four self-concept profiles and to assess the validity of the quantitative measures. The study did not include any information on the reliability or validity of these measures or their pertinence to the sample in the study. Zetlin et al. identified four profiles: the Elite, who had a stable self-concept, positive in nature, and who maintained self esteem by conforming to social rules and norms; the Socialite, who had an unstable and vulnerable self-concept, and who struggled to maintain self esteem through exaggeration; the Loner, whose self-concept was solid and realistic, and who maintained self esteem through actions of personal choice; and the Nonconformer, who was unhappy and negative in self-concept, and who failed to maintain self-esteem through many different behaviors. This study supports Battle’s (1992) suggestion that self esteem is an important component of self-concept for adults with developmental disabilities. The quantitative measures of self-concept including the staff reports did not discriminate among the self-concept profiles. These failures were probably due in part to the narrow self-concepts expressed by the participants and to the lack of items on the measure relevant to these participants. Participants tended to subscribe to socially prescribed roles, with limited variation. The measures used did not touch on many of the prominent spheres that participants
used to describe themselves: vocation, acquiescence to social rules and norms, excessive reliance on others, action versus monotony, and relationships with family and friends.

In summary, self-esteem and self-concept have been identified as central issues in counseling. Self-concept and self-esteem appear to develop in similar ways in people who are disabled and those who are not. Self-concept and self-esteem should, therefore, also prove important concepts in the counseling of individuals who are developmentally disabled.

Play Therapy

Play therapy is a form of nondirective therapy that appears to offer some of the components Spragg (1984) identifies as salient to effective therapy. Play therapy emphasizes client success since it is the client who directs the therapy and chooses the techniques. Therapy mirrors clients' environments because clients act out their lives and environments in the therapy room. Activities are guaranteed to be reinforcing because clients choose what they will do. Most importantly, play therapy is based on Piaget's theory of cognitive development, and is designed to take advantage of the client's cognitive processes at his particular stage of development.
Play Therapy and Theory

Play therapy has been modified for use with a number of different theoretical orientations (Schaefer, 1985; Vinturella & James, 1987). Play can be used in behavioral assessment as a tool for developing a baseline of behaviors and for determining maladaptive behaviors (Vinturella & James, 1987). Play can be used to observe change, for instance, in the process of individuation in Jungian therapy, or to play out internal events, as in Gestalt exploration of polarities (Vinturella & James, 1987). Psychoanalysts see the child’s play as communicating repressed or defended material which the psychoanalyst then interprets to increase the child’s insights (Schaefer, 1985). In fact, Freud, in his classic case of child therapy, based his therapeutic intervention for Little Hans on information about Hans’ play, and this case is seen as the origin of play therapy (Landreth, 1987). In release therapy, the therapist directs the child’s play toward specific play items that deal directly with the child’s identified problems (Schaefer, 1985).

Kottman and Warlick (1990) blended play therapy and Adlerian counseling. Kottman and Warlick included several methods of combining therapy and theory. The nonjudgmental approach of play therapy helped develop the Adlerian, egalitarian relationship between client and counselor.
Symbolic playing out of the child's life events provided a means for exploring the child's life-style. The counselor could use symbols, puppets for instance, to offer interpretations of the child's life-style. Symbolic play provided a safe and familiar means for the child to become reoriented and reeducated and to practice new ways of being.

Several researchers have combined family systems theory and play therapy. Ariel, Carel and Tyano (1985) delineated the manner in which play therapy could be incorporated into family therapy. They listed several benefits of using play therapy. Play offers a limitless source of actions, events, and expressions for both the family and the therapist. It can facilitate communication for children and adults. Play takes therapy out of the realm of talk and into the realm of action. Play is by nature paradoxical. The players are in one sense doing what they say they are doing and because the play is make-believe they are also not really doing. Wolfe and Collins-Wolfe (1983) used play as a means of including young children in the process of family therapy. They developed specific play activities to address systems interventions for many family issues including coalitions, enmeshment and disengagement.

There are three concepts common to the different theoretical applications of play therapy. First, play allows for the concrete acting out of therapeutic topics. For example, a child may be unable to picture herself going
to school without being ill with anxiety. She can, however, play out a scenario where her counselor pretends to be a teacher and the child acts out going to school without being afraid. Second, play permits nonverbal communication between therapist and client. For instance, a boy may be unable to describe his experience of being locked in a closet by his stepfather, but he can clearly demonstrate the experience using dolls and a shoe box. Finally, play encourages a natural, nonjudgmental interaction between counselor and client. There is no right way to play, no superior way to enjoy and explore. As a result, counselor and client are equals in the client’s unique world.

Play Therapy and Specific Problems for Children and Adolescents

As well as being applicable to many theoretical orientations, play therapy can be useful for treating many different problems. For example, children can use the sand tray to act out and come to terms with the many assaults on their developing egos (Vinturella & James, 1987). Vinturella and James describe sand play as appropriate for children who are loners and those who are social. Sand play can help a child sort out feelings and experiences or express what he has clearly in mind. Vinturella and James describe the particular use of sand play to help a boy deal with the death of his father. Stiles and Kottman (1990) use art and play, particularly storytelling, for assessment and
therapy for children who are suicidal. Barlow, Strother and Landreth (1985) suggest play therapy as an intervention for problems including self-management, infantile behavior, lack of interpersonal skills, anxiety about school, and coping with physical disabilities. They offer the case study of Nancy, a child who expressed anger and anxiety by pulling her hair out. After eight sessions of play therapy, Nancy was able to be more assertive and she no longer expressed her fears and frustration by pulling her hair out.

McDonough and Love (1987) used art and play therapy to treat children who were victims of sexual abuse. Art therapy was used by the therapists in the assessment process to determine if abuse had occurred and by the children in the treatment process to express feelings and describe experiences. Play therapy allowed children to tell what happened to them, to work through their emotional responses to abuse, and to relax and take a break from the stress they experienced. Leitschuh and Brotons (1991) also found music, role play, and exercise to benefit children who were victims of sexual abuse.

Kottman, Strother and Deniger (1987) used a form of play therapy called activity therapy to work with children. Activity therapy uses play activities that are structured by the therapist, either through the use of materials or the application of game rules. Activity therapy can be used with children who are acting out, who are at high risk for
dropping out of school, and who are dealing with anger, sexuality or family relations (Kottman et al., 1987). Kottman et al. offer a case study of a young boy struggling with control issues who benefitted from activity therapy.

Play therapy has also been effective for children who have been hospitalized repeatedly or for long periods (Weininger, 1983). Hospitalized children suffer from prolonged separation from family; painful treatments; fear about loss of body parts; the actual loss of body functioning, organs, or limbs; loss of hope; and the fear of death. Weininger describes play therapy at Memorial Sloan-Kettering Cancer Center which helps children come to terms with their stress, fear, and confusion. Children were able to feel more in control, learn functional behaviors, and work better with the hospital staff.

Milos and Reiss (1982) studied the effects of play therapy on separation anxiety. The participants, 32 girls and 32 boys, were randomly assigned to one of four conditions. Three of the treatments were related to separation anxiety. In the first condition, children were allowed to play freely with a doll house set up to resemble a nursery school setting with children, parents and teachers dolls. The second condition used the same doll house, but the children were directed to play about separation. In the third condition, children watched an adult play out separation themes with the doll house. In the control
condition, children played with puzzles. The treatment lasted for three, ten-minute sessions with several days between each session. Sessions were observed and the amount of separation play was figured. Each child’s anxiety level was determined prior to the experiment using the Hall inventory, a teacher rating scale. Following the experiment, the children were interviewed using 12 standard questions, six relating to separation and six unrelated to separation. Their responses were rated for speech disturbances, and their anxiety levels were determined using Mahl’s speech-disturbance ratio. Teachers were also asked to make a global anxiety rating for each child two to eight weeks following the experiment. The speech-disturbance measure showed that the children in the experimental groups significantly reduced their anxiety in comparison to the children in the control group, although there were no significant differences in anxiety among the children in the various experimental conditions. Teacher measures, thought to be less sensitive than the speech-disturbance measures, did not show a significant difference among any of the groups. According to Milos and Reiss, play therapy, even for a relatively brief period of time, did have an impact on anxiety when measured by speech-disturbance. These findings are measured according to statistical significance. It is not clear if the children’s anxiety was lowered enough to satisfy clinical criteria.
Structured play therapy has been effective for children who exhibit disruptive classroom behavior. Bleck and Bleck (1982) worked with third graders who were determined by their teachers to be disruptive. Participants were randomly assigned to either an experimental group or a control group. Children in the experimental group attended a therapy group while children in the control group received no intervention. The treatment group used drawing, painting, role playing, games, clay modeling and puppets to examine emotions, behaviors, and behavior change. Children were assessed using the Devereux Elementary School Behavior Rating Scale, the Walker Problem Behavior Identification Checklist, the Coopersmith Self-Esteem Inventory, and the Disruptive Behavior Rating Scale. Two significant differences were found between the experimental and control groups. The children in the play group improved significantly on the disrespect-defiance factor measured by the Devereux Elementary School Behavior Rating Scale. These children also showed significant improvement on the Coopersmith Self-Esteem Inventory as a result of participating in the play group. Because the control group did not receive any intervention, it is difficult to determine if a placebo effect may have contributed to the changes in the participants in the experimental group.
Play therapy has proved effective for children who are not disabled, although the particular problems these children face vary considerably. Is play therapy equally effective for children who are disabled? Some theorists believe that play therapy is not effective for children with developmental disabilities (Kottman, Strother & Deniger, 1987; Wulff, 1985), while others consider it useful only when considerable structuring is done by the therapist (Broekgaarden et al., 1985; Freundlich, Pike & Schwartz, 1989; Silk, 1989; Schmitz, 1989). Stiles and Kottman (1990), for instance, feel the use of storytelling is inapplicable to the mentally retarded because of their limited verbal abilities. Axline (1969), however, offers the case study of Jerry, a child diagnosed as mentally retarded and nonverbal. Jerry made considerable gains in self-command, independence, and speech as a result of eight nondirective play therapy sessions. Axline argues that children with disabilities have the same emotions, wants and needs as nondisabled children. Though research into the efficacy of play therapy for people who are developmentally disabled is limited, there does seem to be a strong argument for using play therapy with this population.
Roswal, Frith and Dunleavy (1984) studied the effects of the Children’s Developmental Play Program (CDPP) on the self-concept, risk taking and motor proficiency of 32 children ranging in age from 5 to 13, all of whom were special education students at Jacksonville Elementary School. All participants were assessed in three ways. Self-concept was evaluated by the Martinek-Zaichkowksy Self Concept Scale. The investigators developed a game to assess risk-taking. Bruininks-Oseretsky Test of Motor Proficiency was used to measure motor proficiency. Participants were allowed to choose either to participate in the CDPP or not. Those children who chose not to participate formed the control group and received no treatment. Roswal and his colleagues compared pre- and post-test scores and found that the one-to-one, recreational therapy provided during CDPP did not have a significant effect on risk-taking. Self-concept and motor proficiency of the children who participated, however, were significantly improved. Interestingly, though no attempt to address emotional or cognitive change was involved in the program, self-concept was positively affected. Roswal et al. used a post hoc analysis and found that motor performance and self-concept were correlated. They hypothesized that success in the physical world increased positive assessment of the self. The relationship established between the volunteers and the children during these one-to-one sessions may have been a
This placebo effect could have been controlled for by having the control group also meet with volunteers on a one-to-one basis. The members of the control group were self-selected, by choosing not to participate. This group of children may have important qualities that set them apart from participants receiving treatment. These qualities may be important sources of variability which were absent from the analysis of results.

Autism, a particularly challenging developmental disability, is a constellation of symptoms that affects language, interpersonal interaction, and functional behavior (Freundlich, Pike & Schwartz, 1989). In particular, the play of autistic children lacks creativity, symbolism, complexity, and pleasure and contrasts sharply with the play of children who are average, mentally retarded, or physically disabled (Wulff, 1985). For example, rather than playing at caring for a baby doll, an autistic child may hold the doll upside down, shaking its hair back and forth, to watch the movement. Because of the lack of language associated with autism, testing is difficult. Wulff recommends the use of play as an assessment procedure but does not recommend play as therapy, however, because of the lack of apparent symbolism in autistic play.

Voyat (1982) argues to the contrary. According to him, rather than lacking symbolism, the play of children who are
autistic is characterized by obscure, unfamiliar, or confusing symbolism. One of the first and most important jobs of the therapist is to understand these symbols. Voyat described the play of autistic children as raw material not consciously filtered and ordered. As a result, play for these children required constant interpretation from the counselor who, in turn, required responses from the child to clarify the accuracy of interpretation. Play therapy allows a process of understanding to occur. Voyat also identifies play therapy as the most important form of intervention for children who are autistic, particularly because the child guides the therapy process and gives it meaning. He postulated that play helped his clients to deal with emotions by exploring them in a fantasy setting which did not carry the consequences associated with reality. Play also allowed the release of emotions in a safe manner and permitted children to satisfy unconscious needs in acceptable ways. The child could act out an intense emotion through pretending without causing harm to herself or others. Unfortunately, Voyat offers no verification for his assertions about the validity of his theory or therapy.

Because of the theoretical and empirical importance of play to child development, some researchers have looked at the effects of teaching symbolic play to children with developmental disabilities. Kim, Lombardino, Rothman, and Vinson (1989) found that children who received training in
symbolic play increased the amount of symbolic play as well as the complexity of their symbolic play. The researchers noted that the most effective way to teach these subjects was to use themes or toys already being used by the subjects (Kim et al., 1989). This observation seems to support the play therapy concept that intervention should be directed by the child.

Broekgaarden et al. (1985) offer compelling argument for the use of play therapy with children and adults who are developmentally disabled. They cite considerable research, most unpublished, that supports the efficacy of play therapy with this population. They support the idea that individuals with developmental disabilities may benefit from some modeling in how to play and see this modeling as a part of the therapeutic process. Through playing together, therapist and client form a therapeutic relationship built on acceptance, shared experience, and cooperation. In fact, Broekgaarden et al. see play as important regardless of the quality of play. Even without complex, symbolic play, the act of playing together is relationship enhancing. The formation of relationships is often difficult for children and adults with disabilities. As a result the therapeutic relationship can become a therapeutic end in itself. Broekgaarden et al. also offer recommendations for play therapy with this population. They suggest that the therapist avoid underestimating or overestimating the extent
or the pervasiveness of the effects of the disability. Each individual must be treated on an individual basis. A corollary to this suggestion is that problems be addressed in small pieces rather than globally. Therapist responses (e.g., expressing positive regard) must be made in terms the client can understand. Communication may include words, signs, and nonverbal expression. Because clients may not be able to describe their lives accurately or at all, the therapist must be familiar with the lives of clients outside the therapy room to facilitate understanding of the clients' communications and to assist in a more accurate understanding of the clients themselves. A thorough assessment process can also assist in gaining a complete, detailed and accurate picture of clients.

**Play Therapy for Adults Who Are Developmentally Disabled**

Except for the investigations of Broekgaarden et al., the above information on play therapy applies to children and adolescents. Broekgaarden et al. (1985) do include adults with developmental disabilities in their discussion of play therapy. A problem arises in extrapolating from research on children to research on adults who are developmentally disabled. It must be clearly understood that adults with developmental disabilities, particularly mental retardation, are not children in adult bodies (Martin & Fochuk, 1987). They are adults with varying degrees of
ability and disability in a wide range of areas of functioning.

First, it might be useful to question whether or not play therapy is appropriate and functional for adults who are not disabled. Certain play therapy techniques such as dance/movement or art have no age barriers, since in a social (as opposed to therapeutic) setting adults regularly choose to engage in these activities. Other techniques such as make-believe or sand play may not be so clearly universal. Singer and Singer (1977) consider imaginative play as a human experience rather than the experience of the child alone. They recommend that adults who plan to use play as an intervention should enhance their playfulness. Rainwater (1982) encourages the use of dramatic play with clients of all ages. Viewing make-believe as drama may make the universality of this therapy method clearer. Allen and Berry (1987) consider sand play appropriate for clients from age two to adults of all ages, and Noyes (1981) also identifies sand play as appropriate for children and adults. Bishop (1987), Ariel et al. (1985), and Wolfe and Collins-Wolfe (1983), use play therapy as a way of engaging all members of the family in therapy, including adults, and they identify benefits to all members who participate, regardless of age. Play therapy does seem to be an appropriate medium for adult therapy, provided that the therapist remains vigilant to the age and life experience of clients.
It is important to question also whether people with developmental disabilities do play. From the information on children with disabilities, it is apparent that play does develop in children with disabilities, although at a slower rate and stopping sooner than in children who are not disabled (e.g., Axline, 1969; Roswal et al., 1984; Voyat, 1982). Gleason (1990) recorded his observations of two young men who were multiply disabled, ages 16 and 20, whose intelligence quotients both measured below 20. These young men were nonverbal and nonambulatory. Staff saw them as impervious to their environment. Yet, Gleason offers detailed descriptions of their game together. Gleason's observations make it clear that even for those most profoundly disabled, play is still an important activity.

Combining the information on play therapy for adults with the information on play therapy for children with disabilities and the information on play in children and adults with disabilities, it seems safe to conclude that play therapy may prove to be a viable treatment alternative for adults with developmental disabilities.

Play Therapy and Self-Concept

Axline (1969) identified improved self-concept as a primary goal of play therapy. Bleck and Bleck (1982) found that play therapy improved nondisabled children's self-esteem. Play therapy is also effective in improving the self-esteem of children who are disabled. Axline (1969)
describes the case example of Jerry which demonstrates the power of play therapy to increase the sense of self-efficacy of a child who is mentally retarded. Roswal et al. (1984) found that play therapy improved the self-esteem of students in special education classes.

In summary, play therapy has been shown to be compatible with a variety of theoretical approaches to therapy and can be useful in addressing a wide range of psychological and adjustment problems. It can be useful with children who are not disabled and those who are disabled. It can also be useful with adults and can benefit adults with developmental disabilities. Play therapy offers several potential benefits for adults with developmental disabilities. Play therapy uses concrete enactment of therapeutic themes, provides for nonverbal communication, and encourages an egalitarian relationship between therapist and client. Play therapy, in addition, is not necessarily limited in its use or appropriateness for adults, regardless of ability. Play therapy can also be useful in improving self-esteem in nondisabled children and children with disabilities. While many authors recommend the use of play therapy with individuals who are developmentally disabled, little research has been done to support these recommendations.
Summary of the Literature Review

The literature reviewed above supports using play therapy for adults with developmental disabilities and using change in self-esteem as a measure of the efficacy of play therapy. Group and individual therapies have been used with adults who are developmentally disabled. Group therapy has been used to improve empathy, to treat depression, to improve sharing and expression of feeling, and to improve relationships in heterosexual couples. Group therapy can benefit participants by offering a safe social setting to explore experiences and develop relationships. Group therapy has also been identified as time and cost effective treatment.

Individual therapy often emphasizes an educational approach, for example, in the use of Cognitive Stress Inoculation Therapy to improve anger management. Play therapy with individuals has been used with a number of theoretical orientations including psychotherapy, Adlerian therapy and family therapy. Play therapy has been used to address a number of problems including sexual abuse, death of a parent, poor behavior control, and separation anxiety. Though some researchers have reservations about the efficacy of nondirective play therapy with individuals who are developmentally disabled, other researchers have found this
therapy to be helpful for this population. Children with developmental disabilities have shown improvement in independence, self-esteem, and interpersonal relations after participating in play therapy.

Play therapy has been shown to be effective with adults as well as children. Adults with developmental disabilities do play and may also benefit from play therapy.

Self-esteem and self-concept are central constructs to play therapy. Nondirective play therapy is built on Rogers' theory of development of self-concept and self-esteem. Improvement of self-concept and self-esteem are major goals for play therapy. Because adults with developmental disabilities seem to develop in the same manner as individuals who are not handicapped, self-concept can also be a central issue in therapy for them. Adults with developmental disabilities do develop in an environment different from their nondisabled peers. As a result, they have elements of self-concept unique to them. The nondirective approach of play therapy seems particularly suited to this population because it is designed to fit the unique needs of the client.

Research Goal

The goal of this study was to examine the effects of play therapy on adults with developmental disabilities. Various authors support play therapy as a beneficial
intervention for the development of self-concept in adults with developmental disabilities (e.g.; Axline, 1969; Broekgaarden et al., 1985). In addition, improvements in self-concept often effect improvement in other areas of functioning including social behavior (Battle, 1992). Specifically, the study assessed whether or not individual therapy using a variety of play therapy techniques (sand play, water play, art, imaginary play and games) resulted in changes in scores on the Culture-Free Self-Esteem Inventories for adults with developmental disabilities participating in this study and in residential staff assessments of participants' social behaviors in their group homes.
CHAPTER 3

METHODS AND PROCEDURES

This chapter will offer a description of the methods and procedures used in this study. The chapter will proceed from a statement of research objectives, to a discussion of the design of the study. A description of the participants and the validity and reliability of the instrument and other dependent measures will follow. The chapter will end with an outline of the procedures and the analysis used.

Research Objectives

This study assessed the effect that six sessions of individual, self-directed play therapy had on the self-esteem of three adults with developmental disabilities, as measured by the Culture-Free Self-Esteem Inventories.

A second area that this study assessed was the effect six sessions of individual, self-directed play therapy had on the daily interactions of the three participants in their homes, as measured by the reports of full-time Reach staff who work regularly with the participants.

The study assessed whether any changes in self-esteem among the three participants were sustained and whether staff reports continued to reflect changes in participants' behaviors during follow-up.
Finally, the behaviors of the participants during the therapy sessions were examined for changes and unsolicited reports of informants were considered.

**Design Statement**

A single-subject design with multiple baseline across subjects was employed (Barlow & Hersen, 1984). The independent variable was participation in play therapy. The dependent variables were scores on the self-esteem inventory and reports on participant behavior completed by Reach residential staff.

The single-subject design was used for this study because of several considerations. First, the number of subjects available precludes the use of a between-groups comparison. A minimum of three subjects is considered adequate for establishing a relationship between treatment and results across individuals in a single-subject design. Second, individual play therapy is defined in part by the participation of a single client rather than a group of clients. Finally, the present study examined a new area of therapy for adults with developmental disabilities (Broekgaarden et al., 1985). Single-subject investigation fosters the close examination of the effects of treatment on an individual which can encourage the discovery of variability affecting the efficacy of treatment (Barlow & Hersen, 1984).
The particular single-subjects design of multiple baseline across subjects used in this study involves beginning baseline measure of several subjects at the same time. The intervention is then applied to each subject in a staggered, time-line fashion such that the first subject begins intervention while the rest continue to be measured at baseline levels. Then the second subject begins treatment, while remaining subjects are measured at baseline and so on. The treatment in the present study was expected to produce a long-term change in self-esteem and associated behavior that would continue even after the cessation of treatment.

According to Barlow and Hersen (1984), a multiple baseline across subjects is more appropriate to the present study than a withdrawal or reversal design because, theoretically, changes in self-esteem should be developmental (i.e., nonreversible) in form (Battle, 1992). Rather than using withdrawal of treatment with an accompanying return to baseline to support a causal relationship between treatment and change in dependent measures, multiple baseline across subjects uses a staggered application of treatment to succeeding participants across time to demonstrate the relationship between treatment and change on dependent measures. In the present study, stopping the treatment was not expected to result in a return to baseline self-esteem scores and staff ratings.
The relationship between treatment and changes on the self-esteem scores and staff ratings would not be supported by the method of return to baseline in the absence of treatment. By staggering the beginning of treatment, however, it can be shown that for each participant, changes in the self-esteem scores and staff ratings did not occur until after the beginning of treatment, if a relationship did indeed exist.

Participants

Participants for this study were solicited from consumers receiving services at Reach, Inc. in Bozeman, Montana, from 1992 to 1993. Participants were three volunteers who agreed to participate in the study. The volunteers were chosen from a group of individuals who expressed interest in participating in play therapy. The three participants were selected from the group of volunteers based on their willingness and availability to participate in the entire study, their ability to respond to the self-esteem inventory, and their matching qualities.

Participant I was 25 years and 5 months old, and had a full scale IQ of 49 and an overall adaptive behavior age of 9 years and 5 months. Participant II was 21 years and 7 months old, and had a full scale IQ of 59 and an overall adaptive behavior age of 9 years and 3 months. Participant III was 27 years and 2 months old, and had a full scale IQ
of 46 and an overall adaptive behavior age of 8 years and 3 months. All three participants were male. Participants I and II lived in group homes, while Participant III lived at home with his parents. Participant III had, however, lived in a group home previously. All three participants received vocational services at the Reach Work Activity Center. Participant III also worked in supported employment in the community.

**Instruments**

**Rationale for Choice of the Instrument**

Battle’s Culture-Free Self-Esteem Inventories (CFSEI-2), originally produced in 1981, was used because of its applicability to the participants in the study, its simple administration and scoring, and its usefulness as a measure of therapeutic progress (Battle, 1992). Both the original inventory and the second edition were designed to be administered orally to individuals who are disabled. The questions of the inventory are "balanced between positive and negative content to control for examinees' acquiescent response style" (Malgady, 1985, p. 217). In addition, a taped version of the administration is included to be used for standardized administration in research. Administration of the adult form of the CFSEI-2 can take as little as eight minutes, although, for individuals who are disabled, administration may be lengthened by pausing, if administered
orally, or by pausing the taped instructions, for as long as
the respondents need to reply. The individual administering
the CFSEI-2 does not need to be highly trained (Malgady,
1985). Finally, the CFSEI-2 was designed for measuring
therapeutic effects based on changes in the individual's
profile (Malgady, 1985).

**Purpose and Content of the Instrument**

The CFSEI-2 was designed to identify individuals with
learning disabilities as well as those in need of counseling
(Battle, 1992). The CFSEI-2 was also designed to measure
"mood states" including anxiety and depression (Battle,
1992, p. 5). The CFSEI-2 is also effective in measuring the
success of therapy in terms of changes in clients scores on
the instrument.

The CFSEI-2 Form AD contains 40 questions that may be
answered by yes or no. There are 16 items measuring general
self-esteem, eight items measuring social self-esteem, eight
items measuring personal self-esteem, and eight items that
comprise a defensiveness scale.

**Standardization, Reliability and Validity of Instruments**

The 40 items on Form AD were chosen from 85 original
items through factor analysis. "An alpha (kr 20) analysis
of internal consistency revealed the following: General,
.78; Social, .57; Personal, .72; Lie (defensiveness), .54"
The Form AD of the original CFSEI was administered to 127 male and female college students in Edmonton, Ontario. Test-retest reliability coefficient was .81 for this sample. Subtest coefficients were .82 for General, .56 for Social, and .78 for Personal (Malgady, 1985). Standardization for Form AD Lie Subtest of the CFSEI-2 was performed in 1985 with a sample of 434 men and women representing a "cross-section of individuals residing in western Canada" (Battle, 1992, p. 17).

Battle (1992) addressed content validity of the CFSEI by defining self-esteem and then developing items that addressed all aspects of the definition. Battle (1992), defines self-esteem:

...the perception the individual possesses of his or her own worth. An individual's perception of self develops gradually and becomes more differentiated as he or she matures and interacts with significant others. Perception of self-worth, once established, tends to be fairly stable and resistant to change. (p. 21)

Concurrent validity has only been established for Form A (for children) of the CFSEI (Battle, 1992). In 1976, Form A was compared to Coopersmith's Self-Esteem Inventory in a sample of 198 third- through sixth-graders. The correlation coefficients ranged from .71 for fourth graders to .82 for third graders.

Criterion-related validity for Form AD was established for depression in high school students and adults, for anxiety in adults and for employment training for young
adults (Battle, 1992). For 26 high school students, scores on Beck’s Depression Inventory and the short form of the MMPI which indicated levels of depression were negatively correlated with self-esteem scores on the CFSEI ($r = -.75$). That is, higher self-esteem was related to lower levels of depression. Likewise, for adult college students, scores on Beck’s Depression Inventory were negatively correlated with scores on the CFSEI ($r = -.55$). Scores for 249 adults on the North American Depression Inventory (NADI) and the CFSEI were also negatively correlated ($r = -.74$). Scores for 309 adults on the Relative Anxiety Scale and Form AD of the CFSEI were negatively correlated ($r = -.77$). That is, higher self-esteem scores were related to lower levels of anxiety. Finally, for young adults who participated in an employment training program, self-esteem scores improved significantly after participating in the training program, as predicted.

Rationale for Choice of the Instrument

The residential staff assessment was based on Battle’s Teacher Behavior Rating Form (Battle, 1992). Because the participants are adults and not children, certain changes in the wording of items were made (see Appendix A). This form was used because it is simple to administer, has been used successfully in previous research, and because it was applicable to the construct under investigation. In
addition, the emphasis on task behaviors in the adjusted form reflected the residential training practice of assessing change in client behaviors in terms of identifiable task accomplishment.

Purpose and Content of the Instrument

The Teacher Behavior Rating Form (TBRF) was designed as a correlative measure of children’s self-esteem and behavior in the classroom. The TBRF contains 10 questions with responses ranked on a Lichert scale ranging from always (valued at either 1 or 5) to never (valued at either 1 or 5). Numeric values for positive and negative responses are varied to counteract response sets. The adjusted form that was used in this study emphasized tasks rather than school work since this was more appropriate to the participants in this study. Standardization information, as well as information on reliability and validity of the TBRF, were not available.

Observations

In addition to the use of the above instruments, the behavior of the participants was observed throughout treatment and changes in behavior were used as a measure of therapeutic impact. Informants also offered unsolicited descriptions of behavior change or expressed opinions
regarding the efficacy of the play therapy sessions and these reports were also used as measures of change.

**Procedures**

The actual execution of procedures during the study deviated from the original plan of procedures. The original planned procedures will be described first followed by a description of how the actual study was conducted.

**Recruitment**

Residential staff at Reach, Inc. received a letter briefly describing the proposed study and requesting them to contact all clients to identify those clients interested in participating in the study (see Appendix B). A follow-up call was made to each residential facility to answer any questions and to ascertain the names of prospective volunteers. From those volunteers, three participants were chosen based on ability to participate, willingness to participate, and possession of matching qualities. Matching qualities were gender, age, IQ, adaptive behavior scores, growing up in the family home as opposed to early institutionalization, and vocational and residential placement. Individual participants received information regarding the study in the form of a Participant Consent Form (see Appendix C) which was read to each participant by a Reach staff person during individual interviews at Reach, Inc. Family members of two of the individuals were
contacted and given information regarding the study and the case manager for all three individuals was informed about the study and the participants' involvement in the study.

**Schedules of Baseline, Intervention and Follow-up**

Participants were randomly assigned to three schedules of baseline and intervention. The first schedule was three weeks of baseline, three weeks of intervention and five weeks of follow-up. The second schedule was four weeks of baseline, three weeks of intervention, and four weeks of follow-up. The third schedule was five weeks of baseline, three weeks of intervention, and three weeks of follow-up.

**Probe Measures**

Beginning with baseline and continuing through the end of follow-up, probe measures (i.e., the administration of the CFSEI-2 and the completion of the staff assessment) were to be taken once a week, on the same day of the week, at the same time of the week for each individual. Measures were to be taken on a day different from the day the individual participated in play therapy. The CFSEI-2 was to be administered by the Reach Behavioral Management Technician (BMT) in the home of the individual participant. For the client who did not reside in a Reach facility, vocational staff were requested to assist with completion of the measurement tools. Reach staff were to complete their assessment on their own.
Staff were given an explanation of the assessments and the schedule for administering the assessments. They were told that the tools were used because these tools were expected to show changes in participants' scores as a result of the sessions of play therapy. All three staff were given a copy of the tape provided with the CFSEI-2 for administering the questions to each participant. Staff were instructed to pause the tape as long as necessary to allow participants to respond to each question. Staff were also told that they could paraphrase or explain any question to participants without interfering with the validity or reliability of the measure (Battle, 1992).

Baseline

Baseline consisted of weekly probe measures only. The Reach staff person was to administer the CFSEI-2 at a regularly scheduled time each week. Administration consisted of playing the taped directions and questions for the CFSEI-2 to the participants, pausing when necessary to allow for participants' responses, and recording their yes-or-no answers. The CFSEI-2 was to be administered in a quiet room, where the participant and the staff person could work alone and undisturbed. The therapist collected staff reports and CFSEI-2 response sheets several times throughout the study.
Intervention

Prior to the beginning of intervention, participants completed all of the paperwork required of clients at the Human Development Training and Research Clinic at Montana State University. The therapist, Reach staff and parents assisted participants in completing this paperwork. Participants were not charged for therapy sessions according to recommendations of the Human Subjects committee.

Sessions ranged in length from 18 to 45 minutes for Participant I, from 22 to 40 minutes for Participant II, and from 26 to 35 minutes for Participant III. If participants wanted to stop sessions before the end of the allotted 45 minutes, the sessions were stopped and the length of session noted in process notes. Sessions were shortened from the Clinic's usual 50 minutes to 45 minutes to allow for transportation time for the participants. Two sessions were held each week with at least one day between sessions. At the beginning of each session, participants were reminded that the time was theirs to use as they wanted. The materials in the room were reviewed each session. All sessions were video and/or audio taped and process notes of each session were written.

Therapy materials included a sand tray with figurines of people, plants, animals, vehicles, buildings and implements; three sets of family dolls; family puppets;
animal puppets; stuffed animals; dolls; a doll house; paints, crayons, pencils, pens and paper; a dry erase board and dry erase pens; games; balls; blocks; and a play zoo.

Sessions were conducted according to Axline’s model (Axline, 1969; Guerney, 1985). The participants chose what materials were used during the sessions. A deviation from Axline’s model, however, was the use of modeling for Participant I. Participant I was reluctant at first to use any of the items in the play room. This reluctance arose from discouragement he received from family and teachers regarding age-inappropriate play. In order to facilitate the use of the objects in the play room, the therapist would model using the items in the following manner. Participant I would express interest in an item by asking what the item was or by commenting that the item was "neat." The therapist would respond with a description of the item and by reflecting that Participant I was interested in the item. The therapist would remind Participant I that he could use any item in the room and then wait for Participant I to choose an item. If Participant I did not choose an item within a few seconds, the therapist would use the item identified as interesting by Participant I. The therapist attempted to use the item in a neutral way. For example, when Participant I commented on a doll, the therapist reflected Participant I’s interest, reminded him that he could use any item in the room and then waited for him to
choose an item. When Participant I hesitated, the therapist then asked Participant I to hand her the doll. The therapist then simply held the doll in her arms, but did not use the doll for imaginary play.

The therapist verbally reflected the specific actions of the participant. For example, if the participant buried a car in the sand, the therapist reflected that the car was buried. This reflection is different from offering an interpretation that the participant is afraid of cars or doesn’t like cars. The therapist answered any direct questions asked by the participant as briefly as possible.

If the therapist was confident, based on the information offered by the participant’s words and actions, that a particular behavior reflected a participant’s emotions, she tentatively reflected that emotion. For example, in the above example, the participant repeatedly buried the car, saying to the therapist, "You don’t know where it is, but I do. You think it’s gone but I know where it is." The therapist offered that the participant was glad to hide the car from her. If the participant disagreed, the therapist would reflect the disagreement and any correction the participant offered.

The therapist was prepared to place several limitations on the activities of the participants. The therapist was prepared to intercede to stop an activity of the participant when the participant threatened to be self-injurious or
threatened to hurt the therapist, or threatened serious property damage (e.g., threatened to break a window). Participants were also requested to remain in the session room for the entire session, except to go to the bathroom. If the participant had insisted on leaving the session room repeatedly, so that treatment was disrupted, the session was to be considered ended for the day. However, none of these limitations were instituted since none of the disruptive behaviors were displayed by participants.

The therapist provided transportation for each participant. The drive from Reach to the clinic took approximately ten minutes. This time was used by all participants to acquaint the therapist with the latest activities in the participants' lives, to ask about news from the therapist and to prepare for what would happen in the daily sessions. Sessions ended when the participant requested to stop or when 45 minutes had elapsed, whichever came first. If the session ran the full time, the therapist announced when only ten minutes were left in the session. At the end of the 45 minutes, the therapist announced the end of the session. The session was not continued beyond the end of the 45 minutes. The therapist then transported the participant back to Reach. Again, the drive back to Reach was used as a part of the therapy. The participants once again discussed news of their own or of the therapist's
and prepared for what would be happening at the Work Activity Center when they returned.

After the end of each session, the therapist straightened the room. The participant was not asked to help with this. However, often the participant chose to assist in cleaning up the room during the last few minutes of the session, and the therapist joined in until the session came to a close.

Probe measures were to continue to be conducted on a weekly basis according to the process described above in the description of baseline.

Follow-up

Follow-up measures were to be taken in the identical manner of baseline and intervention measures. No contact was made with the participants during this time and no participants received other therapy during follow-up.

Deviations From Procedure

While all participants followed the above procedures in terms of how intervention was conducted, data for participants was not collected in the manner described above. For Participant I, for both the CFSEI-2 and the staff assessment, three probe measures were taken during baseline, one during intervention and three during follow-up. Data was not collected for these days because of the absence of staff from the group home. For Participant II,
two probe measures for the CFSEI-2 and one for the staff assessment were taken during baseline, three probe measures for the CFSEI-2 and two for the staff assessment were taken during intervention, and two probe measures for the CFSEI-2 and one for the staff assessment were taken for follow-up. The staff person responsible for collecting the data reported that the participant expressed frustration with the questions, saying the assessment made him feel "stupid." The staff person did not complete all the staff assessments because of time constraints. Vocational staff withdrew from participation with Participant III after the beginning of the study. Time constraints was given as the reason for withdrawal. Family members were unable to assist in either administering the CFSEI-2 or completing the staff assessment for Participant III, and a substitute was not found until after the beginning of the baseline for this participant. In addition, the person assisting in administering the CFSEI-2 did not see Participant III in his home setting. As a result, two probe measures of the CFSEI-2 were taken during baseline, three probe measures of the CFSEI-2 were taken during intervention, and three probe measures of the CFSEI-2 were taken during follow-up. No staff assessment was completed on this participant.
Data Analysis

According to Barlow and Hersen (1984), data from single-subject research is most frequently analyzed in terms of clinical significance rather than statistical significance. That is, the change in the behavioral measure should be determined as sufficient according to the therapeutic needs of the client, not according to an arbitrary and often minimal, though statistically significant, critical value.

In the study, changes in the self-esteem inventory scores and staff report scores for each participant were examined for clinical significance rather than for statistical significance. On the CFSEI-2, probe scores for total self-esteem, in raw score form, were obtained by counting up the number of yes or no responses that indicated positive self-esteem from the total number of responses excluding the lie subscale questions. Probe scores for the general, social and personal subscales, in raw score form, were obtained by totaling the number of responses that indicated positive self-esteem for each subscale. Probe scores for the lie subscale, in raw score form, were obtained by totaling the number of responses that indicated low defensiveness. Staff assessment scores were computed by totaling the points for each response on the Lichert scale.
for each question. The raw scores were plotted on graphs for each participant and analyzed according to changes in the slope and direction of the line that describes the trend of data (Barlow & Hersen, 1984). A change was to be considered significant if the scores moved from score grouping to score grouping. That is, the difference in scores was considered clinically significant if, for example, a score changed from the low self-esteem grouping to the intermediate self-esteem grouping. There are five score groupings for the total score on the CFSEI-2: 0 to 13 for very low self-esteem; 14 to 19 for low self-esteem; 20 to 26 for intermediate self-esteem; 27 to 29 for high self-esteem; and 30 to 32 for very high self-esteem. There are five score groupings for the General subscale scores: 0 to 4 for very low self-esteem; 5 to 6 for low self-esteem; 7 to 12 for intermediate self-esteem; 13 to 14 for high self-esteem; and 15 for very high self-esteem. There are also five score groupings for the Social and Personal subscale groupings: 0 to 1 for very low self-esteem; 2 to 3 for low self-esteem; 4 to 5 for intermediate self-esteem; 6 to 7 for high self-esteem; and 8 for very high self-esteem. Scores on the staff assessment were grouped for the purpose of this study: 0 to 10 for very low self-esteem; 11 to 20 for low self-esteem; 21 to 30 for intermediate self-esteem; 31 to 40 for high self-esteem; and 41 to 50 for very high self-esteem.
CHAPTER 4
RESULTS

The purpose of this study was to examine the effects of self-directed play therapy on the self-esteem of adults with developmental disabilities. A review of the literature indicated that adults with developmental disabilities may benefit from play therapy as opposed to behavioral or talk therapy. Self-esteem is an important area of development that appears to be positively affected by therapy in general and play therapy in particular. The present study, as opposed to other studies reviewed in the literature, used play therapy with adults who are developmentally disabled and measured the efficacy of therapy with Battle's Culture Free Self Esteem Inventories. The present study was also different in design. The design used was a single subject, multiple baseline design. Finally, clinical significance rather than statistical significance was used as a measure of significant change.

Results of the CFSEI-2

Scores for all participants on all measures are summarized in Table 1 below.
Table 1. Participants Raw Scores on CFSEI and Staff Assessment. Higher scores indicate higher self-esteem or lower defensiveness (Lie Subtest only).

<table>
<thead>
<tr>
<th>Participant I</th>
<th>Baseline</th>
<th>Intervention</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week</td>
<td>1 2 3</td>
<td>4 5 6</td>
<td>7 8 9 10 11</td>
</tr>
<tr>
<td>Total Subtest</td>
<td>18 19 18</td>
<td>17 13 15 16</td>
<td></td>
</tr>
<tr>
<td>General Subtest</td>
<td>8 10 10</td>
<td>9 7 6 6</td>
<td></td>
</tr>
<tr>
<td>Social Subtest</td>
<td>5 5 4</td>
<td>5 4 4 5</td>
<td></td>
</tr>
<tr>
<td>Personal Subtest</td>
<td>5 4 4</td>
<td>3 1 5 5</td>
<td></td>
</tr>
<tr>
<td>Lie Subtest</td>
<td>0 4 1</td>
<td>3 4 2 1</td>
<td></td>
</tr>
<tr>
<td>Staff Assessment</td>
<td>28 31 32</td>
<td>32 31 31</td>
<td></td>
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</table>

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<td>Week</td>
<td>1 2 3</td>
<td>4 5 6 7</td>
<td>8 9 10 11</td>
</tr>
<tr>
<td>Total Subtest</td>
<td>24 15</td>
<td>16 18 16 13 16</td>
<td></td>
</tr>
<tr>
<td>General Subtest</td>
<td>12 7</td>
<td>8 6 6 6 8</td>
<td></td>
</tr>
<tr>
<td>Social Subtest</td>
<td>5 6</td>
<td>5 6 6 5 5</td>
<td></td>
</tr>
<tr>
<td>Personal Subtest</td>
<td>7 2</td>
<td>3 4 4 2 3</td>
<td></td>
</tr>
<tr>
<td>Lie Subtest</td>
<td>0 4</td>
<td>4 1 1 1 3</td>
<td></td>
</tr>
<tr>
<td>Staff Assessment</td>
<td>31</td>
<td>31 25 31</td>
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</table>

<table>
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<th>Baseline</th>
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<tbody>
<tr>
<td>Week</td>
<td>1 2 3 4 5</td>
<td>6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>Total Subtest</td>
<td>18 15</td>
<td>15 14 14 13 13 15</td>
<td></td>
</tr>
<tr>
<td>General Subtest</td>
<td>8 8</td>
<td>9 8 7 7 6 8</td>
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</tr>
<tr>
<td>Social Subtest</td>
<td>6 6</td>
<td>6 4 6 5 6 6</td>
<td></td>
</tr>
<tr>
<td>Personal Subtest</td>
<td>4 1</td>
<td>0 2 1 1 1 1</td>
<td></td>
</tr>
<tr>
<td>Lie Subtest</td>
<td>0 1</td>
<td>2 1 2 1 1 3</td>
<td></td>
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<tr>
<td>Staff Assessment</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Total Self-Esteem Scores

Figure 1 contains the graphs of the total self-esteem scores for each participant. Although two data points are frequently used in single case designs, Barlow and Hersen (1984) recommend that a minimum of three data points be used for analyzing results. There is no significant change in level of self-esteem for Participants I and II. Participant III has moved from the lower end of the low level of self-esteem to the upper limit of very low level of self-esteem, but the trend of the data is a move back into the low level of self-esteem. The data would be clearer, however, if a minimum of three data points were available for each subject in each phase of the study.

Self-Esteem Subscale Scores

Figure 2 displays the graphs for the general subscale scores for each participant. Figure 3 displays the graphs for the social subscale scores for each participant. Figure 4 displays the graphs for the personal subscale scores for each participant. For Participant I, there is a significant drop from the intermediate level of self-esteem to the low level of self-esteem in the general subscale scores from baseline to follow-up. There is no significant change between baseline and follow-up scores in the social and personal subscales. However, because of the lack of data
Figure 1. Total Self-Esteem Scores for All Participants

Participant I
Baseline | Intervention | Follow-Up

Scores

Weeks

Participant II

Scores

Weeks

Participant III

Scores

Weeks

Int.

Low
Figure 2. General Self-Esteem Scores for All Participants

Participant I
Baseline | Intervention | Follow-Up
--- | --- | ---
Low | Int. | Low

Participant II
Weeks
Int. | Low

Participant III
Weeks
Int. | Low
Figure 3. Social Self-Esteem Scores for All Participants

Participant I

Baseline | Intervention | Follow-Up

Weeks

Scores

High

Int.

Participant II

Weeks

Scores

High

Int.

Participant III

Weeks

Scores

High

Int.
Figure 4. Personal Self-Esteem Scores for All Participants

Participant I
Baseline | Intervention | Follow-Up
--- | --- | ---
0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11
Scores: High | Int. | Low | V. Lo

Participant II
Baseline | Intervention | Follow-Up
--- | --- | ---
0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11
Scores: High | Int. | Low | V. Lo

Participant III
Baseline | Intervention | Follow-Up
--- | --- | ---
0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11
Scores: High | Int. | Low | V. Lo

Weeks
points, it is unclear what occurs during intervention for Participant I.

For Participant II, there is no significant change in the General or Social subscale scores. The change in scores for the Personal subscale is unclear. The scores hover between the upper limit of the low level of self-esteem and the lower limit of the intermediate level of self-esteem. More data points would be needed to clarify the change from baseline, through intervention to follow-up.

For Participant III, there is no significant change in scores for the General, Social, and Personal subscales. A third data point, however, in the baseline phase would improve the certainty of this interpretation.

**Lie Subscale Scores**

Figure 5 displays Lie subscale scores for all three participants. All participants averaged well below the norm for adults taking the CFSEI-2. In addition, all participants began with a score of 0 on this subscale. The significance of changes in scores is unclear for Participants I and II because of considerable variability and the lack of complete data. Participant III does indicate a significant improvement in defensiveness. In other words, the increasing scores on the Lie subscale indicate a decrease in defensiveness for Participant III.
Figure 5. Lie Subscale Scores for All Participants

**Participant I**

<table>
<thead>
<tr>
<th>Baseline</th>
<th>Intervention</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Defense</td>
<td></td>
</tr>
</tbody>
</table>

**Participant II**

|          | Defense      |           |

**Participant III**

|          | Defense      |           |

**Scores**

- 0
- 1
- 2
- 3
- 4
- 5

**Weeks**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

**Int. Defense**

**High Defense**
Figure 6 displays the results of the staff assessment for all three participants. There was no significant change in scores for Participant I from the baseline to the follow-up phase. Again, more data points for Participant I, particularly during intervention, would improve the clarity.
of the results. Results for Participant II are insufficient
to draw conclusions. Participant III did not have data
taken for this part of the study.

Observations of Behavior Change

Observations of behaviors and behavior change included
behaviors during therapy as well as reports of change from
informants outside of the therapeutic setting.

Participant I

The observations regarding behaviors and behavior change for Participant I occurred in the therapy sessions.
During the first session of therapy, Participant I did not remove his coat. He expressed no interest in or curiosity about any of the items in the therapy room, except for identifying clay as a familiar item. The therapist modeled using clay by simply holding a piece of clay and rolling it around in her palms. Participant I then held the clay in his hands, squeezing it and passing it back and forth between his hands without forming it into any shape. By the second session, Participant I removed his jacket during session and acknowledged several items in the room. He filled the sand tray with figures and cleaned them up and shaped the clay into a pancake. His focus was on manipulating the objects and enjoying the tactile qualities of the sand and clay. Sessions three and four marked an expansion to using the blocks, dry erase board and puppets.
Participant I would follow the modeling of the therapist in using a new item. He had also asked Participant II what kinds of things he had done in session and used this as a guide for sessions. He began to express interest in an item as a way of gaining access to it. While Participant I continued to use these items mainly for simple manipulation, he did use the puppets for a very brief imaginary greeting. By the final two sessions, Participant I was getting the item for himself, as in the use of the dry erase board, or assertively asking for the therapist to set up materials, as in the use of the paints. The final session ended with an imaginary conversation with the puppets about the end of therapy. In the past, Participant I’s assertiveness and self-initiative have been identified by family and staff as needing improvement.

Participant I carried on an active conversation with the therapist that covered work, home, and family. The therapist was fairly well acquainted with Participant I prior to therapy. The first and second sessions centered around mutual acquaintances of the therapist and participant, all of whom had since moved out of the area. During the second session, the participant discussed a house mate who had just been moved into a rest home because of serious health problems. Sessions 3 and 4 centered on the family of Participant I. Participant I frequently asked the therapist about her family, identifying her with the role
his mother plays in his family. The final two sessions included a broad range of topics and the reemergence of the theme of former acquaintances who had moved on, as well as the topic of Participant I's future plans.

Participant II

Observations of behaviors and behavior change for Participant II occurred within and outside of therapy sessions. During the first two sessions, Participant II used the sand tray. A close family member had recently been killed in an automobile accident and Participant II was unable to attend the funeral. Participant II spent a considerable portion of the sessions 1 and 2 burying and unburying toy cars and his own hands. He told the therapist that she did not know where the cars or his hands were but that he did. Participant II did not use the sand tray in sessions 3 through 6. Between sessions 2 and 3, Participant II was able to go to the family member's grave. Part of the way through session 3, he informed the therapist that he had been to the grave.

Participant II used the paints in five out of six sessions. The paintings were all done with his hands and were abstract. The paintings from session 3 were predominantly red and black smeared together. The paintings from sessions 4 and 5 began with blue, green and red which were smeared together into a muddy brown. Black was added so that the paintings ended up being almost entirely black.
with smears of color. The final painting made during session 6 was blue, green, and red to which black was added. Then before he was finished, Participant II requested white paint for the first time. He added the white to the painting which ended up with more distinct colors and a much lighter tone.

In the fifth session, Participant II expressed considerable regret about the end of therapy sessions. Toward the end of the session he verbally expressed considerable anger. Although staff had identified physical outbursts as Participant II’s major way of expressing anger and as a serious problem for him, Participant II did not act out anger physically, either during or outside of therapy sessions. He returned for his final session and expressed sadness without anger about having to end sessions.

Staff identified the play therapy sessions as helpful for Participant II. Between sessions 2 and 3, Participant II experienced a traumatizing event which he worked on extensively in subsequent sessions. At the end of the intervention phase of the study, a team of staff and other professionals met with him and determined that it would be in his best interest to continue play therapy with the research therapist. However, the research therapist was unable to continue serving him. Eventually, she was able to find another therapist who could conduct play therapy with him. He was not able to begin sessions until after the
present study was completed because of the difficulty in finding an available therapist. As a result, Participant II completed the follow-up portion of the study as planned, that is, without receiving therapy during follow-up.

Participant III

Observations of behavior change for Participant III occurred outside of therapy sessions. Within sessions, Participant III spent considerable time discussing the events of his life. These centered around family, work and church. He spent sessions 2 through 6 painting large abstract paintings using only the colors blue and green. The therapist spent a major part of her reflections on naming feelings the participant seemed to be expressing about his salient issues. In session 2 he talked about one day working a full time job and living independently. By the third session, he had briefly addressed his regret at no longer living in the group home. By session 4, he would acknowledge many of the therapist’s assignments of feeling words to his descriptions. In session 5, he described his mother throwing out an old pair of shoes upon the purchase of a new pair. The therapist said she thought he was pleased to have new shoes. He said he looked for his old shoes but couldn’t find them. The therapist then reflected he might not have wanted his shoes thrown out. He confirmed her reflection. She reflected he was angry or disappointed. He supplied the term upset. It was the first time he had
found the feeling for himself and the first time he had corrected the therapist’s incorrect response.

After the completion of the therapy sessions, the individual who had taken data on Participant III described a discussion she had had with Participant III’s mother. Participant III had had problems with sudden, physical outbursts linked to his feeling strong negative emotions. The mother reported that Participant III had been expressing his emotions verbally more often and that she felt his outbursts were less frequent. This change in behavior occurred after the beginning of his involvement in play therapy.

**Summary of Findings**

There was no clinically significant change in the Total self-esteem scores for Participants I and II. Participant III’s scores showed a downward trend during intervention, but this trend was reversing during follow-up. There was a significant drop in Participant I’s General subscale scores, but no significant changes in Participant I’s Social or Personal subscale scores. Participant II’s General and Social subscale scores did not change significantly. Participant II’s Personal subscale scores do not show a clear pattern of change. Participant III’s General, Social and Personal subscale scores did not change significantly.
Staff assessment data was insufficient for all participants, and no results could be adequately determined.

Observations of behavior change included behaviors in and outside of therapy sessions. Participant I showed increasing independence, assertiveness and initiative in choosing activities in therapy sessions. He also used items in more complex ways over time. Participant II changed the materials he used to suit the issues he was addressing in sessions. He also used the paints in a different way as therapy progressed. He expressed his emotions about the end of therapy verbally rather than behaviorally, which was different from his usual manner of expression. Finally, staff and Participant II identified the play therapy sessions as helpful for Participant II. Participant III’s mother identified a decrease in Participant III’s acting out negative emotions and an increase in his verbally expressing emotions subsequent to the beginning of play therapy.
CHAPTER 5
DISCUSSION

The purpose of this study was to examine the effects of play therapy on the self-esteem of adults with developmental disabilities. Discussion of the results of this study will be presented in this chapter. The discussion will proceed from an introduction, through an examination of the limitations of the study and implications for interpreting the results, to recommendations for further research, and end with a summary of the study.

Introduction

The present study examined the relationships among three concepts: adults with developmental disabilities, self-esteem, and play therapy. Probe measures taken using Battle's Culture Free Self-Esteem Inventories to determine if changes in participants' self-esteem occurred as a result of their involvement in six sessions of play therapy showed clinically significant changes in three groups of scores: Participant III showed a decline in his total self-esteem scores; Participant I showed a decline in his General subscale scores; Participant III showed an improvement in his defensiveness subscale scores.
A staff assessment used to determine changes in participants' self-esteem showed no significant changes in Participant I's self-esteem scores. Data was insufficient for Participants II and III.

Observations in and outside of therapy sessions indicated areas of positive behavior change for all three participants in and outside of therapy sessions.

According to the model of play therapy developed by Axline (1969), which is based in turn on the theories of Rogers (1951) and Piaget (1962), play therapy should enhance self-esteem as well as facilitate therapeutic changes in children. A review of the literature did not provide examples of play therapy for adults with developmental disabilities. Research in counseling for children and adults with developmental disabilities, and research in self-esteem and play therapy, however, suggested that play therapy could have similar effects for adults with developmental disabilities. The data taken from objective measures in the present study do not support this expectation. Observations from the present study, however, do seem to provide support for using Axline's model in therapy with adults who have developmental disabilities.

Limitations to this Study

There are several limitations to this study: the application of the two objective instruments to the
participants and the design of this study, the overall duration of the study, the duration of therapy, insufficient data, the confounding effects of special treatment of participants, and the limited number of participants.

A major problem with the use of the CFSEI-2 and the staff assessment is that neither tool was designed for use as a repeated measure. While the CFSEI-2 had acceptable test-retest reliability (Malgady, 1985), it was never designed to be administered on a weekly basis over a long period of time. There is no information on the test-retest reliability of the staff assessment. In fact, it is possible that the general downward trend of scores could be an artifact of the repeated use of the CFSEI-2, particularly with these participants. Repeated use of the questions may have been interpreted by one or more participants as a sign that they were giving "wrong" answers. This may have been what Participant II meant when he indicated the questionnaire made him feel stupid. It is also possible that as participants became more familiar with the inventories, they became better able to assess themselves. This may account for the improvement in scores on the defensiveness scale.

The lack of standardization information for form AD of the Culture-Free Self-Esteem Inventory and for the staff assessment for adults with developmental disabilities further compounds the problem of using these measures. The
children's forms A and B of the CFSEI-2 have been used with children who have developmental disabilities. Battle (1992) also asserts that all forms of the inventory may be used with people who are disabled. No specific standardization information is available, however, for adults who are developmentally disabled. Lack of norms appropriate to the subjects may explain the low level of self-esteem scored by all three participants. All three participants may have low to very low self-esteem. It is also possible, however, that the score groupings established for the CFSEI-2 are not appropriate for these participants or for adults with developmental disabilities in general. According to staff who administered the CFSEI-2, participants tended to answer in absolutes. For example, the participant would respond yes in regard to worrying a lot, even if he only worries occasionally. To the participant, either he has worried or he hasn't. There is no gradation of worrying a little or a lot. Adults with developmental disabilities may tend to answer with fewer positive self-esteem responses because of their understanding of the questions rather than as a reflection of their self-esteem.

The duration of the study poses another problem in relation to the assessment tools. Ideally, baseline should be conducted until the data has settled into a consistent pattern (Barlow & Hersen, 1984). The continuing decline in the scores of participants may have reflected the fact that
scores had not leveled out prior to intervention. A more lengthy baseline could have alleviated this problem.

The duration of the study also limited the duration of the intervention. The course of nondirected play therapy can extend for months, and it is unclear what constitutes a sufficient or an average course of nondirected play therapy. While Milos and Reiss established statistically significant changes in children's anxiety with only 30 minutes of play therapy, there is no indication of the amount of play therapy necessary to effect clinically significant changes in scores on the self-esteem inventory and staff assessment employed for this study. Especially when dealing with a construct like self-esteem, which should be fairly stable and therefore more difficult to alter (Rogers, 1951), a more lengthy course of therapy seems appropriate. Axline (1969) reports behavior change in a child with developmental disabilities after eight sessions. Battle (1992) reports changes in self-esteem after nine weeks of therapy. Ten or more sessions of play therapy may be ideal for establishing a clear effect on self-esteem.

Insufficient data was another limiting factor in the present study. Duration of the study may also have been a factor with the problem of insufficient data. The longer the duration of the study, the greater the chance of obtaining sufficient data points. However, problems may also arise if the study is too long. Staff who assisted in
the collection of data had many other duties that could conflict with taking the extra responsibility of gathering data for the study. Data for this study was not their primary responsibility and therefore not necessarily a top priority for them. An extra responsibility that drags on can lose even more importance. One way to circumvent this problem is to find ways to make data collection a top priority, either by incentives or by choosing more appropriate individuals to participate in data collection.

Confounding effects of special treatment posed an additional limitation to this study. It could be that the special attention of leaving regular activities or spending one-on-one time with the therapist was actually the mitigating quality of the intervention, not the play therapy itself. Positive changes in behavior may have come simply from spending extra one-on-one time with someone rather than from the particular procedures implemented during therapy sessions.

Finally, the limited number of participants posed a problem in the present study. If more than three participants had been involved in the study, lack of data or inconclusive results for any one participant would have had less impact on the overall results of the study. If three or fewer participants are to be involved in a study, a more lengthy project would be advisable.
Recommendations for Further Research

Research in the area of therapy for adults with developmental disabilities has been limited (Spragg, 1983). The possibilities for future research seem limitless. There are several areas of research to be explored: assessments developed and normed for adults and children with developmental disabilities, cognitive and personality development of people with developmental disabilities, and therapeutic interventions for people with developmental disabilities.

Much research in the area of therapy for individuals with developmental disabilities is plagued by a lack of objective measurement (Spragg, 1983). This lack of objectivity is due in part to the lack of objective assessments appropriate to the population of developmentally disabled. Many tools already developed may be appropriate for this population, but the tools have not been normed on the population of individuals with developmental disabilities. Some tools may be appropriate after minor changes, for instance in the wording of questions or in the administration process. It may often be difficult to obtain a large sample of people with developmental disabilities (Spragg, 1983). Single case designs may therefore be more appropriate, since only one to several participants are
needed for these designs. Tools that can be used in repeated measures designs also need to be developed.

Theorists of human development often extrapolate from their theories to include people with developmental disabilities (for example, see Axline, 1969; Piaget, 1962; Rogers, 1951). Nonetheless, little research has been done to verify or clarify how development progresses in people with developmental disabilities. For example, does or can development of play continue to progress into adulthood for these individuals? How does their childhood and adult environment, which is often marked by considerable outside control and institutional dependence, affect their development? Does development indeed progress in the same manner in individuals who are developmentally disabled as it does in individuals who are not disabled? Longitudinal studies would be ideal for examining questions of development.

Finally, continued research into therapies for individuals who are developmentally disabled is vital (Spragg, 1983). Spragg suggests that replication of studies is very important. The present study found that behavior changes occurred for the three participants involved. Because these three participants were fairly well matched, these findings may be applicable to other individuals similar to the participants. Replication of the present study with other matched groups would help to expand the
applicability of the findings. Replication of this study with the added element of one-on-one time for participants outside of therapy would help to clarify the question of the confounding factor of special treatment. Replication of the study with extended baseline, intervention and follow-up could also clarify questions raised by the limits of this study. Research into new areas is also important. The area of play therapy for adults with developmental disabilities is one example of new and unexplored territory (Broekgaarden et al., 1985). The quality of research in the area of therapy for individuals with developmental disabilities must be improved (Spragg, 1983). According to Spragg, more research involving carefully constructed studies that use objective measures of change needs to be conducted.

Summary

The results from the objective measures of the present study did not indicate that improvements in participants' self-esteem occurred as a result of six play therapy sessions. Observations of participants' behavior in and outside of therapy did indicate that changes occurred during the therapy process. More research is needed to develop better assessment tools, clearer theoretical bases for therapy, and stronger arguments for therapeutic strategies for individuals with developmental disabilities.
REFERENCES CITED
REFERENCES CITED


APPENDIX A

STAFF RATING FORM
Staff Rating Form

Instructions: Please complete this form once per week for each participant in the study. Answer each question according to the individual’s work during the last seven days. Circle the response that best describes your assessment of the individual.

1. Does this individual seek reassurance when completing tasks by asking if the work is correct?
   - always (1)  often (2)  sometimes (3)  seldom (4)  never (5)

2. Does this individual become irritated, submissive, or sullen when criticized?
   - always (1)  often (2)  sometimes (3)  seldom (4)  never (5)

3. Does this individual become frightened, nervous, or anxious when being observed or tested?
   - always (1)  often (2)  sometimes (3)  seldom (4)  never (5)

4. Does this individual daydream so intensely that instructions must be repeated?
   - always (1)  often (2)  sometimes (3)  seldom (4)  never (5)

5. Does this individual become frustrated when he/she cannot successfully complete tasks?
   - always (1)  often (2)  sometimes (3)  seldom (4)  never (5)

6. Does this individual demonstrate perseverance? That is, are assigned tasks completed?
   - always (5)  often (4)  sometimes (3)  seldom (2)  never (1)

7. Does this individual have confidence in ability to complete tasks successfully?
   - always (5)  often (4)  sometimes (3)  seldom (2)  never (1)

8. Does this individual become discouraged and "give up" or fail to complete tasks?
   - always (1)  often (2)  sometimes (3)  seldom (4)  never (5)

9. Does this individual appear to be anxious and working under tension?
10. Does this individual take pride in work and demonstrate positive feelings about herself or himself when tasks are completed successfully?

always (5)  often (4)  sometimes (3)  seldom (2)  never (1)
APPENDIX B

LETTER REQUESTING VOLUNTEERS
Dear Nancy:

I am writing to request your assistance in recruiting Reach consumers who are willing to participate in my thesis research. I am interested in examining the effects of individual counseling for adults with developmental disabilities. I am focusing on play or activity therapy as an intervention for these individuals because this form of therapy does not require that the client be verbal. I am in the process of completing my thesis proposal and hope to have it approved to begin work in the spring. I have discussed the project with Rob Tallon and have received his approval to recruit clients from Reach consumers.

Those consumers who wish to be involved will receive a minimum of one hour of therapy a week. Staff would need to be responsible for assisting participants with transportation to and from therapy sessions. All individuals participating would be responsible for fees accrued during counseling sessions. The clinic operates on a sliding fee scale, beginning at two dollars per session. I am particularly interested in having some clients who are not very verbal. This particular group of individuals is often overlooked for traditional therapy which requires the client to verbalize and reason in the abstract.

At this time, I would like to get an idea of the number of individuals who think they would like to participate as well as some demographic information including age range, range of adaptive level, number of males and females, number from each residence, range of work experience, any previous counseling experience, and reason for their interest in receiving counseling. It would be very helpful to know if these individuals would seek counseling if it were not offered as a part of my research. The individuals who express an interest would not be committed to involvement. Prior to their involvement in this research, each person would receive a complete description of the project they are volunteering for. Perhaps a special Individual Habilitation Plan meeting would be most appropriate for this.

If you would pass a copy of this letter onto the residences, I will contact each residence at the end of the week to find out the information I need to complete my proposal. If you have a consumer who is not receiving residential services from Reach but is receiving vocational services, please pass
this information onto them. If anyone has questions regarding the project, they may call me at home, 388-2044, or they may leave a message for me at the clinic, 994-4113. Thank you for your assistance with this project. I hope that it will expand and improve mental health services to your consumers.

Sincerely,

Ginny Watts
APPENDIX C

PARTICIPANT CONSENT FORM
Participant Consent Form

You are being asked to take part in a study on counseling for adults with disabilities. The results of this study will help counselors understand more about what helps people feel better about themselves. Your name was given to me by your group home trainer because you were interested in being in counseling with me.

If you want to participate, the study will last 12 weeks and will begin in January. During the study, you will answer some questions about how you feel about yourself. Your group home trainer, ________________________, will work with you and you will answer the same questions each week, for the 12 weeks of the study. Also, ______________ will be answering some questions about how you are doing at home each week. After 3-6 weeks, you will come to see me at the Human Development Clinic. You will see me twice a week, each time for about an hour. We will be working in the playroom, a room at the clinic that has supplies to do drawings and paintings, dolls, puppets, a sand tray and games. You will be able to use the time any way you want. At the end of three weeks, you will just answer the questions once a week until the end of the study. Two other people from Reach will also be in the study.

It is possible that at some time you may think about things that are upsetting. You may also begin to feel bad and that could cause problems at work or at home. If this happens, you and I will meet with your trainers and anyone else you think should know, and we will decide how best to help you. If we decide you should leave the study and/or get other counseling, I will help you to do this. You will be paying for any other counseling you receive. I expect that you will enjoy the time you are at the clinic and that you will feel better about yourself when we are done. If you ever feel like you want to stop being in the study, you may stop. If you want to stop a meeting with me at any time, you may.

The regular fees of the clinic will be waived. As a volunteer, you will not be charged for participating in this study. Everything that we talk about at the clinic will be private, unless I believe you are being hurt or you are going to hurt yourself. Then I will let you know that I need to talk to your trainer or to someone at Department of Family Services. I will also video tape each session and may show parts of the tape to my supervisor. He will also keep anything he sees or hears private. I will be writing about the answers you give to the questions, the answers ______________________ gives to her/his questions and information about our meetings at the clinic. I will be
sharing this writing with other counselors. I will give you a number to put on all the answer sheets so that no-one will know the answers are yours or are about you. I will put the answers into a computer, and I will keep the computer locked. When I write about you, I will not use your name and I will not talk about you in a way that would let someone know I was talking about you. You may see anything I have written at any time and you may talk to my supervisor at any time.

If you have any questions, please ask me now. If you have questions later on, please call me at 994-4113. If you would still like to be in the study, please sign your name on the first line below. The other line is for your guardian/_________ to sign. Thanks for your time.

I have gone over the information on this form and I understand this information. I have chosen to be a participant in this study.

__________________________________________________________  __________________________________
Participant  Date

__________________________________________________________  __________________________________
Guardian/Witness  Date