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## AN OBSERVATIONAL ANALYSIS OF DEMOGRAPHIC CHARACTERISTICS, PERSONALITY PROFILES, AND PERCEIVED PROBLEM-SOLVING SKILLS OF ADOLESCENTS IN THERAPEUTIC FOSTER CARE

Ву

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#### ABSTRACT

AN OBSERVATIONAL ANALYSIS OF DEMOGRAPHIC CHARACTERISTICS, PERSONALITY PROFILES, AND PERCEIVED PROBLEM-SOLVING SKILLS OF ADOLESCENTS IN THERAPEUTIC FOSTER CARE

By

#### Charlene Crickon Kushler

An observational analysis was performed on 41 adolescents placed in therapeutic foster care, a relatively new treatment setting. Data were obtained using the Millon Adolescent Personality Inventory, the Personal Change Questionnaire, and a demographic survey.

Frequency data examined revealed that the majority of adolescents in therapeutic foster care were Caucasian females who were temporary wards of the court or state. More than 40% of the adolescents had a history of psychiatric or residential treatment and had been in more than one previous foster care placement. The length of placement in therapeutic foster care averaged close to 1 year.

Research questions focused on the personality profiles and perceived problem-solving skills of the adolescents in that setting, as well as the relationship

of those variables to the length of time in treatment. The results indicated the predominance of certain personality styles among the adolescents placed in therapeutic foster care. In particular, the adolescent females most frequently evidenced a Passive-Aggressive personality style. The second most prominent styles were equally divided among the Avoidant, Histrionic, and Compulsive personality styles. The male adolescents' most common personality styles were Passive-Aggressive and Antisocial. A significant positive correlation was found between the Compulsive personality style and length of time in treatment.

No correlation was found between the adolescents' perceived problem-solving skills and length of time in treatment. There was a significant correlation between therapist rating of client functioning and time in treatment. Furthermore, a significant positive relation-ship existed between perceived problem-solving skills and age. Additional significant positive correlations were found between the Narcissistic and Histrionic personalities and certain perceived problem-solving skills. A significant negative correlation was found between the Avoidant personality and all four of the problem-solving scales.

A discussion and interpretation of these findings were presented. Implications of these results include the possibility of using personality testing for screening candidates for this treatment modality and the potential desirability of introducing a problem-solving skills training component to therapeutic foster care. Directions for further research were offered.

In loving dedication to my husband, Martin Gregory, and our daughter, Jessica Nicole.

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#### CHAPTER I

#### INTRODUCTION TO THE STUDY

This chapter begins with a brief historical overview of the evolution of therapeutic foster care, culminating with the legislation that has defined the focus of this type of treatment program. Following this explanation is a description of the need as well as its purpose. Because this is an observational analysis rather than an experimental design, the focus for this study is provided through five research questions that attempt to define and describe the therapeutic foster care population. Additionally, a brief overview is provided of the three major theories underlying this study: psychoeducation, problem solving, and therapeutic foster care as a treatment modality. Finally, a summary concludes this chapter.

#### Background

From their inception and throughout their history, foster care placements have fluctuated between a custodial and a treatment orientation. The concept of foster care dates back to the Elizabethan Poor Law of 1601, when the colonies stipulated the local care of the needy.

Specifically, the law allowed for the apprenticeship of needy children to promote training aimed at being self-supporting in adulthood.

This benevolent intention was translated pragmatically into the "binding out" or indenturing of orphaned, neglected, or destitute children, a practice that originated in England (Cox & Cox, 1985). In addition to indenturing, some communities also used vendue, which was the auctioning off of children to individuals who claimed they would care for the children for the lowest price (Cox & Cox, 1985). Thus, initially, this arrangement was of a custodial nature, with the children providing a source of labor to the families in whose homes they were placed.

Although the binding out of children provided support for the majority of children in need, by the mid- to late eighteenth century, large cities had begun to maintain almshouses, a precursor to institutionalization of dependent children. Because the conditions in these houses were often deplorable, resulting in a mortality rate in the 1800s of 80% to 90%, philanthropic and religious groups began sponsoring private orphanage asylums (Cox & Cox, 1985). By the 1830s, these private childcare institutions had replaced the indenture system.

In the years prior to the Civil War, a new type of childcare institution began to emerged. These facilities

were called reformatories and were created for the placement of juvenile offenders. Rehabilitation rather than custodial care was emphasized. This laid the foundation for the treatment orientation of present-day childcare institutions. The plan at that time was to release the children after one or two years of treatment to be apprenticed to rural families. State Boards of Charity emerged at that time to supervise these childcare arrangements (Cox & Cox, 1985). However, this treatment orientation was short-lived. Following the Civil War, an immense number of children were orphaned and displaced, resulting in a shift once again to merely custodial care.

However, the social reform movement of the 1900s precipitated a change from relief to prevention. Charles Loring Brace founded the Children's Aid Society, which advocated the use of foster homes, promoted the "science" of child placement, and emphasized attention to the needs of the child (Cox & Cox, 1985). As part of the reform movement, legislation was passed that outlawed the placement of children in almshouses. Private charity organizations flourished, and denominational foster care homes emerged. In 1909, President Theodore Roosevelt convened the first White House Conference on Children, which encouraged the shift from institutions to foster home placements. By 1920, the Child Welfare League of

America had been formed to supervise the standards of childcare.

Although the Social Security Act of 1935 established child welfare services, federal money was not available until 1947. The government actually did not grant any significant funding for foster care until 1961. This was immediately followed in 1962 by a change in the definition of child welfare services to include prevention and rehabilitation. However, this shift to a treatment orientation was short-lived. In 1967, the emphasis reverted to tangible, custodial services rather than counseling. The literature offers no explanation for this change in orientation (Cox & Cox, 1985).

Foster care as a treatment tool resurfaced in 1971 with the publication of Foster Care of Children: Nurture and Treatment, published by the U.S. Department of Health, Education, and Welfare. In 1975, the Child Welfare League of America continued this orientation in its Standards for Foster Family Services. Under "Objective and Purpose," it stated:

The ultimate objectives of foster family services should be the promotion of healthy personality development of the child, and the amelioration of problems that are personally or socially destructive. . . Foster family care should provide, for the child whose own parents cannot do so, experiences and conditions that promote normal maturation (care), prevent further injury to the child (protection), and correct specific problems that interfere with healthy personality development (treatment).

This clear statement of the treatment intent of foster care was followed in 1975 by the creation of Title XX, which authorized the following (Cox & Cox, 1985):

- a. community-based prevention and rehabilitation services:
- b. prevention and reduction of inappropriate institutional care;
- c. referral to institutional care when appropriate.

Elements (a) and (b) of Title XX form the foundation for the emergence of therapeutic foster care, a community-based prevention/rehabilitation program aimed at minimizing inappropriate institutional care. Beginning in the late 1970s, therapeutic foster care treatment programs started to appear in the literature.

#### Need

The most recent national statistics indicate that approximately 396,000 children are in foster care homes (Cox & Cox, 1985). The proportion of adolescents within this population has doubled in the past few years from 24% to 49% (Timberlake & Verdieck, 1987).

Timberlake and Verdieck (1987) offered explanations for the phenomenon of a higher representation of adolescents in foster care:

1. A larger number of children enter foster care at an early age and remain through adolescence.

- 2. A decrease in external family supports and social-control influences make out-of-home placements necessary for this age group.
- 3. An increased willingness appears to exist for parents to turn "problem" adolescents over to social service agencies.
- 4. Delinquent adolescents are being diverted into the child care system.

This last point is part of a more basic trend of deinstitutionalization that has emerged in the mental health field in recent years. Within the past decade, the mandate to locate the least restrictive setting has resulted in a diversion of adolescents from correctional and psychiatric facilities into newly created therapeutic foster homes (Hawkins, Meadowcraft, Trout, & Luster, 1985). These diverted adolescents are prime candidates for a treatment-oriented foster care program.

The therapeutic foster care programs that began to emerge in the late 1970s revolve specifically around a treatment component for foster care. The literature makes reference to a 75% to 82% success rate, which is neither defined nor quantified (Webb, 1988).

Specific delineation of the characteristics of this population or definitive criteria for appropriate referrals to these programs have been lacking in the literature. Most descriptive statements merely note that

these children have "behavioral or emotional problems."

The question then becomes which children constitute appropriate referrals to therapeutic foster care, i.e., who is supposedly being successfully served by these programs? Profiles of this population are lacking.

Identifying who is being served by therapeutic foster care programs would provide a foundation for later research into the efficacy of this treatment strategy and would ensure the appropriateness of referrals based on the evaluation of who benefits from this form of intervention. Quality assurance rests on the ability to evaluate program effectiveness. However, quality assurance cannot be ascertained when the population is ill-defined, leaving the targeted behaviors for change not clearly enumerated. Evaluation of a particular program's effectiveness and justification for the choice and high expense of therapeutic foster care as a treatment option necessitate specificity of the characteristics of those children benefiting from this modality. The literature regarding therapeutic foster care describes each programs' functioning without performing an analysis of the population itself. An observational analysis adolescents currently in therapeutic foster care could reveal some distinguishing patterns could and differentially identify factors that correlate with successful treatment and subsequent placement.

#### <u>Purpose</u>

The primary purpose of this study was to ascertain certain characteristics of the adolescents served by therapeutic foster care programs. To accomplish this task, selected therapeutic foster care programs were examined with the intention of identifying characteristics of the adolescents in placements. This examination included assessing the personality profile of the children as well as examining the effect of treatment by measuring their performance on a personal change questionnaire. Finally, attempts were made to identify factors that correlated with length of stay in placement.

#### Research Questions

- 1. Is there a personality profile of adolescents in therapeutic foster care?
- 2. Are adolescents in therapeutic foster care aware of elements necessary for personal change or problem solving?
- 3. What is the correlation between personality profiles and length of time in therapeutic foster care?
- 4. What is the correlation between length of time in therapeutic foster care and awareness of personal change or problem-solving elements?

5. What is the correlation between personality profiles and awareness of personal change or problem-solving elements?

#### Theory

This section contains an overview of the three major theories that underlie this study: psychoeducation, problem solving, and therapeutic foster care. The section begins with a macroscopic theoretical perspective by outlining the broad field of psychoeducation. This discourse narrows to discuss a specific psychoeducational intervention model, the problem-solving approach, which can be applied in various treatment settings. Finally, the theory behind therapeutic foster care is explored to help in understanding the treatment program selected for this study.

Psychoeducation entered the mental health scene 35 years ago, emerging from the theoretical coupling of the fields of education and psychology (Sanford, 1955). Withstanding the tests of time and professional scrutiny, psychoeducation has gained legitimacy as an assessment and intervention strategy (Authier, Gustafson, Guerney, & Kasdorf, 1975; Goss, 1964; Guerney, Guerney & Stollak, 1971/1972; Larson, 1984; Masher & Sprinthall, 1971; Miller, 1969).

The crux of this new model has been to provide a teaching format for the delivery of human services. In particular, the practitioner and client focus on the development of personal and interpersonal skills and attitudes that the client could apply to resolve present and future psychological problems (Guerney et al., 1970).

Inherent in the psychoeducational approach are three basic assumptions (Larson, 1984):

- 1. The practitioner is a teacher of the client.

  Therefore, therapeutic intervention is seen as a learning
  process (Guerney et al., 1970, 1972).
- 2. The client's problems are viewed as a skill deficit or lack of competency that can be overcome with training.
- 3. The client is viewed as an active, self-responsible, and self-directing person, even in the treatment setting.

Within the context of this new psychoeducational model, one of the areas of research has been the facilitation of competency in personal problem solving and decision making (Parker, 1987). The major advantage in learning a problem-solving process in treatment is that the principles can be readily transferred from one situation or content area to another (Hepworth & Larsen, 1990). A client's acquisition of these skills would not only remedy the immediate problem but would also serve a

preventive function by enhancing the client's future coping capacity.

Problem-solving theory revolves around three core terms that need to be operationalized at this point: "problem," "problem-solving" behavior, and "solution."

The term "problem" refers to a specific situation or set of related situations to which a person must respond in order to function effectively in his/her environment. Accordingly, a situation would be deemed problematic if no effective response alternative was immediately available to the individual confronted with the situation (Davis, 1966; Lazarus & Folkman, 1984; Skinner, 1953). Included in this definition are all those situations that, due to novelty, complexity, ambiguity, or conflicting stimulus demands, fail to elicit "automatic" effective actions, thus requiring problem-solving behavior.

"Problem solving" is defined as a behavioral process, whether overt or cognitive in nature, which (a) makes available a variety of potentially effective response alternatives for dealing with the problematic situation and (b) increases the probability of selecting the most effective response from among these various alternatives (D'Zurilla & Goldfried, 1971). Thus, this definition includes both the generation of alternative responses as well as decision-making or choice behavior.

Finally, a "solution" or effective response refers to the response or pattern of responses that alters the situation so that it is no longer problematic to the individual and at the same time maximizes other positive consequences and minimizes other negative ones (D'Zurilla & Goldfried, 1971).

Using this "problem--problem solving--solution" paradigm, individuals could be perceived as differing in their ability to problem-solve. This differential functioning could be viewed as existing on a continuum. On one end are those individuals deemed to be effective in their decision-making capacity. Socrates observed that competent individuals are "those who manage well the circumstances which they encounter daily, and who possess a judgment which is accurate in meeting occasions as they arise and rarely miss the expedient course of action." Juxtapositioned to these individuals are those who appear unable to appropriately resolve certain situational problems in their lives and who, accordingly, bear the labels of "abnormal," "deviant," or "emotionally disturbed." These are frequently the labels worn by the adolescents placed in the therapeutic foster care treatment programs examined in this study.

Theoretically, the core of these therapeutic foster care treatment programs is the use of specially selected and trained foster parents, who act as paraprofessionals

and implement treatment programs designed by agency staff for adolescents or children within the family's context (Hawkins et al., 1985). The main component of this strategy is the "professional" parent who functions as the main "agent of treatment" rather than merely as a custodial caregiver. Other specific features, according to Hawkins et al. (1985), include:

- 1. Supervisory staff, who provide a range of services to the foster parents and to the adolescents and their families.
- 2. A recruitment and training program to obtain highly qualified foster parents.
- 3. An emphasis on professionalism of the parenting role as indicated by a salary for the foster parent commensurate with that of a beginning child care worker, rather than merely being provided room and board reimbursement.
- 4. A high degree of accountability of the supervisory staff, the foster parents, and the adolescents.
- 5. Extensive foster parent support services, including 24-hour on-call emergency services; liaison services with the school, courts, and other community agencies; respite care; and intensive supervision (often weekly rather than the monthly or quarterly supervision provided to regular foster care families).

- 6. An individualized point system to motivate the adolescent's behavior in the foster home and to direct treatment goals.
- 7. Foster parent and adolescent evaluations to provide feedback.
- 8. Treatment services to the adolescent's biological family.

The theoretical advantages of this treatment model have been well-documented (Hawkins et al., 1985; Hazel, 1982; Lanier & Coffey, 1981; Larson, Allison, & Johnson, 1978; Rubenstein, Armentrout, Levin, & Harold, 1978). A brief summary is as follows:

First, the disruption to the adolescent's life is minimized in that opportunity to engage in normal activities is facilitated by a family setting.

Second, a greater proportion of the cost of the placement is invested directly into the treatment of the child rather than into buildings, maintenance staff, equipment, or other typical residential expenses.

Third, because an actual facility does not need to be maintained, there is less pressure either to retain adolescents after treatment goals have been achieved or to accept inappropriate referrals.

Fourth, treatment is highly individualized because of the placement of only one or two children per home.

Fifth, the behaviors targeted for change are highly relevant to the tasks of daily living because of the context of that treatment. Thus, these new behaviors are more likely to transfer to the adolescent's own home due to the similarity of settings.

Sixth, positive incidental learning occurs as a result of exposure to a relatively healthy family.

Finally, a broad range of adolescent clients can be served by this program model due to the individualized treatment and separate placement opportunities.

Thus, theoretically speaking, therapeutic foster care programs provide the opportunity to target the problemsolving skills of the adolescents in care and alter their "deviant" labeling. One of the goals of this study was to investigate whether those problem-solving skills were affected by the therapeutic foster care programs examined.

#### Summary and Overview

This chapter contained an overview of the evolution of the therapeutic foster care programs that provides the treatment context for this study. Additionally, the need and purpose of this study were described, along with five research questions designed to define and describe the therapeutic foster care population being examined. The chapter ended with a brief presentation of the three

theories underlying this study: psychoeducation, problem solving, and therapeutic foster care.

In Chapter II, the relevant literature is reviewed for the following three areas: psychoeducational theory, problem-solving theory, and therapeutic foster care. The research procedures and design are presented in Chapter III, along with a discussion of the construction and validity of the Millon Adolescent Personality Inventory and the Personal Change Questionnaire. The analysis of the results is described in Chapter IV, while conclusions and recommendations for future research are presented in Chapter V.

#### CHAPTER II

#### REVIEW OF RELATED LITERATURE

This chapter contains a literature review of the three major theories used in this study. Moving from the macroscopic to the microscopic perspective, the chapter with review of the literature begins а psychoeducational theory. This is followed by a literature review on a type of psychoeducational model, problem-solving theory (which includes the theory behind the Personal Paradigm Shift, a specific problem-solving approach contributing to this study). Finally, the chapter ends by focusing on a literature review of therapeutic foster care, a specific treatment concept in which problem-solving theory can be applied.

#### Review of the Literature on Psychoeducation

The historical development of the psychoeducational approach can be traced through the cumulative beliefs of various theorists and researchers over the past century. As far back as Watson (1916), researchers believed that human attitudes, interests, values and behavior could be extremely malleable with proper environmental

manipulation. In accordance with this philosophy, psychoeducation views much of human behavior as the result of learning and experience rather than instinct or genetic predisposition.

Later, Skinner (1938, 1953) provided direction for learning-oriented therapists when he developed the concept of operant conditioning. Skinner strengthened the basis for the psychoeducational approach with his focus on targeting specific teaching objectives regarding behaviors and by developing specific teaching programs for accomplishing those goals. Using this learning-based approach, Wolpe (1958) targeted his interventions toward the "psychologically distressed." An almost simultaneous factor at this time for the evolving psychoeducational approach was Albee's (1959) warning to the profession that a need-supply gap was imminent. Through his writings, he urged a shift from the traditional counseling model, in order to have the supply of counseling services meet the projected demand that he anticipated.

This push for a new model was occurring as decades of research had allegedly failed to provide strong, convincing proof that traditional therapy was effective and efficient (Eysenck, 1952; Levitt, 1957, 1963). Psychoeducation was one of the nontraditional approaches that gained strength with these disputed research findings.

At this same time, the emergence of the importance of prevention rather than remediation resulted in a shift to a more instructional model of intervention. This shift entailed a change in emphasis with goals and interventive style. Rogers (1951) ushered in a portion of this shift with his focused attention on goals and responsibility, with an emphasis on client determination. Specific impetus for the cognitive-emotional-behavioral style that characterizes psychoeducation was contributed by Ellis (1963), who stressed teaching cognitive-emotional skills to people for their use in facilitating their own personal and interpersonal goals.

Following these initial historical roots, the psychoeducational approach began to gain its own identity when theorists like Patterson and Carkhuff (1969) urged psychological practitioners to consider educational training as a therapeutic modality. Patterson and Carkhuff stated that perhaps therapy was not necessary. Instead they supported direct training or education of individuals in the "conditions of good human relations—not only normal people and children but the emotionally disturbed as well" (p. ix). As part of this emergence of its own identity, psychoeducation was defined and differentiated from traditional therapy by theorists like Authier, Gustafson, Guerney and Kasdorf (1975).

Traditional therapy was perceived as following an illness model: "abnormality--diagnosis--prescription--therapy--cure" (Authier et al., 1975). The psychoeducational model has a pattern of "client dissatisfaction--goal setting--skill teaching--satisfaction or goal achievement." The client is perceived as a pupil who is taught not only symbolic and cognitive processes of change but also instruction in overt behavior.

Within the psychoeducational approach are two types of programs: one that focuses on general skills training and the other that emphasizes specific skills. The following provides examples in the literature of the two models.

### General Skills Training

General skills training programs stress counseling skills, communication skills, interpersonal skills, and relationship skills. Carkhuff (1971) and Ivey (1971) developed two of the most popular general skills training programs.

Carkhuff's program has been used to teach the interpersonal skills of empathy, respect, concreteness, genuineness, self-disclosures, confrontation, and immediacy to various groups of psychiatric inpatients (Pierce & Drasgow, 1969; Vitalo, 1971), to parents of emotionally disturbed children (Carkhuff & Bierman, 1970),

to college students (Berenson, Carkhuff & Myrus, 1966), to Head Start teachers (Bierman, Carkhuff & Santilli, 1969), to groups consisting of teachers and parents of different races (Carkhuff & Banks, 1969), and others.

Ivey's (1971) program emphasizes less global communication skills, such as attending behaviors, open-invitation-to-talk, paraphrasing, minimal-encouragement-to-talk, and reflection-of-feeling. Ivey's program has also been used with various populations, including psychiatric inpatients (Donk, 1971; Ivey, 1973; Orlando, 1974) and psychiatric outpatients (Galassi, Galassi, & Litz, 1974; Gormally, Hill, Otis & Rainey, 1975).

Both Ivey's and Carkhuff's programs involve teaching a variety of communication skills by explicit instruction and feedback in graded practice. The therapist's role is, thus, conceptualized as that of a teacher who uses behavioral shaping with emphasis on verbal reinforcement. Additionally, role playing in dyads or triads is frequently used, along with audio and/or video feedback.

In addition to the Carkhuff and Ivey programs, other models have been developed to teach general skills competency. These include the Step Group Therapy model, the Conjugal Relationship Enhancement Program, and the Parent Effectiveness Training Program, which are briefly described in the following paragraphs.

The Step Group Therapy program by Authier and Fix (1977) is a blend of group therapy with behavior therapy using the psychoeducational format. The program consists of teaching nine communication skills in a series of three steps. Patients are promoted from one group to the next by demonstrating competency in that particular set of skills emphasized at each step. The program uses written definitions of skills, model tapes, didactic instruction, and a counselor who acts as a teacher, using the above modalities along with successive approximation reinforcements to encourage the development of skills.

The Conjugal Relationship Enhancement Program (Ely, Guerney, & Stover, 1973) explicitly teaches the communication skills inherent in the roles of "speaker" and "listener" in marriage counseling situations. This model has been adapted and used by Collins (1971) and Rappaport (1971). Another marital counseling psychoeducational program by Weiss, Hops and Patterson (1973) teaches the more specific skills of contracting and negotiating in relationships.

Gordon's (1973) Parent Effectiveness Training teaches both basic communications skills and specific parenting skills. A similar parenting program has been developed by Patterson and Gullian (1968).

#### Specific Skills Training

Specific skills training programs are numerous and address diverse populations. Probably the most widely known is the Structured Learning Therapy developed by Goldstein (1973). This program is unique in that it was specifically designed to fill the void mentioned earlier between public demand for psychological services and the number of psychological practitioners available to meet the need. Furthermore, the program was intentionally lifestyles, designed to address the need, environmental realities of the lower socioeconomic class because traditional methods of treatment have not always adequate or appropriate for this been population.

Structured Learning Therapy focuses on the use of modeling, role playing, and social reinforcement to enhance patient autonomy, assertiveness, internal controls, role-taking abilities, sense of mastery in social interactions, accuracy of affective perception and communication, tolerance for frustration and ambiguity, and other useful behaviors in which the person may be deficient. Structured Learning Therapy has successfully used with various psychiatric populations (Gutride, Goldstein, & Hunter, 1973, to increase social behavior of psychiatric inpatients; Goldstein et al., 1973, to teach independence to outpatient and inpatient populations).

Gutride, Goldstein, and Hunter (1974) contributed one of the more recent additions to the Structured Learning Therapy, i.e., the development of a transfer of training phase. This phase directly teaches trainees skills that will help them cope with stress when they return to their home environments. Thus, the teaching of coping skills has become an important adjunct to the psychoeducational model.

In addition to the Structured Learning Therapy program, other specific skills training models have been directed toward various populations. These can be briefly enumerated to reflect the breadth of applicability of this type of program, based on research in the literature: job hunting (Hunt & Azrin, 1973); interpersonal communication skills (Rathus, 1973); developmental tasks of children and adolescents (Gum, Tamminen, & Smaby, 1973; MacMullen, 1973); sexual satisfaction (Masters & Johnson, 1970); irrational thoughts (Ellis, 1961, 1963); controlling problem behavior, problem solving, and decision making (Krumboltz & Thoresen, 1969; Mahoney, 1974); coping with frustration (Giebink, Stover, & Fahl, 1968); handling aggressive impulses (Gittelman, 1965); alleviating depression (Lewinsohn, Weinstein, & Shaw, 1969; Libert & Lewinsohn, 1973); learning constructive marital conflict resolution (Bach & Wyden, 1969); "healthy talk" by schizophrenics (Meichenbaum, 1969); and problem-solving skills training programs (D'Zurilla & Goldfried, 1971).

In addition to this breadth of usage and most relevant for the purposes of this study, the psychoeducational approach has been repeatedly used to alter the learning behavior of disturbed/delinquent children and adolescents (Beck & McDonnell, 1982; Brown, 1980; Brown & Quay, 1978; Glick & Goldstein, 1987; Konstantareas & Homatidis, 1984). Two research examples of using the psychoeducational model with delinquents are Minuchin, Chamberlain, and Graubard (1967) and Carpenter and Sugrue (1984).

Minuchin et al. (1967) used a psychoeducatonal approach with disturbed/delinquent children by training them to focus attention, to organize and obtain information through communication, and to search for solutions to conflicts when interacting with teachers. Improvements were significant in attention, style of communication, and cognition.

Carpenter and Sugrue (1984) used the psychoeducational model with a heterogeneous delinquent treatment program. They combined affective education and social skills training in an outpatient setting. They found that delinquents with immature personalities or neurotic features appeared to benefit more from this approach than those with characterological disorders.

In summary, as can be noted from the above references, the literature is replete with studies attempting to identify what characteristics or populations are most amenable to the psychoeducational approach. The research results have indicated that the psychoeducational model has been used successfully in diverse contexts with various populations, including emotionally disturbed or delinquent adolescents. One of the specific skills training approaches within the field of psychoeducation is problem solving.

## Review of the Literature on Problem Solving

The clinical application of problem-solving training had its beginnings in the late 1960s and early 1970s as part of the trend toward clinical interventions that focused on the facilitation of social competence. Developmentally speaking, D'Zurilla and Goldfried (1971) provided the theoretical underpinnings of problem-solving theory. Their research, which spanned more than 15 years, resulted in the following two beliefs:

1. The first belief is that ineffective coping with problematic situations, along with its personal and social consequences, may be the necessary and sufficient condition for an emotional or behavioral disorder requiring psychological treatment.

2. The second belief is that problem solving may be most efficiently developed by training individuals in general procedures or skills.

These two findings have relevance for the adolescents in this study. Since the therapeutic foster care adolescents have been identified as having emotional/behavioral disorders requiring treatment, they fit within the first belief system of D'Zurilla and Goldfried. Accordingly, the possibility of being able to remedy their deficient problem solving through skills training could provide a direction for future experimental research into the adolescent population and therapeutic foster care.

In line with the theoretical conceptualizations of D'Zurilla and Goldfried (1971), problem solving can be viewed as a cognitive-affective-behavioral process, culminating in the discovery of a solution to a problem. D'Zurilla and Goldfried proposed a prescriptive or normative model of social problem solving that focused on how individuals should solve problems in order to maximize their effectiveness (as opposed to a descriptive model that merely describes how individuals typically solve problems).

The D'Zurilla and Goldfried model was based on a melding of relevant problem-solving theory and research literature from the fields of experimental psychology, education and industry. The final D'Zurilla model

consisted of the following five components: problem orientation, problem definition and formulation, generation of alternative solutions, decision making, and solution implementation and verification. Individually, each component serves a definite purpose or function in the problem-solving process. Combined, the five components are expected to maximize the probability of ascertaining the most effective solution when appropriately applied to a particular problem.

Following the lead of D'Zurilla and Goldfried (1971), Spivack, Platt, and Shure (1976) provided support for exploring the problem-solving capability of clients. In their research, they compared a group of "deviant" individuals with a group of "normal" individuals. Their results indicated that the deviant group demonstrated inferior skills in problem solving compared to the normal group with respect to three major areas:

- 1. The deviant group generated fewer possible solutions to hypothetical problem situations.
- 2. The deviant group suggested solutions that were often antisocial in nature.
- 3. The deviant group had very inaccurate expectations about probable consequences of alternative solutions.

Furthermore, Spivak et al.'s (1976) results indicated that promising results could be obtained when deviant subjects received systematic training in problem solving. Substantial research can be found in the literature on the use of problem-solving skills training with adolescents, as can be noted by the references in the following paragraphs.

Kazdin, Esveldt-Dawson, French, & Unis (1987) focused on problem-solving skills training by comparing three conditions: cognitive-behavioral problem-solving skills training to nondirective relationship therapy and a control condition for antisocial children. Fifty-six children between the ages of 7 and 13 were randomly assigned to one of four therapists and the three The children were hospitalized conditions. psychiatric facility during the period of treatment and discharged thereafter. The problem-solving training condition led to significantly less externalizing aggressive behaviors and fewer behavioral problems at home and at school and more prosocial behaviors than the other two conditions. These effects were evident immediately after treatment and at a 1-year follow-up.

Tisdelle and St. Lawrence (1988) examined the effectiveness of social problem-solving skills training with conduct-disordered in-patient adolescents. Training criteria were socially validated with nonhospitalized

adolescents. Three baseline assessment sessions were conducted before the intervention, and further assessments were administered after each training session. Only when the subjects attained the skill level exhibited by the normal adolescents in the comparison group did the training progress to the next phase. Five problem-solving component skills were taught to the adolescents: problem identification, goal definition, generation of alternatives, comparison of consequences, and selection of the best alternative. Verbal problem solving improved, generalized to unfamiliar problem situations, and was maintained at a 1-month follow-up assessment.

Christoff et al. (1985) evaluated the effectiveness of a problem-solving training program for adolescents. The subjects were four adolescents ranging in age from 12 to 14 years who were referred to the training program because they were socially withdrawn and lacking in social skills. The results showed a significant increase in both problem-solving skills and specific social interaction skills. All improvements were maintained at a 5-month follow-up assessment.

Sarason and Sarason (1981) used this approach to enhance problem-solving cognitions and effective coping behavior in problematic situations relevant to adolescents. The successful results were maintained at a

l-year follow-up. In addition, objective measures within the school setting were also apparent, including lower rates of tardiness, fewer absences, and fewer referrals to school personnel for problem behavior.

Other problem-solving skills training programs have been developed and evaluated with successful results. Some programs have had the benefit of replicated research. Jacobson (1977) fine-tuned his research using a treatment and control group by adding a nonspecific therapy group (Jacobson, 1978). The following summary of his 1977 and 1978 research highlights his findings.

Jacobson (1977) developed a behavior marital therapy program using problem-solving skills training. The program was initially evaluated in an outcome study involving 10 distressed marital couples, who were randomly assigned to either a treatment group (involving 10 sessions) or a waiting-list control group. The results indicated that the couples in treatment improved significantly more than the waiting-list control group on both problem-solving behavior and marital adjustment measures. At a 1-year follow-up, the treatment gains were maintained. In addition, frequency of problematic behaviors in the home was significantly affected by the specific problem-solving treatment procedures.

Jacobson (1978) conducted a second study to replicate the above findings, allowing for the addition of a

nonspecific therapy group to control for nonspecific factors such as attention and expectation of benefit. The nonspecific group included discussions of the relationship problems but contained no specific problem-solving skills training. The results confirmed the findings of the first study. In addition, the results showed that the problem-solving treatment group demonstrated significantly more improvement than the nonspecific treatment group on measures of problem-solving behavior and marital adjustments. These gains were maintained at a 6-month follow-up assessment.

Robin (1979, 1980) also fine-tuned his initial research. The problem-solving program he designed for parent-adolescent dyads experiencing conflict has been evaluated in three clinical outcome studies: one by Robin, Kent, O'Leary, Foster, and Prinz (1977), one by Robin (1981), and one by Foster, Prinz, and O'Leary (1983).

In the first study, Robin et al. (1977) randomly assigned 22 mother-adolescent dyads to a problem-solving training group or a waiting-list control group. The results demonstrated dramatic improvement in problem-solving behavior in the problem-solving group relative to the control group at the post-treatment assessment. However, no definitive evidence of improvement in conflict resolution behavior was noted at home.

In the second study, Foster et al. (1983) randomly assigned 28 families to a waiting-list control group, a problem-solving group with generalization programming, or a problem-solving group without generalization training. The results indicated that both treatment groups improved significantly more than the control group on several measures of parent-adolescent conflict and communication behavior at home. These results were generally maintained at a 6- to 8-week follow-up assessment. The lack of significant differences between the two treatment groups was attributed to enhancements in the problem-solving training, such as inclusion of fathers in the program instead of mothers and adolescents only, an emphasis during training on the families' real problems instead of hypothetical ones, and the addition of two sessions.

In the third study (Robin, 1981), problem solving was compared to a less structured "best alternative treatment" in an attempt to control for nonspecific factors such as expectations of benefit. The alternative treatment was short-term family therapy conducted in an eclectic or family systems approach. Thirty-three families were randomly assigned to the two treatment groups or to a waiting-list control group. The results showed that both treatments produced significant improvement in conflict resolution and communication behavior at home. Only the problem-solving group demonstrated significant improvement

in problem-solving communication. These treatment effects were maintained at a 10-week follow-up. Furthermore, the parents in the problem-solving group rated their experience more favorably than did the family therapy group with regard to improvement in their relationship with their adolescents, improvement in their adolescents' behavior at home, improvement in problem-solving discussions at home, and the extent to which the program fulfilled their expectations.

Research has also been done on the use of the problem-solving model for reducing stress and enhancing ineffective coping skills. Two studies regarding coping were by Moon and Eisler (1983) and Dixon, Heppner, Petersen, and Ronning (1979).

Moon and Eisler (1983) compared the problem-solving group to a stress-inoculation and a social-skills training group when examining anger control issues. The results showed that stress inoculation significantly decreased anger-provoking cognitions but did not increase appropriate assertiveness. However, both the problem-solving training group and the social skills training group significantly reduced anger-provoking cognitions and increased assertive or socially appropriate behaviors.

Dixon et al. (1979) also used problem-solving skills training to enhance the generation of alternatives and

choice behavior with undergraduate college students. The subjects were randomly assigned to the problem-solving group, a pretest-posttest control group and a posttest-only control group. The problem-solving group showed significantly better problem-solving skills; the difference resulted primarily from less impulsivity in problem-solving situations.

Heppner, Hibel, Neal, Weinstein, and Rabinowitz (1982) also later studied the effects of the problemsolving model with college students with problem-solving deficits. Subjects were randomly assigned to the problemsolving group or a delayed-treatment control group. Following training, the subjects in the problem-solving group, compared to the control group, reported fewer problems on the problem checklist, more problem-solving confidence, a greater tendency to approach rather than avoid problems, and a more favorable self-assessment of their problem-solving skills. These gains were maintained at a 1-year follow-up evaluation. Similar results were obtained in research by Parnes and Noller (1973) conducted over a 2-year period with college freshmen.

Problem solving has also been used in the treatment of depression. Nezu (1986) randomly assigned 26 clinically depressed subjects to one of three conditions: problem-solving therapy, problem-focused therapy, or a waiting-list control group. Statistical analyses and

clinical analyses indicated substantial reductions in depression in the problem-solving group. These results were maintained over a 6-month follow-up period. In addition, the improvement in depression was significantly greater in the problem-solving group than in the other two groups. This superiority was maintained at a 6-month follow-up evaluation. Furthermore, the results indicated that the problem-solving group increased significantly more than the other two groups in self-appraisal of problem-solving effectiveness and also in locus of control orientations from external to internal. Again, these improvements were also maintained at the 6-month follow-up assessment.

Hussian and Lawrence (1981) also used problem-solving skills training in the treatment of depression with geriatric patients in a nursing home. The problem-solving group showed significant improvement relative to the waiting-list control group and the social reinforcement training group. This superiority was present at a 2-week follow-up, although the differences were no longer significant at the 3-month follow-up assessment.

Other researchers have also examined the use of problem-solving training with psychiatric patients (Bedell, Archer, & Marlowe, 1980; Coche, Cooper, &

Petermann, 1984; Coche & Flick, 1975; Edelstein, Couture, Cray, Dickens, & Lusebrink, 1980; Hansen, St. Lawrence, & Christoff, 1985; Siegel & Spivack, 1976a, 1976b).

The problem-solving therapy approach also has been used successfully with weight-control problems (Black & Scherba, 1983; Black & Threlfall, 1986; Straw & Terre, 1983), alcoholism (Chaney, O'Leary, & Marlatt, 1978; Intagliatia, 1978), vocational indecision (Mendonca & Siess, 1976), academic underachievement (Richards & Perri, 1978), agoraphobia (Jannoun, Munby, Catalan, & Gelder, 1980), and with community problems (Briscoe, Hoffman & Bailey, 1975).

Given the wealth of research on problem solving following the original findings of D'Zurilla and Goldfried (1971), this dissertation study included a specific problem-solving model, the Personal Paradigm Shift, when examining the adolescent population in therapeutic foster care. The Personal Paradigm Shift was developed by Hinds (1983) at Michigan State University with the intention of educating the client in therapy in a manner that would promote learning of the process of personal change. The paradigm approaches change as a problem-solving process with four phases that closely follow the final components of the D'Zurilla model: awareness of the problem, decision making as a process, selection of oppositional

alternatives to targeted behaviors, and the planning and implementation of necessary actions.

## Personal Paradigm Shift

Since the Personal Paradigm Shift forms the foundation for one of the instruments used in this study (i.e., the Personal Change Questionnaire), an explanation of the paradigm stages is deemed appropriate at this point (Hinds, 1983).

Stage 1--Awareness. This stage consists of seven steps aimed at creating self-understanding. The essence of this stage is that the individual confronts and examines the critical relationships between internal and external variables that contribute to the maintenance of personal problems.

- Step 1: instructs the individual to describe a personal problem which he/she wants to resolve.
- Step 2: asks the individual to set initial goals related to the problem chosen. (These goals are operationalized as behavioral objectives, aimed at assisting the individual in looking toward the future with optimism regarding possible resolution.)
- Step 3: asks the individual to identify the antecedent events to the problem.
- Step 4: has the individual identify the internal reactions, i.e. beliefs, feelings, mental images, and physiological reactions, that occur within the individual that accompany the antecedent events.
- Step 5: focuses on helping the individual see the sequential chain of behavioral actions that are taken by that individual when the problem situation occurs.

Step 6: has the individual identify the consequences that follow the actions addressed in Step 5.

Step 7: asks the individual to describe what beliefs or needs must be abandoned before behavior can be changed and the problem resolved. (This final step is a unique feature that is not found in other behavior change or problem-solving models.)

Stage 2--Decision making. This stage is aimed at having the individual use the information gained in the previous stage to examine his/her decision-making process. Decision making is seen as consisting of three steps:

Step 1: constructing a balance sheet of perceived rewards and punishments entailed in solving the problem versus not changing.

Step 2: making a cognitive and emotional commitment to change versus accepting the current situation as satisfactory.

Step 3: confronting the resistance to change and identifying the fears associated with changing and resolving the problem.

Stage 3--Oppositional alternatives. This stage attempts to help the individual develop a new set of internal reactions to foster a sense of self-control. The four steps in this stage are aimed at generating new beliefs, feelings, physiological reactions, and mental images to counter those identified in the Awareness Stage. The individual is asked to record the stressful conditions of the problem situation as part of the first step and then to think of new healthy internal reactions to oppose the existing ones as part of the second step. The third

step has the individual think about new actions to replace old problematic behaviors. The final step has the individual identify the new consequences that will follow the new actions.

Stage 4--Planning and action. The final stage consists of ten steps aimed at reducing the individual's fear and increasing his/her motivation for change. This stage targets the individual's feelings of helplessness, hopelessness, and loss of control.

- Step 1: asks the individual to identify the initial goal he/she needs to achieve to maintain motivation. This goal must be realistic, specific, countable, and in behavioral terms.
- Step 2: focuses on recognizing and creating support systems for instituting change.
- Step 3: uses the concepts of observational learning and modeling in having the individual seek information and identify others who have achieved their goals and, thus, resolved their problems.
- Step 4: has the individual identify what appropriate reward he/she will provide him/herself following the accomplishment of the initial goal change. The individual must be able to use this positive reinforcement as a continued source of motivation throughout this process.
- Step 5: is unique to this model in that the individual is taught to organize a plan of attack for working on the personal problem. The individual is asked to clearly delineate the appropriate order of behaviors he/she will need to perform to achieve the desired behavior change and resolve the problem.
- Step 6: teaches the individual the meaning of feedback and how to develop a specific feedback system to maintain motivation.

Step 7: helps the individual develop a time frame for accomplishing goals and resolving problems.

Step 8: assists the individual in developing back-up plans in the event that he/she encounters failure in first trying to resolve the problem.

Step 9: addresses the issue of fear of success, i.e., the individual's unconscious attempt to undermine personal change and return to self-defeating behavior.

Step 10: has the individual keep a daily or weekly log to record the specific gains made in achieving behavior change and resolving problems. This written record is intended to provide the individual with a support system to maintain motivation toward problem resolution.

With the Personal Paradigm Shift, as with other psychoeducational problem-solving models, the ultimate goal is to teach the individual the process of personal change and to have the individual see him/herself as an active agent making behavioral choices that either facilitate or impede problem resolution.

Two research studies have been performed using the Personal Paradigm Shift. One study was by Jeney (1985), and the other by Parker (1987).

In his dissertation, Jeney (1985) used the Personal Paradigm Shift to assess the pain perceptions, health behavior, and psychological disturbance of 51 chronic-pain patients. A multivariate analysis of variance on the subjects as a group was performed on the pain data and found to be nonsignificant for both the pretest-posttest comparison and the pretest follow-up comparison. The

author contended that the reasons for lack of significance included the small sample size, inappropriate dependent measures, the improvement evidenced in both groups, the brevity of the treatment period, and the subjects' rejection of the rehabilitation model.

However, Parker (1987) in his dissertation used the Personal Paradigm Shift in assessing the stress, health behavior, and academic achievement of college students who had been identified as academic underachievers. Again the group, not the individual, was the unit of analysis regarding gain scores obtained from pretest-posttest and pretest follow-up comparisons. A two-way analysis of variance performed on the pretest follow-up comparison of quarterly grade point averages found a significant difference for those who had used the Personal Paradigm Shift. Parker stated that the absence of significance in other aspects of the design might have been attributable to the brief treatment period, the inappropriate dependent measures, the size of the treatment group, the evidence of improvement in both groups, and the developmental and personality factors that characterized the subjects involved in the study.

In summary, the literature on problem-solving theory, including the research on the Personal Paradigm Shift, supported the use of problem-solving skills training with

various populations for application not only at a remedial level but also for prevention and/or enhancement.

## Review of the Literature on Therapeutic Foster Care

Because therapeutic foster care is a relatively new phenomenon, the literature, both descriptive and evaluative, is scant. Webb (1988) commented that, in 1983, 32 private agencies administered specialized therapeutic foster care programs in Michigan alone. of these programs had been developed since 1978. indicated that evaluations have tended to be anecdotal, without research supporting the efficacy of therapeutic foster care as a treatment modality. In fact, she was able to find only one comparative study (Rubenstein, Armentrout, Levin, & Harold, 1978). In summation of her analysis of the literature on therapeutic foster care, Webb asserted the need for further evaluations to determine whether therapeutic foster care as a treatment modality can effectively influence a clearly defined population.

In their comparative study, Rubenstein et al. (1978) discussed the Parent-Therapist Program in Ontario, Canada. This program was designed for emotionally disturbed latency-age children (ages 6 to 12) as an alternative to institutionalization. An experimental design was used to evaluate the program. Twenty-seven children were admitted

into the Parent-Therapist Program, and 45 children were placed in residential treatment centers. The average length of time in placement was 18.7 months. The researchers used the Quay-Peterson Behavior Problem Checklist to ascertain the degree of behavioral disturbance. A three-way analysis of variance revealed that both groups showed improvement not related to the treatment modality to which they were assigned. However, the authors contended that the Parent-Therapist Program had a per diem rate of \$24.05 to \$30.16, compared to a residential treatment rate of \$47.43 to \$63.77. authors, therefore, noted that therapeutic foster homes are more cost-effective than residential treatment.

Three articles focused on the subsequent placement of children after discharge from therapeutic foster care as providing a positive assessment of the treatment modality (Bauer & Heinke, 1976; Hawkins, Meadowcraft, Trout, & Luster, 1985; Larson, Allison, & Johnson, 1978). Bauer and Heinke reviewed the therapeutic foster care program developed at the Fond du Lac Office of the Wisconsin Department of Health and Social Services. In its 8 years of operation, the program had placed 175 children, ranging in age from 2-1/2 to 17 years. No behavioral or psychological criteria for referral were indicated. Of the 42 children discharged, 29% returned to live with their birth parents, 23% were placed in adoption, 12%

entered independent living situations, 22% were placed in group homes or other treatment homes, and 7% entered institutions. From these outcome measures, the authors determined that "most of the youngsters who have participated in the program have made significant gains."

Larson et al. (1978) article discussed the Alberta Parent Counselors program in Canada. Eightv-seven children between the ages of 8 and 16 were placed in therapeutic foster homes. More than 50% had committed delinquencies; half were a grade or more behind in school. All demonstrated conduct problems, such as aggressiveness, withdrawal, social anxiety, depression, hyperactivity, or disobedience. The average placement was 8.7 months. evaluation design was descriptive and process-oriented, relying on systematic recording of the project experience. For evaluation purposes, assessments of the children involved four diagnostic instruments, interviews, school reports and behavioral indicators. The only statistical finding reported was that 70% of the 50 children discharged from the program were placed in permanent situations in the community. Thirty percent were still in need of specialized institutional care. As with the Rubenstein et al. articles, the authors indicated that the \$23 per day cost "compared favorably" with institutional care costs during that year, making the program costeffective.

Hawkins et al. (1985) discussed the PRYDE model of therapeutic foster care. This program placed children ranging in age from 4 to 18 years in therapeutic foster care due to aggressive, attention-getting, hyperactive, or unethical behavior. The program's results were measured from three perspectives: (a) discharge rates: 82% of the 16 children were discharged to less restrictive, less structured settings; (b) recidivism: of 28 children discharged, only 1 had reentered the child welfare or juvenile court system 6 months after discharge; and (c) self-report: satisfaction questionnaires completed by the youths in the program revealed that 85% of their statements were "very positive about their foster parents."

Hazel (1982) reviewed the Kent Family Placement Project. Adolescents ranged in age from 14 to 18 years and consisted of three groups: delinquent boys, girls with unacceptable or dangerous behavior (though not necessarily illegal), and casualties of the system (i.e., children who were being stored in institutions). The author indicated that an independent study (not further defined) of 25 placements, as well as the Project's own evaluation (not further clarified) of 156 boys and girls placed in the program, revealed that three-fourths of them "improved during placement." This "improvement" was not

specifically defined, nor was any information provided regarding the design or measurement instruments used.

Lanier and Coffey (1981) discussed the specifics of the therapeutic foster care program developed at the Smokey Mountain Area Mental Health Center. In this article they merely described the services offered and did not indicate the number or criteria of children served. Furthermore, no statistical or evaluative outcome data were noted. The authors did comment that their approach was cost-effective, although no supportive documentation was provided.

In summary, only one comparative study on the efficacy of therapeutic foster care appeared in the literature (Rubenstein et al., 1978). Furthermore, in that study no significant difference in improvement was found between children in therapeutic foster care and those placed in residential facilities. However, the authors did contend that therapeutic foster care was more cost-effective than residential treatment, a finding reiterated by Larson et al. (1978) and Lanier and Coffey (1981).

#### Summary

Psychoeducation, which has emerged from the coupling of the fields of psychology and education, does not follow the traditional medical model but instead has a format of

intervention beginning with client dissatisfaction, moving to the setting of goals and the instruction of specific skills, and culminating in particular goal achievement. A specific skills training program within the field of psychoeducation is problem solving, which has been used successfully with various psychiatric populations, including emotionally disturbed and delinguent adolescents. Problem-solving theory contends that ineffective coping with problem-solving situations, along with accompanying personal and social consequences, may be the necessary and sufficient condition for the development an emotional or behavioral disorder requiring psychological treatment. An additional contention is that specific skills training in problem solving may be One such specific training program is the Personal Paradigm Shift, used in this study. A treatment setting in which an examination of the problem-solving skills of the population is lacking is therapeutic foster care, where adolescents are placed with specially trained foster parents who function as change agents. Although the literature is substantial regarding descriptions of therapeutic foster care programs, few data exist on identifying the specific population being served by this treatment modality. Filling a portion of this data gap by identifying some of the characteristics of this population was the focus of this study.

#### CHAPTER III

#### METHODOLOGY

This chapter contains a discussion of the therapeutic foster care population, the sample-selection criteria, and the representative sample that was examined in this study. Additionally, procedures and instrumentation used in this study are explained. The section on the Millon Adolescent Personality Inventory (MAPI) includes a description of the instrument, its construction, scoring, reliability and validity, as well as a review of the research on this The discussion of the Personal Change instrument. Questionnaire contains a description of the instrument, including information regarding its reliability and validity. Additionally, a brief overview is given of the survey developed for this study. A presentation of the data analysis and design of the study, followed by a summary, concludes Chapter III.

### Sample

#### Population

Child and Family Services is a private, nonprofit organization with a central office in Okemos, Michigan.

Fourteen statewide branches accept foster care referrals from various private and public agencies throughout Michigan. Ten of those branches have therapeutic foster care programs, with a total population of approximately 250 children placed in therapeutic foster care at any give time. Nine of those ten branches agreed to participate in this study, representing approximately 220 children in therapeutic foster homes.

# Sample-Selection Criteria

The criteria for selecting the adolescents for this study were as follows:

- 1. The adolescent must be between the ages of 13 and 18 years.
- 2. The adolescent must be placed within the therapeutic foster care program at the agency (as opposed to being in regular foster care).
- 3. The adolescent must have at least an average IQ and/or be able to read at a sixth-grade level or better in order to complete the instruments used in this study.

From the pool of adolescents meeting those criteria, a sample of 100 adolescents was randomly selected. A return rate of 94% from the adolescents' therapists was obtained for the demographic information on these adolescents. However, a final voluntary subject

population on the MAPI and Personal Change Questionnaire consisted of 41 adolescents.

# Description of the Sample

Descriptively speaking, of the 94 adolescents initially surveyed in therapeutic foster care for this study, the following results were obtained. With regard to race, 86 were Caucasian-Anglo, 5 were Hispanic, 1 was Native American, and 2 were biracial. Forty-nine were male and 44 were female; one adolescent's gender was not noted on the survey. With regard to state or court wardship, 62 adolescents were temporary wards, 14 were permanent wards (meaning parental rights had been terminated), and 18 were missing data on the survey for this variable. Concerning family status, 51 were biological offspring, 5 were adopted, and 38 were missing data on the survey for this variable. The mean age was 15.65 years. length of time in therapeutic foster care was 17.7 months, and the mean length of time in regular foster care programs was 4.2 months. The mean number of previous foster care placements was 1.6. The mean score by the therapists of the adolescents' overall functioning on a scale of 0 (poor) to 7 (very well) was 4.5.

A statistical comparison was run between the 41 ( $\underline{n}$  = 41, Group B) adolescents who agreed to participate and the 59 ( $\underline{n}$  = 59, Group A) who did not complete their

instruments. A total of eight different demographic and descriptive variables (i.e., age, gender, race, whether or not the adolescent was a ward of the court or state, length of time the adolescent had been in therapeutic foster care, number of previous foster care placements, whether the adolescent had ever been institutionalized, and the therapist's rating--on an 8-point scale--of how well the adolescent dealt with problems) were examined. The analysis revealed that, except for gender, there were no significant differences between the two groups. further statistical analysis indicated that gender had no significant correlation with any of the variables of interest in this study (i.e., the adolescent's self-rating of problem-solving ability, the therapist's rating of the adolescent's problem-solving ability, the length of time in therapeutic foster care, or any of the four components of the Personal Change Questionnaire). This suggests that, for the purposes of this study, the final sample was representative of the original sample, with no noticeable biasing.

Complete descriptive data on the study sample are presented in the Results section.

#### Procedures

For each adolescent, the branch agency received one descriptive survey for the therapist to complete, as well

as one MAPI and one Personal Change Questionnaire for the adolescent to complete. The adolescents were given the following written instructions:

You were selected to be a part of a study of teenagers in special foster care programs. Your participation is completely voluntary. You can stop being in this study any time you want. The study consists of two questionnaires that will take you approximately one hour to complete. You won't be putting your name on these forms and no one will know which answers were yours. Your therapist will be available to answer any questions you might have. Are you willing to be a part of this study by completing these forms?

Upon receiving a verbal consent, the adolescent was then provided with the two instruments (the MAPI and the Personal Change Questionnaire), both of which contain instructions for completion.

With consultation from the branch agencies, an additional statement was developed to give to the adolescent as an explanation for the study:

We are asking you to complete these forms to help us find out how adolescents in foster care programs like yours feel and think. Once we know that, we may be able to be more helpful. You will notice that one of the forms asks you to pick a behavior of yours that has created problems for you, like talking back to teachers, not talking about your feelings, not getting your chores done, or not completing your Once you have picked the problem, just homework. answer the questions on the form. Maybe the behavior you pick is one that you are working on as a goal in your foster home, with your caseworker or counselor, or at school. There is no right or wrong answer to these questions. Just answer as honestly as you can. If you need help in deciding on a problem or goal, you can ask your foster parents, caseworker, or counselor for help. Thank you for helping us by answering these questions.

The reference to the Personal Change Questionnaire specifically in this statement was due to the resistance expressed by the therapists to administer this instrument to the adolescents because of its stance of self-responsibility regarding behavior. Some therapists strongly verbalized that the adolescents were victims and not responsible for the problems for which they were receiving treatment. The statement allowed the adolescents to select a behavior that they perceived as creating problems for them. This will be discussed further with reference to the results in the Discussion section.

# <u>Instrumentation</u>

# The Millon Adolescent Personality Inventory

The MAPI consists of 150 true-false items designed to measure objectively certain personality dimensions, expressed concerns, and behavioral correlates in adolescents between the ages of 13 and 18 years. (See Appendix A.) The scores on the profiles are adjusted for prevalence data on each of the 20 scales, using normative scores.

The eight personality variables are derived from Millon's (1969, 1981) theory of personality, which consists of a 2 x 4 matrix (passive/active x detached/dependent/independent/ambivalent).

The first dimension pertains to the pattern of coping behavior employed by the adolescent to maximize rewards and minimize pain. An active pattern means that the adolescent appears aroused and attentive, arranging and manipulating life events to obtain gratification and avoid discomfort. A passive pattern results in an apathetic, restrained, yielding, or resigned demeanor that suggests the adolescent is content to allow events to take their own course without personal attempts at regulation or control.

The second dimension revolves around the primary source from which the adolescent attempts to gain comfort and satisfaction (positive reinforcement) or to avoid emotional pain and distress (negative reinforcement). The detached type experiences few rewards or satisfactions in life, either from self or others. The dependent type measures personal satisfactions or discomforts by how others react. The independent type relies on personal values and desires, with little regard to the concerns and wishes of others. Finally, the ambivalent type feels conflicted over whether to follow others or be guided by personal desires and needs.

The eight resulting personality styles are as follows:

- Scale 1: Introversive (31 items): Passive-Detached: is quiet, unemotional, indifferent about involvement with others.
- Scale 2: Inhibited (41 items): Active-Detached: is withdrawn, mistrustful, lonely, fearful of rejection.
- Scale 3: Cooperative (35 items): Passive-Dependent: seeks relationships in which others provide support, lacks initiative or autonomy, is clinging.
- Scale 4: Sociable (29 items): Active-Dependent: intensely needs attention and approval, is dramatically emotional, superficial, capricious, manipulative.
- Scale 5: Confident (42 items): Passive-Independent: is self-assured, has high self-esteem, is self-centered, exploitive, takes others for granted.
- Scale 6: Forceful (37 items): Active-Independent: intensely needs power and control, is suspicious, hostile, angry.
- Scale 7: Respectful (29 items): Passive-Ambivalent: is serious-minded, rule-conscious, subservient with underlying anger and opposition, fearful of disapproval.
- Scale 8: Sensitive (46 items): Active-Ambivalent: is pessimistic, emotionally labile, explosively angry alternating with apologetic.

The following eight scales on the MAPI are considered "expressed concerns," which focus upon the affect and cognitions that adolescents may experience about issues that tend to concern this age group at one time or another during this developmental stage. The intensity with which the adolescents experience these issues is reflected in the score elevations of each scale.

Scale A: Self-Concept (36 items): clarity of identity--who one is and what one will become.

Scale B: Personal Esteem (36 items): level of satisfaction experienced by the adolescent when comparing self against an ideal.

Scale C: Body Comfort (21 items): comfort with body maturation and adolescent developmental changes.

Scale D: Sexual Acceptance (28 items): satisfaction with sexuality and development of heterosexual relationships.

Scale E: Peer Security (23 items): degree of acceptance and sense of belonging with peers.

Scale F: Social Tolerance (26 items): interpersonal sensitivity and respect for others.

Scale G: Family Rapport (25 items): degree of comfort within the family system.

Scale H: Academic Confidence (30 items): attitudes toward academic achievement.

The MAPI also contains four behavioral correlates. These have been assessed through empirically derived scales rather than self-report. High scores on these scales suggest the respondents answered similarly to adolescents with poor impulse control, difficulty conforming to rules and norms, poor academic achievement, or school truancy. The scales are labeled as follows:

Scale SS: Impulse Control (35 items).

Scale TT: Societal Conformity (39 items).

Scale UU: Scholastic Achievement (41 items).

Scale WW: Attendance Consistency (36 items)

Scoring the MAPI. When constructing the MAPI, Millon (1982) believed that his personality inventory measured traits, concerns, and behaviors that were neither normally

distributed nor of equal prevalence in normal and clinical populations. Accordingly, Millon maintained that transforming the raw scores into standard scores was inappropriate. Accordingly, when scoring the MAPI, raw scores are transformed into base rate scores. This conversion was determined by personality trait prevalence data obtained in external validation studies on 430 individuals.

Two arbitrary numbers were selected to designate the two base rate cutting lines. A base rate score of 75 indicated the "presence" of the personality trait, concern, or behavior. Adolescents scoring above 74 are said to possess, to a clinically significant degree, the trait, concern, or behavior assessed. Similarly, a base rate score of 85 indicated the "predominance" of the personality, trait, or behavior. Adolescents scoring above 84 on a scale are considered to display that trait, concern, or behavior as a dominant element of their clinical picture. A base rate score of 50 was selected to represent the median for all adolescents who participated in the test-construction studies.

Within the MAPI instrument are items to assess reliability and validity of responses. Three factors contribute to nonusable responses:

- 1. Tendencies of the adolescent to "deny" emotional problems, trying to appear healthier than would be objectively determined.
- 2. Tendencies of the adolescent to "complain" excessively, trying to appear more disturbed than is objectively justified.
- 3. Tendencies of the adolescent to respond "randomly," i.e., not answering, either by accident or intentionally, in a manner reflecting comprehension and relevance.

For the reliability index, items were included to focus directly on the adolescent's belief that his/her responses represent an enduring set of feelings and that he/she took the testing situation seriously. Three items that comprise the reliability index (Scale 21) have been shown to be very successful in identifying those adolescents for whom test-taking attitudes or lack of conviction reflected in their responses resulted in scores with little enduring meaning. A score of 2 is recorded as unreliable, 0 equals reliability, and 1 is questionably reliable.

The validity index (Scale 22) targets problems arising from noncomprehension or random responding. These problems seem to occur, according to the manual, when the adolescents are too disoriented to focus or maintain interest in the inventory or are purposely avoiding

committing themselves due to their perception of consequences associated with the test. Accordingly, implausible but nonbizarre items were included that had a frequency response of less than .01 among normal or clinical populations. Seventy-five percent of all adolescents who fail to complete the MAPI carefully or relevantly are detected by the three items in this index, which is highly sensitive to careless, confused, or random responding. Again, scores of 2 indicate unreliability, 0 suggests reliability, and 1 indicates questionable reliability.

Evaluation of reliability and validity. To develop a diagnostic instrument capable of efficiently assessing adolescents on a number of significant personality and behavioral characteristics, the MAPI was constructed with attention directed to reliability as well as internal structure and external validation.

Empirical evaluation of the MAPI consists of (a) reliability estimates for test-retest stability and internal consistency, (b) scale intercorrelations, (c) external correlations with other personality instruments, and (d) results of factor analyses.

The reliability and validity of the MAPI instrument have been carefully investigated by other researchers, using a variety of established empirical procedures,

including test-retest and internal consistency indicators of reliability and convergent validity with other diagnostic inventories. The procedures used and results obtained are described in detail in Millon, Green & Meagher (1982).

Research on the MAPI. Because the MAPI is a relatively new instrument, little research was available for review. Only one study to date has appeared in the literature regarding the use of the MAPI as a validating instrument (Levine, Green, & Millon, 1986). To establish external-criterion validation, 181 adolescent subjects completed the MAPI and the Separation-Individuation Test of Adolescence (SITA), which is based on Mahler's theory of early childhood separation-individuation processes. An examination of the results by Levine et al. supported the establishment of external validity for the MAPI.

Other research has been conducted on the MAPI and presented at various conferences, printed in unpublished reports at psychiatric institutions, and written as dissertation findings. In her dissertation, Fons (1987) used the MAPI to compare 30 adolescents in a psychiatric inpatient unit to two groups of 30 high school students (one group of high school students having scored in the abnormal range on the MAPI pretest and one group having scored in the normal range). Fons found a greater degree

of test-retest stability in the personality scales of the MAPI than in the Expressed Concern scales. She was also able to demonstrate that scores on the Inhibited and Sensitive scales decreased with treatment, that the Sociable and Confident scales scores increased with treatment, that the Expressed Concern scales decreased with treatment, and that the untreated groups evidenced no significant differences on pre-posttest scores.

Five presentations examined the MAPI at the Millon conference in Miami, Florida, in March 1986 (Fons, 1987). The following is a summary of those articles:

Zupkus (1986) discussed her research in the use of the MAPI to differentiate among normal, emotionally disturbed, and delinquent adolescents. With 60 subjects in each group, membership was predicted with 60.5% accuracy among all three groups and with 76.1% accuracy between the normal and pathological groups. Additionally, Zupkus found that Forceful and Sensitive personality styles were more frequent among maladjusted adolescents than among normals.

Watchman (1986) presented research data that used the MAPI to differentiate between depressed and nondepressed adolescents. His results indicated that high scorers on the Introversive, Cooperative, and Respectful scales used denial as a coping mechanism and changed very little when

depressed; high scorers on the Forceful and Sensitive scales became more aggressive when depressed; and high scorers on the Inhibited, Sensitive, and Cooperative scales became highly intropunitive. The findings suggested that personality style as measured by the MAPI is a salient factor in determining an adolescent's response to coping with depression.

Tracy (1986) reported results from research using the MAPI with 230 adolescent inpatients and outpatients. He warned that the MAPI's weakness tends to rest in the area of diagnosis of the more severe Axis I pathology, including psychosis and major depression.

Pantle and Wassink (1986) also employed the MAPI with inpatient adolescents selected from the crisis treatment unit of a psychiatric hospital. They found no significant difference using the MAPI between the groups who had threatened suicide and those who had demonstrated no suicidal behavior before admission. However, the MAPI did differentiate between those who had attempted suicide and those who had not, with the group attempting suicide having significantly higher scores on Inhibited and Sensitive and significantly lower scores on Sociable and Confident.

Using the MAPI, Pantle and Houskamp (1986) assessed differences among adolescents with a history of sexual abuse. Three groups of adolescents, matched by age,

gender, and diagnosis, were equally divided among those having experienced documented severe sexual abuse, moderate sexual abuse, and no sexual abuse. Their results indicated that MAPI profiles on adolescents who had experienced sexual abuse differed from the profiles of adolescents who had not been sexually abused. The Inhibited, Personal Esteem, Peer Security, and Social Tolerance scales were significantly higher in the two sexually abused groups, whereas the Sociable and Confident scales were significantly lower. Furthermore, as the severity of the sexual abuse increased, so did the scores on the Peer Security and Social Tolerance scales, whereas scores on the Sociable and Confident scales declined. Pantle and Houskamp interpreted those findings to mean that severely abused adolescents perceived themselves as less confident and outgoing and as having greater difficulty with peer relationships and tolerance for others.

The MAPI also has been used in two unpublished reports researched at Pinerest Christian Hospital in Grand Rapids, Michigan, in 1988. Using the MAPI, VanZytveld (1988) assessed 56 adolescents characterized by differential levels of suicide proneness. The three groups being compared were those who had threatened suicide, those who had attempted suicide, and those who

had no history of suicidal behavior. Significant differences were found among the groups. Specifically, those who had threatened suicide scored highest on the Inhibited and Sensitive scales and lowest on the Sociable and Confident scales. Additionally, on the Expressed Concern scales, the threateners scored highest on having issues regarding Self-Concept, Personal Esteem, Body Comfort, Sexual Acceptance, Peer Security, and Social Tolerance. Those who had attempted suicide showed significantly less distress on the MAPI relative to those who had threatened suicide. VanZytveld suggested that the difference might have been due to the attempters seeing themselves as having made a choice and, thus, having achieved some type of resolution. On the other hand, the threateners could be seen as being in the midst of indecision and, thus, of distress that is reflected in the MAPI scales.

The other research study conducted at Pinerest was performed by Houskamp (1988) and used the MAPI to assess differences between a sexual-abuse group and a control group with no history of sexual abuse. Significant differences were found on the Inhibited, Sociable, Confident, Personal Esteem, Peer Security, and Social Tolerance scales. As noted in other research cited herein, scores on the scales correlate with the severity

of the abuse, indicating a possible relationship between severity of sexual abuse and its effects.

In a paper presented at the Society of Personality Assessment in New Orleans, Louisiana, in March 1988, Trenerry, Pantle, and Ziebelman (1989) compared the MAPI with the Rorschach in assessing 63 adolescents admitted to an inpatient crisis unit. They found a significant correlation between the Depression index and the Inhibited, Cooperative, Sociable, Confident, and Forceful Personality scales. Furthermore, they found a constellation of MAPI Personality scales that demonstrated predictive value regarding suicidal behavior.

Pantle (1989) described a comparison of the MAPI with the Rorschach and the Multiscore Depression Inventory in a paper presented at the Society for Personality Assessment in New York in April 1989. Pantle performed the comparison to assess mood disorders of adolescents hospitalized for depression at the Pinerest Christian Hospital in Grand Rapids, Michigan. Pantle reported that an elevation in the Forceful scale may be indicative of "masked depression" that presents as disruptive behavior. In line with Millon's theories, Pantle's research further suggests that passive-aggressive and avoidant types are susceptible to depressive disorders, whereas histrionic, narcissistic, and antisocial personality styles tend to be

intolerant of negative affect and often take a "flight into health" shortly after being admitted for treatment.

In summary, published research on the MAPI is sparse. However, research findings presented at conferences and summarized in dissertations and unpublished reports have supported its use in assessing various adolescent populations. In particular, the MAPI has been found to have assessment value in terms of depression, suicidal proneness, and sexual abuse. These findings would suggest the appropriateness of using the MAPI with the adolescent population in this study.

## The Personal Change Questionnaire

The Personal Change Questionnaire consists of 38 questions. (See Appendix B.) Respondents are asked to answer on a scale from 0 (very poor) to 7 (very well). The first 37 questions relate to the process of problem solving and are based on the four stages of the Personal Paradigm Shift: (a) awareness; (b) decision making, (c) oppositional alternatives, and (d) treatment planning and action. The final question (#38) asks the respondents to rate themselves on their own problem-solving ability. (A corresponding question regarding the respondent's problem-solving ability is asked of the therapist on the Survey instrument used in this study.)

Description of the stages. The Personal Change Questionnaire's four stages correspond to identical stages in the Personal Paradigm Shift. Each stage in the Personal Paradigm Shift consists of detailed steps designed to educate the respondent about the relationships between external behaviors and internal experiences, such as thoughts, feelings, and bodily reactions. Because the Personal Change Questionnaire is based directly on the Personal Paradigm Shift, the items on the questionnaire correlate with the individual steps of the Personal Paradigm Shift. The following is a description of the stages as they relate to the items on the Personal Change Questionnaire:

Stage One: Awareness (Items 1-10). The first stage is designed to guide respondents through a self-analysis of their present behaviors to discover the personal dynamics of the present problem. The focus is on identifying the problem and its antecedent or concurrent thoughts and feelings. The intention is that respondents become aware of and examine relationships between internal and external variables that create and maintain their personal problems.

Stage Two: Decision-Making (Items 11-17). The second stage is based on awareness gained in Stage One. The focus is on determining how the information from Stage One influences their decisions about making changes. The

problem-solving process at this stage consists of three steps: constructing a balance sheet of thoughts and feelings surrounding personal changes, making a commitment to change, and confronting the barrier of fear about changing.

Stage Three: Oppositional Alternatives (Items 18-26). The third stage aims at helping the respondents replace old internal reactions with new thoughts, feelings, and behaviors. In addition, this stage attempts to foster a sense of self-control over internal reactions and subsequent behaviors.

Stage Four: Treatment Planning and Action (Items 27-37). This final stage provides realistic steps for developing and carrying out plans to bring about desired changes and solving the problem identified in Stage One. The problem-solving process in this stage consists of goal setting, finding appropriate role models and support groups, and creating specific methods of record-keeping and self-evaluation.

Reliability and validity. The Personal Change Questionnaire is new and, at the time of this study, was being researched in terms of its reliability, content validity, and construct validity (Kelley, in process). Kelley (1989) noted that the reliability of the Personal Change Questionnaire could be evaluated in terms of

Cronbach's alpha. The content validity relied on the use of expert judges regarding the items on the questionnaire. To assess construct validity, Kelley stated that the clients were to be given a self-rating and a therapist's rating, which were subjected to a correlational analysis.

Kelley's (1991) preliminary results suggested that the Personal Change Questionnaire did demonstrate good reliability in terms of its internal consistency. Kelley found the Personal Awareness scale to have a Cronbach's alpha of .83, the Decision-Making scale to have a .81 score, the Oppositional Alternatives scale to have a .92 score, and the Planning and Action scale to have a Cronbach's alpha of .92, thus indicating good internal consistency for each of the four scales in the instrument.

In addition, in terms of construct validity, Kelley found that the clients' self-ratings and the therapists' ratings of problem-solving ability were in fact positively correlated ( $\underline{r} = .44$ ,  $\underline{p} = .001$ ), thus demonstrating the validity of that aspect of the Personal Change Ouestionnaire.

Because the original Personal Change Questionnaire targeted adult clients, minor alterations were made for this study in vocabulary and with regard to examples used, in order to enhance readability and comprehension of the items by an adolescent population. Two methodological

safeguards were incorporated to ensure that the resulting instrument could be appropriately completed by this target population. First, the instrument was pilot-tested with a sample of 10 adolescents (5 male and 5 female) randomly selected by the staff of St. Vincent Home for Children in Lansing, Michigan. This group was selected because of their similarity to the target population of this study. Adolescents from the St. Vincent Home frequently move into therapeutic foster care programs. The adolescents in the pilot test were all able to successfully read and complete the test instrument.

As a second check, a panel of professionals who work with this population was selected to review the instrument and make suggestions regarding wording and comprehension. The only suggestion received from the panel was that the word "counseling" be substituted for "therapy." This change was made in the instrument provided to the adolescents in this dissertation study.

Although comprehensive reliability and validity testing of the Personal Change Questionnaire was well beyond the scope of this study, certain methodological procedures were employed to address these issues. In particular, the four Personal Change Questionnaire stages were examined using a combination of rational and empirical criteria, including (a) logical fit of each item with its scale, (b) significant correlation of each item

with its scale, (c) overall scale internal consistency (using Cronbach's alpha), (d) no substantive improvement in scale internal consistency if the item were removed, and (e) items correlated highest with their own scale.

The scales for the four stages satisfactorily met all of the first four criteria. However, a total of 6 of the 37 items did correlate slightly (although not significantly) higher with another scale than with their own. The content of those six items was reexamined in terms of their logical fit with their original and competing scales. For the purposes of this study, it was determined that the original scale placement was satisfactory.

The reliability of each of the four scales, in terms of internal consistency, was found to be similar to the previously cited results obtained by Kelley. The Personal Awareness scale demonstrated a Cronbach's alpha of .80, the Decision-Making scale was .78, the Oppositional Alternatives scale was .84, and the Planning and Action scale was .91, thus indicating that each of the four scales demonstrated good internal consistency.

Finally, there was one opportunity for directly examining the issue of validity in this study. Item 38 of the Personal Change Questionnaire assesses the adolescents' perceptions of their overall problem-solving

ability. Similarly, the survey completed by the adolescents' therapists for this study included an item measuring the therapists' assessment of the adolescents' problem-solving ability. The results showed that the correlation of the two different measures was statistically significant ( $\mathbf{r} = .40$ ,  $\mathbf{p} = .01$ ), indicating at least that degree of external criterion validity for the Personal Change Questionnaire. Once again, this result is very similar to the previously cited results obtained by Kelley.

On the basis of the prior research with the Personal Change Questionnaire, together with the pilot-testing and expert review conducted of preliminary procedures, it appears that the instrument used was reliable, valid, and appropriate for the target population examined in this study.

## Survey

The final instrument used in this study was the survey to ascertain certain demographics of the population in therapeutic foster care. (See Appendix C.) The instrument was given to the adolescent's therapist to complete and return.

The questions on the survey included age, gender, race, family status (biological or adopted, temporary or permanent ward), length of time in therapeutic foster care

programs, length of time in regular foster care programs, number of previous foster care placements, and history of residential placement or psychiatric hospitalizations. The final question asked the therapist to rate the adolescent on his/her problem-solving ability at the current time, using a scale of 0 (very poor) to 7 (very well).

This instrument was mailed to the therapist assigned to each of the adolescents selected for inclusion in this study. It was successfully completed and returned for all of the subjects included in the final study results.

## Design

this study consisted design of of observational analysis of the population in therapeutic foster care using the demographic information on the survey, the personality profiles suggested by the MAPI, and the examination of problem-solving abilities indicated by the Personal Change Questionnaire. Because this study involved observational analyses rather than experimental or quasi-experimental design to measure the effects of an experimental treatment, most typical concerns regarding threats to validity were not pertinent. Nevertheless, one factor of concern in the design was the relative newness of the MAPI and the Personal Change Questionnaire. Both instruments have been developed only recently and, therefore, have not been extensively researched regarding reliability and validity. Caution, accordingly, was exercised in terms of interpreting the results.

# Data Analysis

The analysis of the therapists' survey featured basic descriptive statistics, including the frequencies, means, and standard deviations of the various variables. Crosstabulations were made to develop frequency tables and descriptive graphs.

The primary research instruments, i.e., the MAPI and the Personal Change Questionnaire, were first analyzed using similar descriptive statistics. (Results for the MAPI were structured according to the protocols suggested by the developers of that instrument.) Gender differences on the Personal Change Questionnaire were examined using two-tailed t-tests and on the MAPI, using the Pearson chisquare statistic. Differences between the study sample of adolescents and the national normative data were examined using the Pearson chi-square test for goodness of fit. In each case, a significance level of .10 was selected due to the small sample sizes available and the exploratory nature of this study.

In addition, a variety of correlational analyses were conducted among and between variables in the two

instruments, and between those instruments and the descriptive and demographic variables obtained from the therapists' survey. Finally, Pearson correlations were used to examine the relationship between time in therapeutic foster care and results on the MAPI and the Personal Change Questionnaire.

All analyses were conducted using the Statistical Package for the Social Sciences (SPSS) computer software.

# Summary

A sample of adolescents in therapeutic foster care was observed relative to a demographic survey, the Millon Adolescent Personality Inventory, and the Personal Change Questionnaire. The MAPI was designed to assess the overall make-up of an adolescent's personality, including coping styles, expressed concerns, and behavioral patterns. The Personal Change Questionnaire analyzes problem-solving abilities in terms of personal awareness, decision-making skills, knowledge of oppositional alternatives, and planning and implementation behaviors. The research questions were examined through means, frequencies, cross-tabulations, and Pearson correlations.

#### CHAPTER IV

#### DATA ANALYSIS

In Chapter IV, the results of the study are presented. Initially, the results of the descriptive survey are provided in order to identify the therapeutic foster care adolescent population studied. Thereafter, the results on each of the five research questions are presented. Specifically, the following contents are included:

Research Question 1: the results of the MAPI in an attempt to ascertain if there is a personality profile of adolescents in therapeutic foster care.

Research Question 2: the results of the Personal Change Questionnaire in an attempt to determine if adolescents in therapeutic foster care are aware of elements necessary for personal change or problem solving.

Research Ouestion 3: the correlation between the results on the MAPI and the length of time in therapeutic foster care.

Research Question 4: the results on correlational data regarding the relationship between the length of time in therapeutic foster care and the results on the Personal Change Questionnaire.

Research Question 5: the correlation between the results on the MAPI and the results on the Personal Change Questionnaire.

This presentation of information is followed at the end of the chapter by a summary of the results on the

descriptive survey, as well as all five research questions.

## Results

### Descriptive Survey Results

The results of the descriptive survey cover the 41 adolescent subjects in therapeutic foster care who completed all of the instruments involved in this study.

Sixteen of these adolescents were male; 24 were The data on one survey were incomplete with regard to gender. Ninety-five percent of the sample was Caucasian-Anglo, and 5% was Hispanic. Twenty-nine percent of the adolescents were temporary wards of the court or state, six were permanent wards, and data were incomplete on the remaining six. Thirty-seven percent of the adolescents had a history of psychiatric hospitalization or residential treatment. The mean age was 15.8 years. The mean length of time in the therapeutic foster care program was 16.9 months, and the mean length of time in regular foster care placements prior to admission into therapeutic foster care was 8 months. The number of foster care placements before entering previous therapeutic foster care was 1.6.

The data on 5 of these 41 adolescents were omitted in the analyses when the results on the MAPI indicated that their profiles were invalid. This removal of five subjects was not considered to have posed a threat to the data analysis (as discussed earlier, in the Methods section).

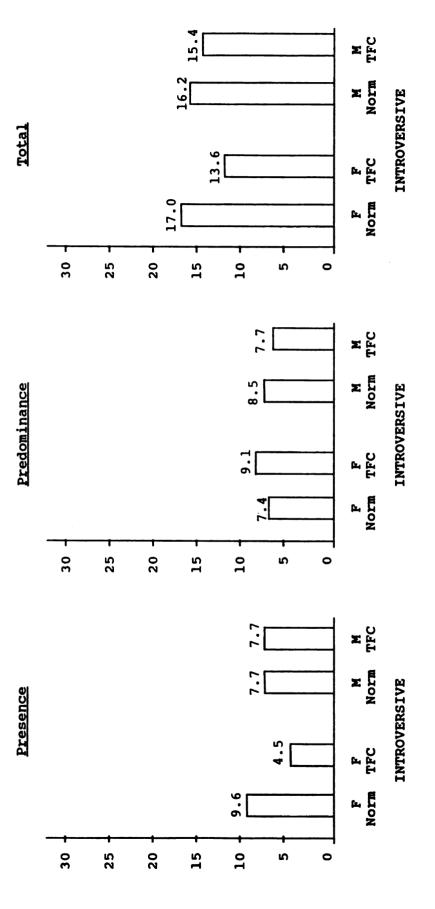
# Results Regarding Personality Profile of Adolescents in Therapeutic Foster Care

possibility of a personality profile adolescents in therapeutic foster care was assessed via In examining the results of the MAPI, all 20 scales were used. When constructing the MAPI, Millon prepared national normative data, for both males and females, for each of the first eight scales. The summary scores from these normative data were obtained for use in this study via a personal telephone conversation with Millon's offices (Kevin Anderson, National Computer Systems Professional Assessment Services, October 1, 1990). In terms of these first eight scales, the results of this study were compared to the national normative sample, as well as undergoing an analysis by gender. remaining 12 scales do not have any normative data available. Accordingly, a comparison was made only between the males and females within this study.

Per the scoring instructions of the developers of the MAPI instrument, the data have been divided into the percentage of adolescents who scored at 75 or above, indicating the "presence" of that trait, and those who scored at 85 or above, indicating the "predominance" of

that trait. In addition, a total score combining the presence and predominance scores has been provided for both the male and female populations. These data are presented in Graphs 1 through 20.

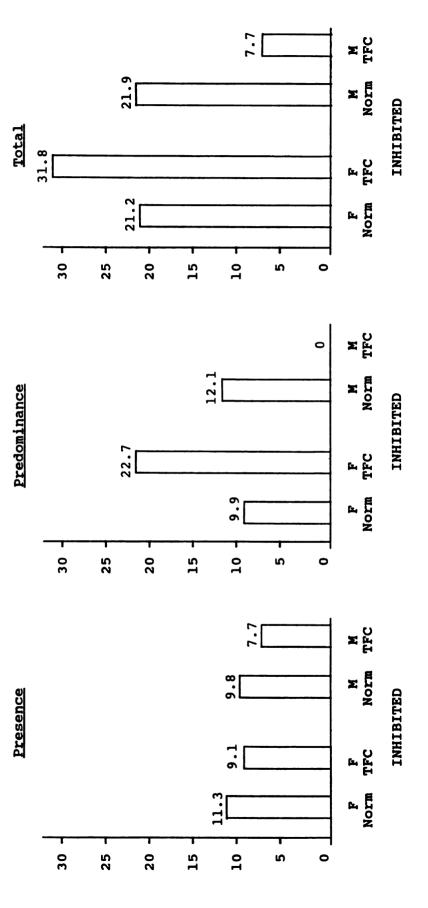
For the first scale, Introversive, the normative female population scored at 9.6% for presence, whereas the therapeutic foster care females scored at 4.5% (see Graph For predominance, the normative sample scored 7.4%, whereas the females in therapeutic foster care scored 9.1%. Thus, the total combined score reflects a similar percentage for the normative sample (17%) as for the subjects in this study (13.6). For the male population, the results on this scale were even closer. In terms of the presence of that trait, the normative and therapeutic foster care males scored identically (7.7%). For predominance, the scores were almost identical (norm group: 8.5%; study group: 7.7%). This resulted in a total combined score of 16.2% for the normative group and 15.4% for the therapeutic foster care males. Together, these results suggest little difference between the study population and the national normative group on this variable, for either males or females. When a comparison is made between males and females on being Introversive, the females have a similar total score to the males in the normative and study samples



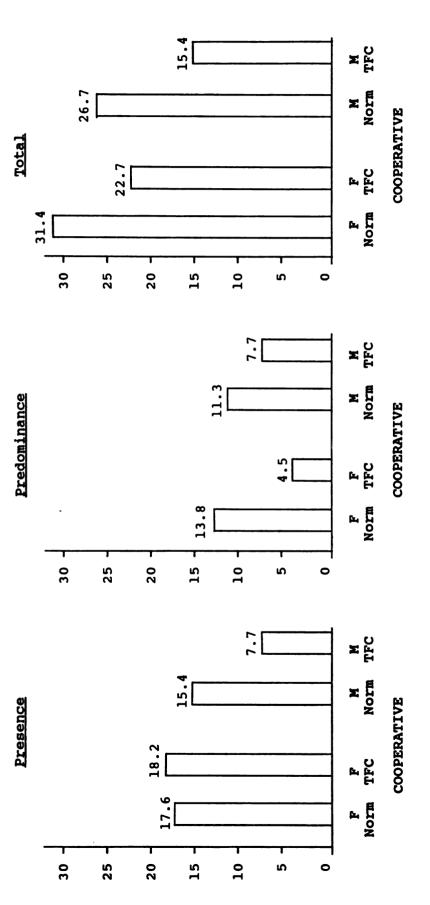
Graph 1: Comparison of results on the Introversive scale.

For the second scale, Inhibited, the females in the normative sample scored similarly (11.3%) to the females in therapeutic foster care (9.1%) for the presence of the trait (see Graph 2). However, the females in this study scored higher (22.7%) than the normative population (9.9%) on the predominance of this trait. Thus, the total combined score for the females in therapeutic foster care (31.8%) was greater than the total score for the normative population (21.2%). Interestingly, this was also the case for the male subjects. The normative population scored similarly on presence (9.8% vs. 7.7%) and higher on predominance (12.1% vs. 0%), resulting in a higher total score for the normative male population (21.9%) when compared to the males in this study (7.7%). Although males and females in the normative population were relatively similar on their scores on being Inhibited (21.9% and 21.2%, respectively), the females in this study scored significantly higher (31.8%) than the therapeutic foster care males (7.7%).

For the third scale, Cooperative, the females in the normative population scored similarly (17.6%) to the therapeutic foster care females (18.2%) on the presence of that trait (see Graph 3). However, on the predominance of



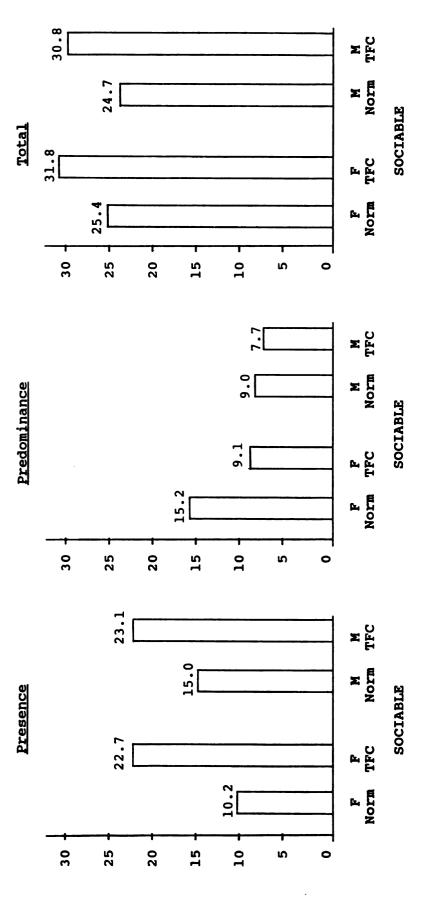
Graph 2: Comparison of results on the Inhibited scale.



Graph 3: Comparison of results on the Cooperative scale.

the characteristic, the normative population scored 13.8%, whereas the female subjects in this study scored 4.5%. Accordingly, the total combined score for the normative female population was somewhat higher at 31.4% than for the females in therapeutic foster care (22.7%). With regard to the males, the normative population scored higher than the therapeutic foster care males on both the presence and predominance of the characteristic (15.4% vs. 7.7% and 11.3% vs. 7.7%, respectively). Thus, similar to the female comparison, the total combined score was somewhat higher for the normative male population at 26.7% than for the therapeutic foster care males at 15.4%. When the genders were compared, the females scored higher than the males on this trait for both the normative population and therapeutic foster care subjects.

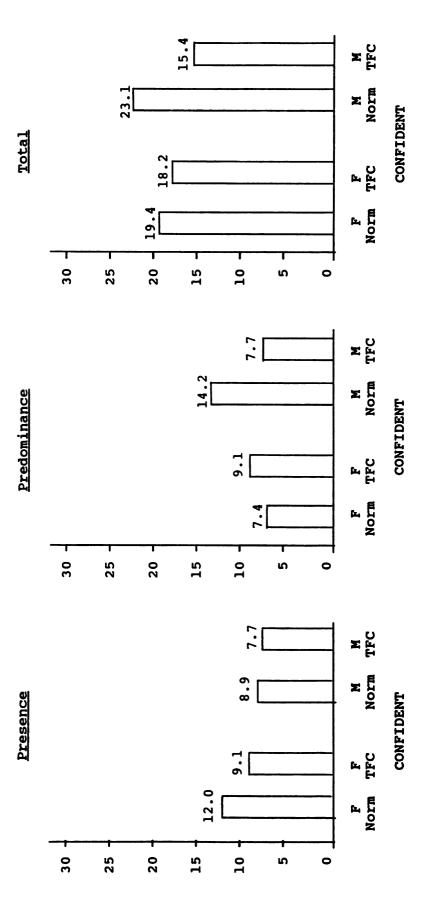
For the fourth scale, Sociable, the female normative population scored less (10.2%) than the females in therapeutic foster care (22.7%) on presence, although on predominance the normative population scored slightly higher at 15.2% than the females in therapeutic foster care at 9.1% (see Graph 4). The combined total placed the therapeutic female population with a similar score on this trait (31.8%) to the normative population (25.4%). The same trend occurred with the males. The therapeutic foster care males scored higher than the normative males



Graph 4: Comparison of results on the Sociable scale.

on the presence of the trait (23.1% vs. 15%) but similarly on the predominance of the trait (7.7% vs. 9%, respectively). Nevertheless, as with the females, the combined total score resulted in the therapeutic foster care males scoring fairly similarly at 30.8% to the normative males at 24.7%. When the sexes were compared on the total score for this trait, there was almost no difference for either the normative or the therapeutic foster care populations.

For the fifth scale, Confident, the therapeutic foster care females scored similarly to the normative female population (9.1% vs. 12%, respectively) on the presence and predominance (9.1% vs. 7.4%) of the trait Thus, for the total combined score, the (see Graph 5). normative female population was very similar to the therapeutic foster care females (19.4% vs. respectively). With the males, the normative population scored about the same as the therapeutic foster care subjects on presence (8.9% vs. 7.7%) and slightly higher on predominance (14.2% vs. 7.7%). Accordingly, the normative male population had a slightly higher total combined score (23.1%) than the therapeutic foster care male subjects (15.4%). In comparing the genders, the females in therapeutic foster care scored higher than the

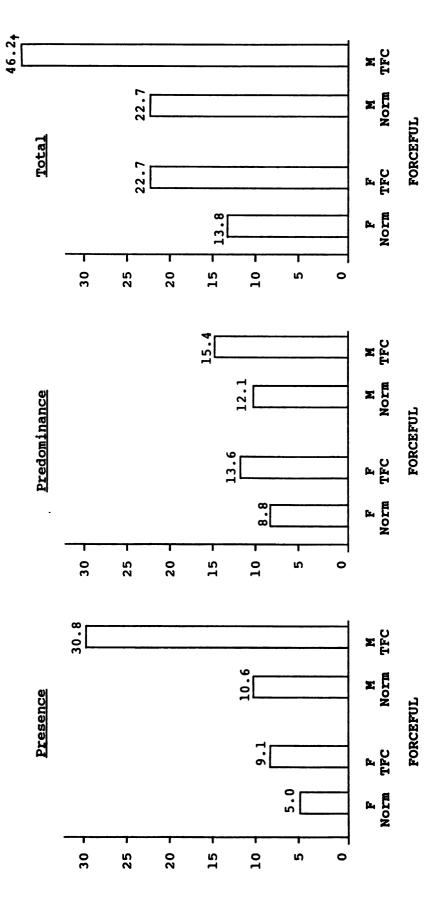


Graph 5: Comparison of results on the Confident scale.

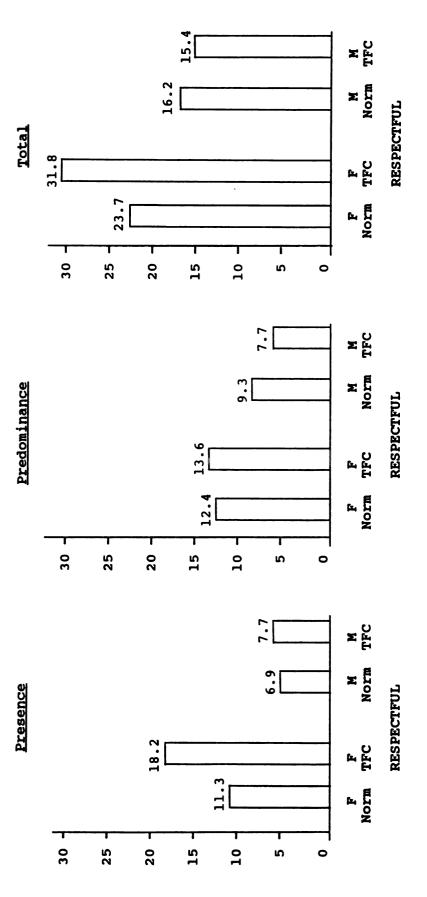
males in therapeutic foster care on this trait, whereas the reverse was true with the normative population.

For the sixth scale, Forceful, the females in therapeutic foster care scored slightly higher than the normative females on presence (9.1% vs. 5%), predominance (13.6% vs. 8.8%), and therefore on the total combined score (22.7% vs. 13.8%, respectively) (see Graph 6). was also true of the therapeutic foster care males. males in this study scored higher than the normative males on the presence of this trait (30.8% vs. 10.6%). The differences were smaller for predominance (15.4% vs. 12.1%), although the trend was still present. For the total combined score, the therapeutic foster care males scored significantly higher for this trait (46.2%) than the normative population (22.7%). In terms of gender differences, the males scored higher than the females for both the therapeutic foster care and normative populations.

For the seventh scale, Respectful, the female therapeutic foster care subjects scored slightly higher on presence (18.2% vs. 11.3%), similarly on predominance (13.6% vs. 12.4%), and slightly higher on the total combined score (31.8% vs. 23.7%) (see Graph 7). However, for the males, the therapeutic foster care subjects scored



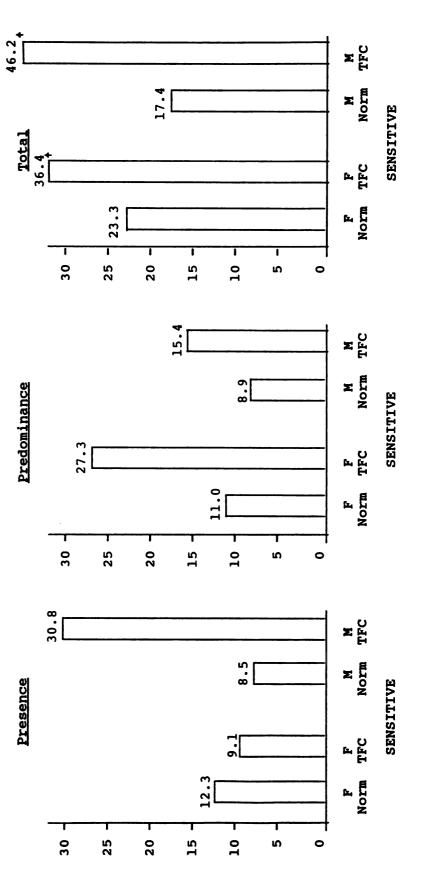
Graph 6: Comparison of results on the Forceful scale.



Graph 7: Comparison of results on the Respectful scale.

very similarly to the normative population on presence of the trait (7.7% vs. 6.9%) and on the predominance of the characteristic (7.7% vs. 9.3%). Accordingly, the therapeutic foster care males scored almost the same as the normative males on the total combined score (15.4% vs. 16.2%, respectively). The females in both the normative and therapeutic foster care populations scored higher than the males on this characteristic. The difference was significant in the therapeutic foster care group.

For the eighth scale, Sensitive, the therapeutic foster care females scored slightly lower (9.1%) than the normative females (12.3%) on presence of the trait but higher on the predominance of the characteristic (27.3% vs. 11%, respectively) (see Graph 8). Accordingly, the therapeutic foster care females scored higher on the total combined score than the normative females (36.4% vs. 23.3%). For the males, the therapeutic foster care population scored higher than the normative population on the presence of the trait (30.8% vs. 8.5%) and the predominance of the trait (15.4% vs. 8.9%). They were significantly higher on the total combined score (46.2% Interestingly, the therapeutic foster care vs. 17.4%). males scored higher than the therapeutic foster care females on this trait, but the reverse was true of the normative population.



Graph 8: Comparison of results on the Sensitive scale.

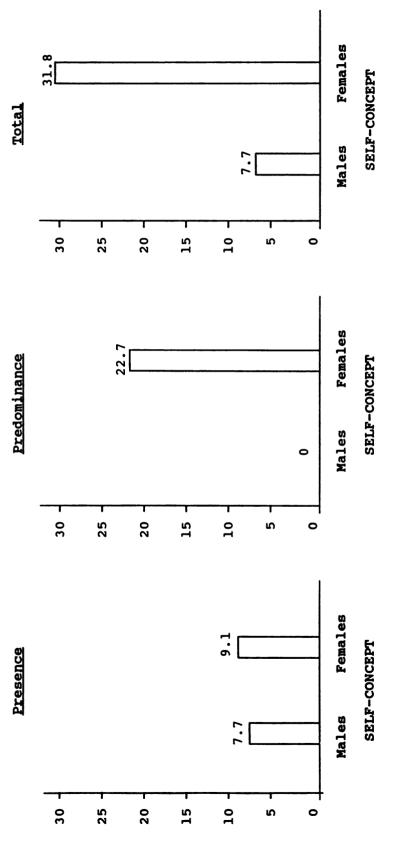
For the remaining 12 scales of the MAPI, normative data were not available. Accordingly, a comparison was made between males and females in therapeutic foster care on presence, predominance, and total combined scores.

For the Self-Concept scale, the females were similar to the males on the presence of the issue (9.1% vs. 7.7%), slightly higher on the predominance (22.7% vs. 0%) and significantly higher on the total combined scores (31.8% vs. 7.7%) (see Graph 9).

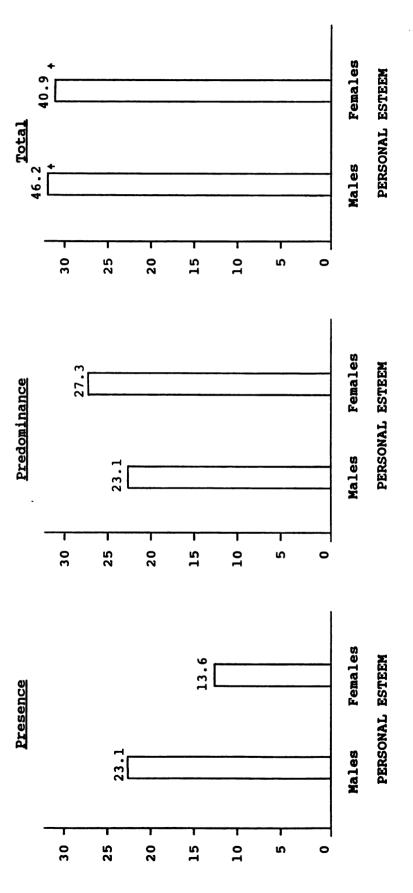
On the Personal Esteem scale, males scored higher than females on the presence of the issue (23.1% vs. 13.6%) but similarly on the predominance (23.1% vs. 27.3%). On the total combined score, the males scored similarly to the females (46.2% vs. 40.9%) (see Graph 10).

On Body Comfort, males scored almost identically to females on both the presence of the issue (23.1% vs. 22.7%) and the predominance (7.7% vs. 9.1%). Therefore, they were nearly the same on the total combined score (31.8% vs. 30.1%) (see Graph 11).

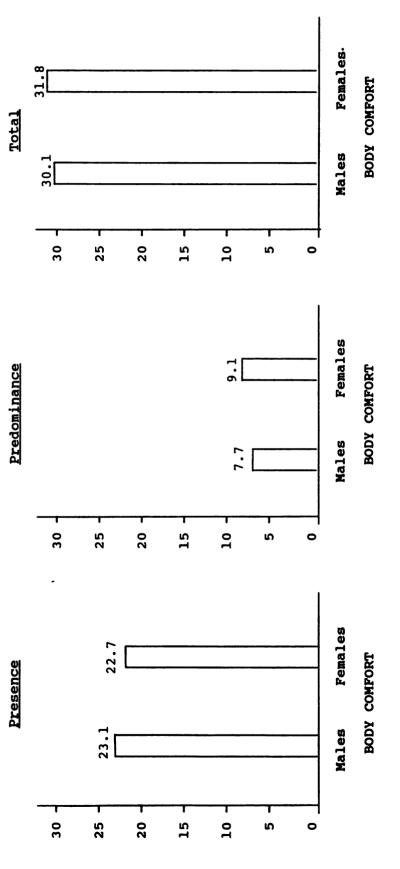
In terms of Sexual Acceptance, the males outscored the females on presence of the issue (18.2% vs. 0%), were similar on predominance of the issue (18.2% vs. 15.4%), and were higher on the total combined score (36.4% vs. 15.4%) (see Graph 12).



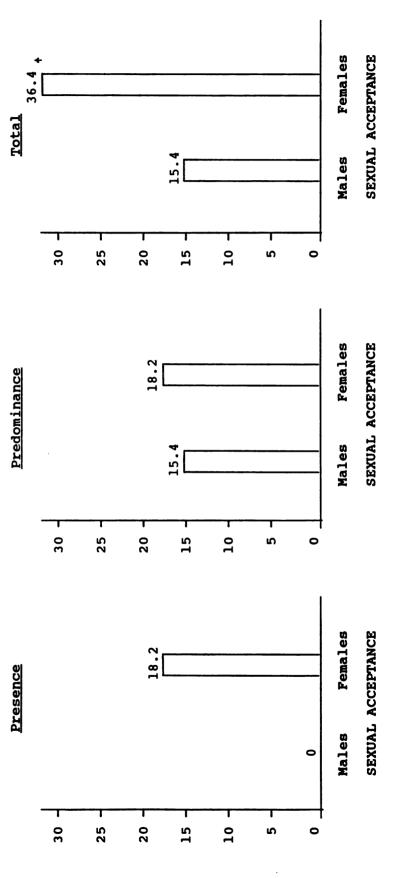
Graph 9: Comparison of results on the Self-Concept scale.



Graph 10: Comparison of results on the Personal Esteem scale.



Graph 11: Comparison of results on the Body Comfort scale.



Graph 12: Comparison of results on the Sexual Acceptance scale.

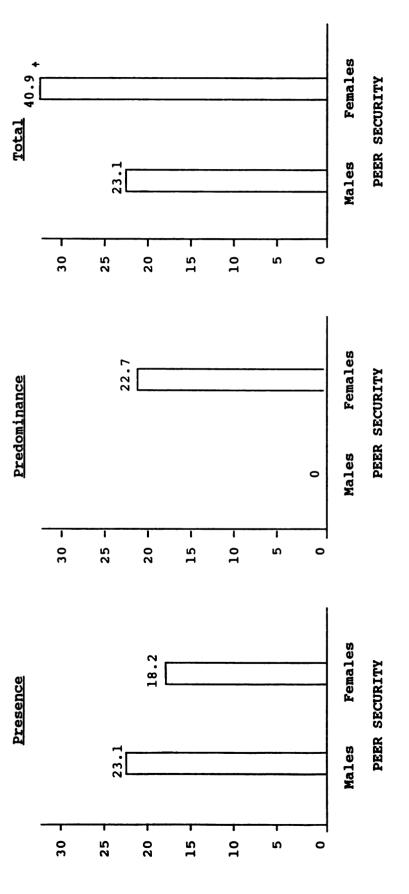
With reference to Peer Security, the males scored similarly to the females on the presence of the issue (23.1% vs. 18.2%). However, the females scored higher on the predominance of the issue (22.7% vs. 0%). Nevertheless, for the total combined score, the males outscored the females (40.9% vs. 23.1%) (see Graph 13).

On Social Tolerance, the females scored higher than the males (18.2% vs. 0%) on the presence of the issue, but the males outscored the females on the predominance of the issue (15.4% vs. 4.5%). For the total combined score, the females scored slightly higher than the males (22.7% vs. 15.4%) (see Graph 14).

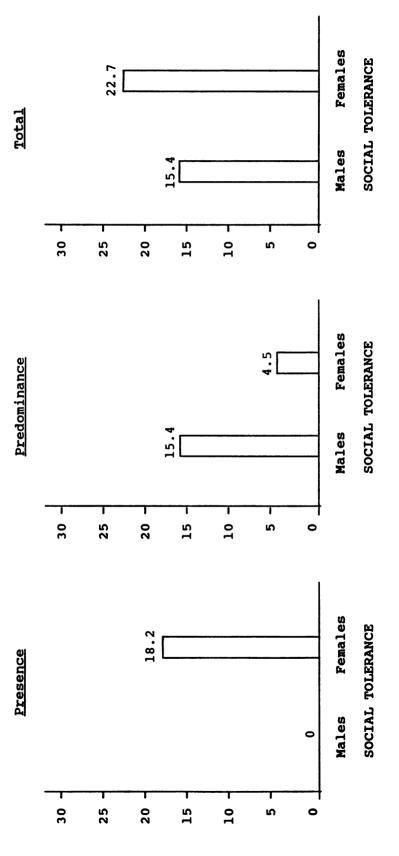
With reference to Family Rapport, the males outscored the females on the presence of the issue (23.1% vs. 13.6%) and on the predominance (46.2% vs. 22.7%), and were significantly higher on the total combined score (69.3% vs. 36.3%) (see Graph 15).

In terms of Academic Confidence, the males scored similarly to the females on the presence of the issue (7.7% vs. 9.1%) but higher on the predominance of the issue (15.4% vs. 4.5%) and, accordingly, on the total combined score (23.1% vs. 13.6%) (see Graph 16).

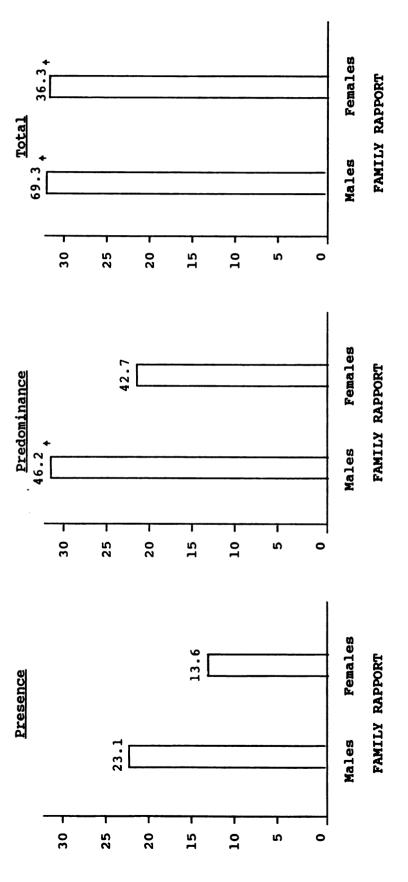
Relative to Impulse Control, the males were similar to the females on the presence of the issue (7.7% vs. 4.5%), were higher on the predominance (15.4% vs. 4.5%)



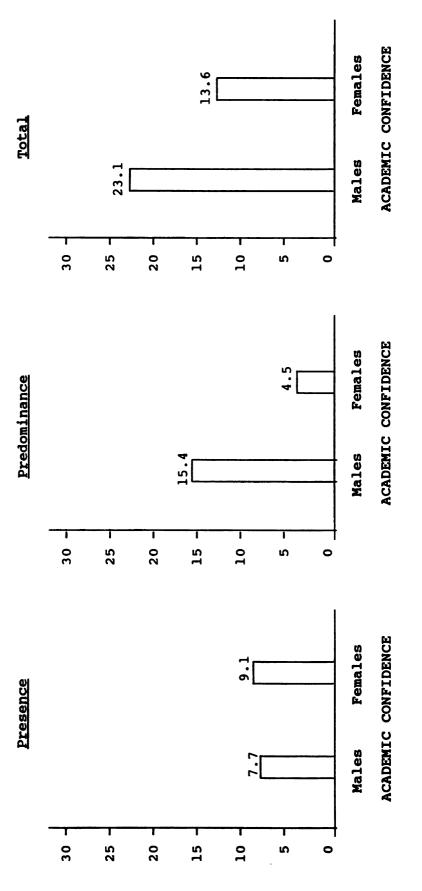
Graph 13: Comparison of results on the Peer Security scale.



Graph 14: Comparison of results on the Social Tolerance scale.



Graph 15: Comparison of results on the Family Rapport scale.



Graph 16: Comparison of results on the Academic Confidence scale.

and were higher on the total combined score (23.1% vs. 9%) (see Graph 17).

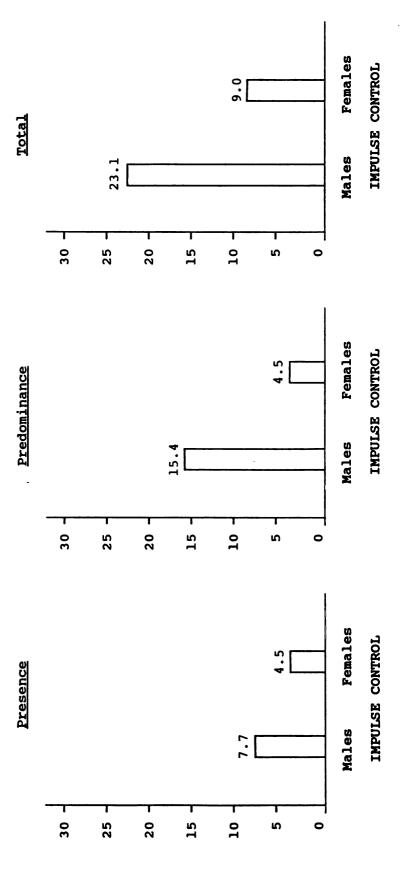
With regard to Social Conformity, the males also outscored the females on presence (38.5% vs. 18.2%) and predominance (7.7% vs. 0%). Consequently, the males were significantly higher on the total combined score (46.2% vs. 18.2%) (see Graph 18).

In terms of Scholastic Achievement, the males outscored the females on the presence of the issue (23.1% vs. 9.1%), but both genders scored 0% on the predominance of the issue. Accordingly, the males scored higher than the females on the total combined score (23.1% vs. 9.1%) (see Graph 19).

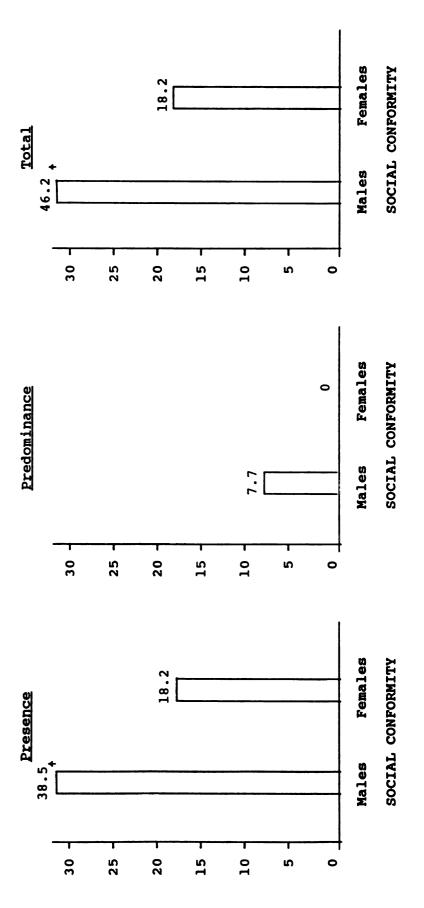
Finally, with regard to Attendance Consistency, the females scored significantly higher than the males. The males scored 0% for presence, predominance, and total combined score. The females scored 13.6% on presence and predominance, with a total combined score of 27.2% (see Graph 20).

#### Results Regarding Awareness of Elements Necessary for Problem Solving

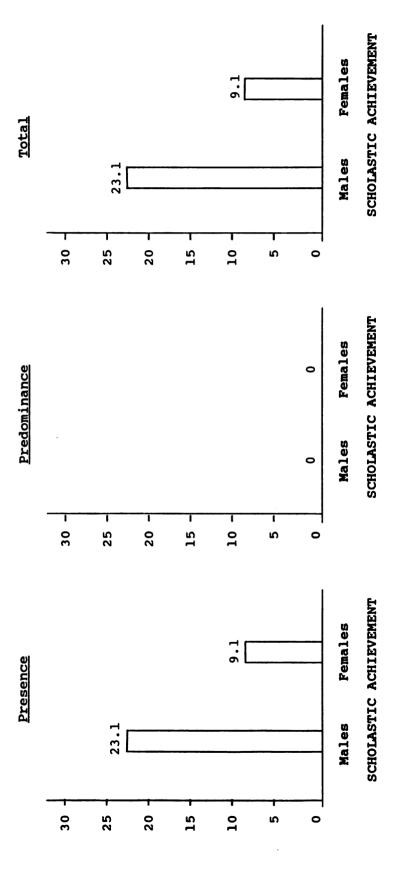
On a scale of 0 to 7, adolescents in therapeutic foster care on an average rated themselves on problemsolving abilities as shown in Table 1.



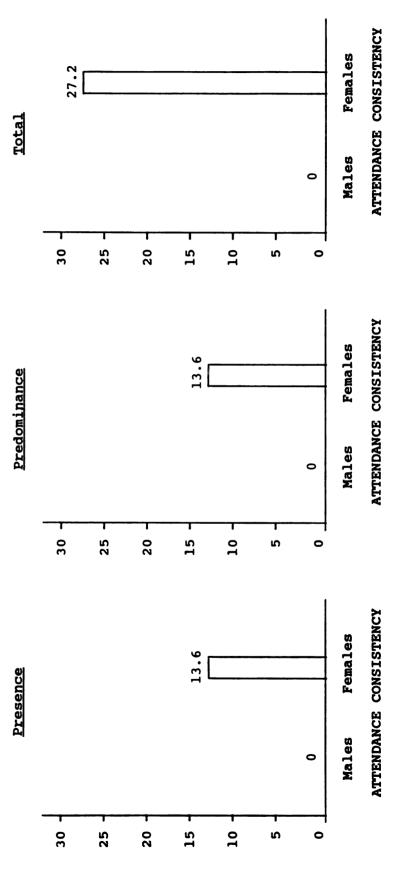
Graph 17: Comparison of results on the Impulse Control scale.



Graph 18: Comparison of results on the Social Conformity scale.



Graph 19: Comparison of results on the Scholastic Achievement scale.



Graph 20: Comparison of results on the Attendance Consistency scale.

Table 1
Perceived Problem-Solving Abilities

Scale	Males		Females		
	Mean	SD	Mean	SD	Signifi- cance*
Personal Awareness	5.12	1.50	5.21	1.15	N.S.
Decision Making	5.19	1.52	5.02	1.69	N.S.
Oppositional Alternatives	5.50	1.45	5.57	1.22	n.s.
Planning and Action	4.98	1.51	5.24	1.83	n.s.

<sup>\*</sup>Two-tailed  $\underline{t}$ -test,  $\underline{p}$  < .10; N.S. = not significant.

No significant differences were found between males and females in this study on their scores for any of the four problem-solving scales. In terms of differences between the scales themselves, there was one clearly significant finding. For the total sample (males and females combined), the mean score on the Oppositional Alternatives scale was significantly higher (p < .05) than the scores on each of the other three scales. This basic trend persisted for both males and females, although with the smaller sample size only a few of the within-sex comparisons reached statistical significance. For males, the Oppositional Alternatives score was significantly higher than the Personal Awareness score (p < .10). For

females, the Oppositional Alternatives score was significantly higher than that observed on both the Personal Awareness scale (p < .05) and the Planning and Action scale (p < .10).

Direct interpretation of the scores obtained on the Personal Change Questionnaire is difficult due to the lack of normative data and the fact that the scale points on the questionnaire are not individually defined. Because the Personal Change Questionnaire uses a type of global visual analog scale, ranging from 0 to 7 with only two end-point descriptors (0 is "Don't know" and 7 is "Know very well"), a score of 5 or 6 would suggest that the adolescents in therapeutic foster care generally perceived themselves as having a moderate level of knowledge and The statistical comparisons discussed awareness. previously would further suggest that adolescents in therapeutic foster care perceived themselves as most knowledgeable in identifying alternative courses of action and the accompanying consequences (i.e., the Oppositional Alternatives scale content).

Results Regarding Possibility of a Correlation Between Personality Profiles and Length of Time in Therapeutic Foster Care

The third research question, examining the relationship of time in therapeutic foster care with the MAPI scores, was analyzed by performing Pearson Correlations with scale scores. Of the 20 MAPI scales, only 4 demonstrated significant or near significant correlations. These are outlined in Table 2.

Table 2

Correlations of Length of Time in Therapeutic
Foster Care With MAPI Scales

Variable	Pearson Correlation	Significance	
Respectful	$\underline{\mathbf{r}} = .29$	p = .045	
Impulse Control	$\underline{\mathbf{r}} =25$	$\underline{p} = .075$	
Peer Security	$\underline{\mathbf{r}} = .21$	$\underline{p} = .111$	
Sensitive	$\underline{\mathbf{r}} =20$	$\underline{p} = .125$	

Results Regarding Possibility of a Correlation Between Length of Time in Therapeutic Foster Care and Awareness of Problem-Solving Elements

In terms of the fourth research question, none of the four Personal Change Questionnaire sections of Personal Awareness, Decision Making, Oppositional Alternatives, or Planning and Action were significantly correlated with length of time in therapeutic foster care. However, the

individual Personal Change Questionnaire item measuring the adolescent's self-rating of overall functioning (PCQ#38) was positively and nearly significantly related to length of time in therapeutic foster care (see Table 3).

Table 3

Correlation of Length of Time in Therapeutic Foster
Care With the Personal Change Questionnaire

Variable	Pearson Correlation	Significance
Personal Awareness Decision Making Oppositional Alternatives Planning and Action PCQ #38		<pre>p = .405 p = .427 p = .188 p = .370 p = .111</pre>

Further analysis revealed that each of the four Personal Change Questionnaire sections was significantly correlated with the age of the adolescent (see Table 4).

Table 4

Correlation of Age of Adolescent With the Personal Change Questionnaire

Variable	Pearson Correlation	Significance	
Personal Awareness Decision Making Oppositional Alternatives Planning and Action		<pre>p = .034 p = .007 p = .024 p = .019</pre>	

# Results Regarding the Possibility of a Correlation Between Personality Profiles and Awareness of ProblemSolving Elements

With reference to the fifth research question regarding a possible correlation between the Personal Change Questionnaire and the MAPI, the following relationships were discovered through data analysis:

The Personal Awareness Scale was negatively correlated with the Inhibited style ( $\underline{r}=-.34$ ,  $\underline{p}=.023$ ) and with Self-Concept ( $\underline{r}=-.31$ ,  $\underline{p}=.035$ ). There was almost a significant negative correlation between Personal Awareness and Scholastic Achievement ( $\underline{r}=-.27$ ,  $\underline{p}=.056$ ). A significant positive relationship was found between Personal Awareness and the Confident style ( $\underline{r}=.29$ ,  $\underline{p}=.046$ ).

The Decision-Making Scale was negatively correlated with the Inhibited style ( $\underline{r} = -.34$ ,  $\underline{p} = .020$ ). A

significant positive correlation was found between the Decision-Making Scale and the Sociable style ( $\underline{r} = .33$ ,  $\underline{p} = .026$ ) as well as the Confident style ( $\underline{r} = .39$ ,  $\underline{p} = .009$ ).

The Oppositional Alternative Scale correlated negatively with the Inhibited style ( $\underline{r} = -.35$ ,  $\underline{p} = .019$ ) and with Self-Concept ( $\underline{r} = -.33$ ,  $\underline{p} = .024$ ). There was almost a significant positive correlation between Oppositional Alternatives and the Confident style ( $\underline{r} = .27$ ,  $\underline{p} = .053$ ).

The Planning and Action scale correlated negatively with the Inhibited style ( $\underline{r} = -.28$ ,  $\underline{p} = .048$ ) and almost significantly negatively with Scholastic Achievement ( $\underline{r} = -.28$ ,  $\underline{p} = .053$ ).

#### Summary

Descriptive factors as well as five research questions were investigated in this study. A summary of the results is provided in the following paragraphs.

#### <u>Descriptive Data</u>

A summary of the descriptive data on the 36 adolescents in the final sample is as follows: Twenty-two adolescents were female, 13 were male, and gender on 1 was missing. Thirty-five were Caucasian-Anglo, and 1 was Hispanic. Twenty-six were temporary wards, 4 were permanent wards, and data on 6 were missing. More than

40% had a history of psychiatric hospitalization or residential placement. The adolescents averaged 1.5 previous foster care placements, where they had spent a mean length of time of 5 months. The adolescents averaged 1 year in therapeutic foster care. The mean age of the adolescents in therapeutic foster care was approximately 15-1/2 years.

#### Personality Profile

The initial research question explored the possible existence of a personality profile of adolescents in therapeutic foster care. As pertained to the first eight scales of the MAPI, females in therapeutic foster care most frequently had a Sensitive style, whereas the males most frequently had a Sensitive or Forceful style. With reference to the remaining 12 scales of the MAPI, the issues of most concern to females in therapeutic foster care were Personal Esteem and Peer Security, whereas for the males the issue was Family Rapport.

#### Perceived Problem-Solving Skills

The second research question examined the awareness of elements necessary for problem solving. The results indicated that the adolescents in therapeutic foster care rated themselves between 4.98 and 5.57 on a 0 to 7 scale. This level of response would suggest a perceived moderate level of knowledge and awareness.

#### <u>Correlation of Time in Therapeutic</u> <u>Foster Care With Personality Profiles</u>

The third question explored the relationship of time in therapeutic foster care with personality profiles. A significant positive relationship was found with the Respectful style. A significant negative relationship was indicated relative to the issue of Impulse Control.

#### Correlation of Time in Therapeutic Foster Care With Perceived Problem-Solving Abilities

The fourth research question examined the relationship between length of time in therapeutic foster care and perceived problem-solving abilities. No relationship was found between the four elements of problem solving and length of time in therapeutic foster care. However, a significant positive relationship was found between age and each of the four elements of problem solving.

#### <u>Correlation of Personality Profiles With</u> <u>Perceived Problem-Solving Abilities</u>

The final research question explored any relationship between personality profiles and perceived problem-solving abilities. The Inhibited style was significantly negative in its correlation with all four elements of the problem-solving process. Significant negative correlations were found between various personality profiles and subscales of the problem-solving process: between Personal

Awareness and Self-Concept, and between Oppositional Alternatives and Self-Concept. Significant positive correlations were found between various personality profiles and subscales of the problem-solving process: between Personal Awareness and the Confident style, between Decision Making and the Sociable style, and between Decision Making and the Confident style.

The results of this study are summarized and analyzed in more detail in Chapter V. A discussion of the implications of these results in terms of future research, theory, and program application is also provided.

#### CHAPTER V

#### SUMMARY AND CONCLUSIONS

This chapter contains an overall review of the study, followed by conclusions and interpretations of the data.

The implications of the findings for theory development and future research are also included.

#### Review of the Study

An observational analysis was conducted of 41 adolescents in therapeutic foster care. Research questions were aimed at ascertaining the characteristics of these adolescents, in terms of various descriptive variables, personality profiles, and perceived problemsolving abilities. In addition, personality profiles and perceived problem-solving abilities were examined relative to length of time in the treatment setting. Millon's formulation of personality development provided the theoretical underpinnings used in the determination of personality profiles. The examination of the adolescents' awareness of the problem-solving process was based on the research of Hinds and other psychoeducational theorists.

The findings revealed certain personality profiles for adolescents in therapeutic foster care that occurred more frequently than in the normal population. For the females in therapeutic foster care, the Sensitive personality style prevailed. For the males, the Sensitive and Forceful personality styles were most common. A significant positive relationship was found between length of time in therapeutic foster care and the Respectful personality style.

No relationship was found between length of time in therapeutic foster care and perceived problem-solving abilities, although a positive relationship was found between length of time in treatment and both the adolescents' and the therapists' ratings of the adolescents' functioning.

#### Conclusions Regarding Demographic Variables

The frequency of data within the various variables examined revealed that the majority of adolescents in therapeutic foster care were Caucasian females who were temporary wards of the court or state. More than one-third of the adolescents had a history of psychiatric or residential treatment and had been in more than one previous foster care placement before entering therapeutic foster care. The data suggested no predominant pattern in terms of prior placements in that adolescents entered

therapeutic foster care after both more restrictive and less restrictive placements elsewhere. The average number of months spent in regular foster care before placement in therapeutic foster care was 8 months. This time period might be indicative of the length of time needed to determine that treatment rather than a custodial placement was necessary for the adolescent. The length of placement in therapeutic foster care averaged close to 1-1/2 years.

Data regarding the subsequent placements of adolescents leaving therapeutic foster care (either successfully or prematurely) could be quite informative relative to how therapeutic foster care serves adolescents in the continuum of mental health care. Unfortunately, follow-up data on the adolescents who left the therapeutic foster care program in this study were sought but could not be obtained.

#### Conclusions Regarding Personality Profile

In response to the question regarding the personality profile of adolescents in therapeutic foster care, the results of the first eight scales of the MAPI can be used to ascertain frequent or common descriptors.

With reference to females, the largest percentage of responses (36.4%) reflected a Sensitive style. This finding was higher than the presence and predominance of this profile in the normal population (23.3%). This scale

measures self-dissatisfaction and emotional/behavioral unpredictability. High scorers tend to be discontented and pessimistic, with a low tolerance level for frustration. A central issue with this type is their struggle between acting out and curtailing resentments. This style corresponds with the Passive-Aggressive personality of the DSM III-R.

This finding was closely followed by three equally predominant profiles (31.8% each): Inhibited, Sociable, and Respectful. These results were more pronounced than those of the normal population, where the predominance of these profiles was less (21.2%, 25.4%, and 23.7%, respectively).

The Inhibited scale measures social discomfort and withdrawal. High scorers tend to be shy and socially illat-ease. They desire closeness but have learned to maintain a distance and not trust others. They often feel lonely, but fear of rejection keeps them from revealing their feelings. This style corresponds with the Avoidant personality of the DSM III-R.

The Sociable style is characterized by outgoing, charming, and impulsive behavior. High scorers are talkative, emotionally expressive, and frequently dramatic. They tend to have strong but brief relationships with others and become bored in long-term

commitments. This style corresponds with the Histrionic personality of the DSM III-R.

Respectful scale The measures responsible. conforming, cooperative behavior. High scorers are usually serious-minded, orderly, efficient, rule-conscious individuals who keep their emotions in check and try to lead a predictable existence. According to Millon (1981), this personality type experiences strong anger and resentment, which makes them ambivalent regarding being interpersonally dependent or independent. To control these rebellious and oppositional feelings, they become overly conforming and overtly submissive. This style corresponds with the Compulsive personality of the DSM Length of time in therapeutic foster care was III-R. significantly positively correlated with this variable.

For the males, two scales, Forceful and Sensitive, equally predominated the results at 46.2% each, reflecting the presence of two fairly distinct subgroups among males in therapeutic foster care. These findings suggest a considerably stronger tendency toward these profiles than in the normal population (22.7% and 17.4%, respectively).

The Forceful scale measures domination, fearless assertiveness, and tough-mindedness. High scorers are often strong-willed, blunt, unkind, impatient, and frequently question the abilities of others. This style

corresponds with the Anti-Social personality of the DSM III-R.

As described previously, the Sensitive scale measures self-dissatisfaction and emotional and behavioral unpredictability. High scorers tend to be discontented and pessimistic. This style parallels the Passive-Aggressive personality of the DSM III-R.

After these two scales, the next most frequent profile for the males (30.8%) was the Sociable style. This finding was slightly higher than the presence and predominance of this profile in the normal population (24.7%). As indicated previously, the Sociable scale reflects a charming, outgoing, and impulsive individual, with brief but intense relationships, paralleling the style of the Histrionic of the DSM III-R.

When reviewing these personality styles, the common denominators among the female adolescent therapeutic foster care population appeared to be impulsivity, anger, and lack of social competence. Impulsivity also appeared to be a common factor in the personality styles that composed the majority of male referrals for therapeutic foster care placements. As noted in Chapter II, psychoeducational problem-solving skills training programs have proven to be effective in improving social competence, decreasing aggression, and increasing internal controls (by teaching tolerance for frustration and

ambiguity). Accordingly, a case could be made to seriously consider using a psychoeducational problem-solving approach with this population, based on their personality styles.

In terms of the remaining 12 scales of the MAPI, which address Expressed Concerns, the adolescents in therapeutic foster care appeared to have the following issues:

For the females, 40.9% were assessed as having Personal Esteem and Peer Security issues. The Personal Esteem scale score indicated dissatisfaction when comparing self against an ideal. The Peer Security scale score suggested a lack of a sense of acceptance by peers. These scores suggest a lack of a sense of social competence and possibly the experiencing of negative labeling effects from being in an out-of-home placement.

The females in therapeutic foster care also scored high on the scales evaluating their Sexual Acceptance (36.4%), Family Rapport (36.3%), Self-Concept (31.8%), and Body Comfort (31.8%). These results suggest a lack of satisfaction in the development of heterosexual relationships, discomfort within the family system, lack of clarity regarding who she is and what she will become, and a discomfort with body maturation and changes accompanying adolescent development. Perhaps further

research into additional identifying information regarding this population could expand an understanding of these concerns. For example, if a high proportion of female adolescents in therapeutic foster care have been sexually abused, a high score on Sexual Acceptance, Self-Concept, Body Comfort, and Family Rapport could be easily explained. Because research has already been done using the MAPI with sexual abuse victims, correlational patterns could be compared with this population.

The remaining scale scores reflected the following hierarchy of issues: Attendance Consistency (27.2%), Social Tolerance (22.7%), Social Conformity (18.2%), Academic Confidence (13.6%), Scholastic Achievement (9.1%), and Impulse Control (9.0%). Of particular interest in these findings is the low level at which the female adolescents perceived their impulse control to be a problem. This was at odds with the profiles reflected in the MAPI Personality Scales, suggesting a lack of personal awareness among these female adolescents. This finding is discussed later in this chapter relative to the Personal Change Questionnaire, in which the adolescents rated themselves on Personal Awareness.

For the males, the most frequent issue (69.3%) was Family Rapport, which gauges the degree of discomfort the adolescent experiences within the family system. A high score here was not surprising for the males or females in

this study, given the nature of the population sampled and the necessity for placement outside the home.

The next two most common issues (46.2% each) were Social Conformity and Personal Esteem. As noted previously, the Personal Esteem scale ascertains the level of dissatisfaction experienced by the adolescent when comparing self against an ideal. An out-of-home placement and labeling effects may once again have played a role in this finding. The Social Conformity scale score reflected a lack of compliance to societal rules and regulations. This finding paralleled the presence of antisocial impulsive behaviors found in the MAPI personality profiles, suggesting accurate personal awareness by the male adolescents in this regard.

The fourth most frequent issue was Body Comfort (30.1%). As described earlier, this scale score suggests discomfort with body maturation and the changes that accompany adolescent development. Again, further exploration of additional identifying factors such as sexual abuse might explain this finding.

The eight remaining scales reflected the following hierarchy of issues: Peer Security, Academic Confidence, Scholastic Achievement, and Impulse Control each with a score of 23.1%; Sexual Acceptance and Social Tolerance with a score of 15.4% each; a Self-Concept score of 7.7%;

and an Attendance Consistency score of 0%. As noted with the females, the Peer Security issue for the males might be related to labeling effects and being in an out-of-home placement. However, what is of interest, in that it differs from the findings with the female population, is that the males appeared to have a moderate awareness that their impulsivity was a problem. This difference might have ramifications in terms of interventions with each population.

In summary, the findings on the Personality and Expressed Concern scales regarding both the female and male adolescents in therapeutic foster care reflected issues regarding impulsivity, aggressiveness, and lack of social competence. Because research on psychoeducational problem-solving skills training programs has demonstrated effective intervention with these issues, the desirability of attempting to use the problem-solving approach with this population in this setting warrants consideration.

### Conclusions Regarding Self-Rating of Problem-Solving Skills

The conclusions that can be drawn on the self-rating of the problem-solving abilities of the adolescents in therapeutic foster care are limited. The lack of normative data precludes the ability to assess the therapeutic foster care sample scales relative to other populations.

However, comments can be made among the subscales and between the sexes. In terms of both the males and females, the adolescents in therapeutic foster care rated themselves highest on their ability to identify Oppositional Alternatives when in a problem situation. This self-perception tends to be at variance with the research by Spivack et al. (1976), who found that "deviant" individuals generated fewer possible solutions than the normal population and frequently suggested solutions that were antisocial in nature.

Of particular interest relative to the male adolescents was the finding that they rated themselves lowest on Planning and Action, indicating perceived difficulty in implementing and maintaining their choices. This self-perception is congruent with the male adolescents' personal awareness of their impulsivity, discussed earlier in this chapter.

Unlike the males, the females rated themselves lowest on Decision Making, indicating a perceived difficulty in identifying what reinforces their behavior and in making a behavioral commitment. The impulsivity and unpredictability that characterize the Passive-Aggressive personality style (the most prevalent personality style among this female adolescent population) might be related to their perceived inability to make a behavioral commitment.

On the other hand, their perception of not being able to identify what reinforced their behavior was congruent with the lack of personal awareness noted earlier in this chapter and might reflect the high percentage of Histrionic personality styles in this population, as discussed earlier in this chapter. Because Personal Awareness is the focus of one of the stages in the Personal Paradigm Shift, this finding might indicate a possible need for problem-solving skills training on this issue.

## Conclusions Regarding the Relationship Between Length of Time in Therapeutic Foster Care and Personality

The results of this study indicate that some relationships exist between certain traits reflected in the MAPI personality profiles and length of time in therapeutic foster care. For example, the significant positive relationship between the Respectful style and length of time in therapeutic foster care raises an interesting question. Do adolescents with a Compulsive personality stay longer in therapeutic foster care because their responsible, conforming, cooperative, rule-conscious behavior does not precipitate expulsion to other placements (with other styles being weeded out over time), or do adolescents with various styles develop more of a Compulsive personality style over time in therapeutic

foster care? Theoretically speaking, Millon would state that personality patterns are enduring over time and would not be easily changed except by intensive intervention. Unfortunately, because a correlation does not indicate causality, this question cannot be answered in the current study. However, this question could be examined using a different experimental design that tracks adolescents over time and, thus, assesses whether personality profiles and behavioral patterns remain stable.

Juxtapositioned to the previous finding is the discovery that a significant negative relationship existed between lack of Impulse Control and length of time in therapeutic foster care. Thus, adolescents who are in therapeutic foster care the shortest period of time have greater problems with impulse control. A logical explanation would be that impulse control is being acquired over time in therapeutic foster care, a possibility that warrants attention and further research.

Two other relationships reached near-significance levels. Concerns regarding Peer Security positively correlated with length of time in therapeutic foster care. The interpretation of this finding is that adolescents feel less of a sense of belonging and acceptance in relation to peers the longer they remain in therapeutic

foster care. Various explanations of this finding are possible. Adolescents in therapeutic foster care may feel increasingly different from their peers, possibly due to a labeling effect that is either self-imposed or socially prescribed, the longer they remain placed out of their family homes. On the other hand, adolescents who have issues about feeling different from their peers may require longer treatment. Another possible explanation is that the longer adolescents remain in therapeutic foster care, the greater their ability to identify accurately their differences from their peers that warranted their out-of-home placement. Because causality cannot be ascertained in this study, further research would be In any event, as noted previously in this chapter, social competence can be improved using a psychoeducational problem-solving approach, which warrants consideration with this treatment population.

Finally, a near-significant negative relationship was noted between the Passive-Aggressive personality and length of time in therapeutic foster care. As discussed with reference to Impulse Control, this finding suggests that those adolescents who seem self-dissatisfied and unpredictable affectively and behaviorally do not remain long in therapeutic foster care. Various explanations

seem feasible. One possible explanation for this finding is that foster parents and/or staff are not engaged by the discontented, pessimistic, and moody attitude of these adolescents and choose to consider other placement arrangements rather than experience the erratic interpersonal style of these adolescents (a social competency issue). A second explanation is that the impulsive style of this personality results in a premature termination of treatment and a replacement in another setting. As noted previously in this chapter, both impulsivity and social competence have been successfully influenced by the psychoeducational problem-solving approach. However, an issue related to this finding about the short treatment stay of this personality style is that the Passive-Aggressive personality style characterizes the largest percentage of adolescents in the therapeutic foster care population, thus suggesting the likelihood of a high turnover rate and a high percentage of unsuccessful placements for a large portion of the referrals.

In terms of implications, the above-noted correlations between certain characteristics on the MAPI and length of time in therapeutic foster care are intriguing, but they suggest the need for further research to ascertain causal factors with regard to these four

relationships. Given the significant positive and negative correlations of these traits, it could conceivably be possible, with further analysis, to use the MAPI instrument as a screening tool for therapeutic foster care admissions to facilitate selection of the best-suited candidates for treatment.

# Conclusions Regarding the Relationship Between Length of Time in Therapeutic Foster Care and Perceived Problem-Solving Abilities

No significant correlations were found between length of time in therapeutic foster care and the four scales of the Personal Change Questionnaire. If the Personal Change Questionnaire is a measurement of perceived problemsolving ability, this suggests the possibility that adolescents are not improving in problem-solving skills during their tenure in therapeutic foster care. might be related to the stated view of some of the therapists noted in Chapter III that the adolescents in therapeutic foster care were victims and not responsible for their behavior.) If that is the case, this finding would suggest the need to strengthen the focus of the program in terms of building problem-solving capabilities. However, due to the design of this study, that need cannot be definitively established. One other possible explanation for these results is that adolescents who do improve in problem-solving skills leave treatment and,

thus, do not establish a long tenure in the program. Further study would be necessary to help clarify this issue.

One interesting finding regarding the Personal Change Questionnaire was that Item 38, measuring the adolescents' self-rating of overall functioning, was nearly significantly correlated with length of time in therapeutic foster care. Thus, adolescents who had the longest placements in therapeutic foster care tended to rate themselves as having higher levels of functioning. This relationship is strengthened by the fact that therapists' ratings of adolescents' problem-solving ability were strongly positively correlated with length of time in treatment.

Although these findings are encouraging and would be consistent with the aim of therapeutic foster care programs, causality cannot be determined by these correlations. Two competing explanations arise: Do longer stays in therapeutic foster care produce better functioning, or are adolescents with better functioning able to remain longer in the program? A longitudinal study design would be required in order for conclusions to be drawn on this issue.

One final interesting observation in this area of the study was that each of the four scales of the Personal

Change Questionnaire was significantly positively correlated with age. This finding, together with the lack of any relationship to time in treatment, suggests that problem-solving ability, as measured by the Personal Change Questionnaire, might be much more influenced by simple developmental growth than by participation in therapeutic foster care. Although the design of this study once again precludes a definitive answer on this issue, these results would tend to lend further weight to the recommendation for increased emphasis on problemsolving skills in therapeutic foster care. (A more radical interpretation would be that therapeutic foster care cannot influence problem-solving ability and that, therefore, foster care should assume a more custodial function while natural maturational processes increase problem-solving ability over time.)

# Conclusions Regarding the Relationship Between Personality and Perceived ProblemSolving Abilities

The following positive relationships were found between personality and the adolescents' perception of their problem-solving abilities:

The Confident style, which parallels the Narcissistic personality of the DSM-III R, had significant or near significant positive correlations with three of the four elements in the problem-solving process. There was no

correlation between the Narcissistic personality and the Planning and Action scale. Without further research, it is difficult to determine whether these high self-ratings regarding problem-solving were merely an expression of the high confidence of the Narcissistic personality. If that is the case, it is of interest that this confidence did not extend itself to Planning and Action. This result may be related to the adolescents' level of personal awareness of a problem with impulsivity that was noted earlier in this chapter.

A significant positive relationship was found between the Decision-Making scale and the Sociable style or Histrionic personality. Clinically speaking, this finding is quite congruent with the dynamics of this personality. According to Millon, Histrionic personalities result from a specific parenting style that irregularly positively reinforces parentally valued behaviors. As a result, the Histrionic learns to focus attention on rewards and the behaviors on which they are contingent. The Decision-Making scale explores reinforcements of behavior, an area where Histrionics can, accordingly, rate themselves quite high.

In terms of significant negative correlations, the following relationships were found:

The Inhibited style or Avoidant personality was negatively correlated with Personal Awareness, Decision

Making, Oppositional Alternatives, and Planning and Action. This finding appears congruent with the issues of the Avoidant personality style, which is characterized by social discomfort and withdrawal and would, thus, logically have a self-perception of being deficient in terms of problem-solving abilities.

Self-Concept was also significantly negatively correlated with Personal Awareness and Oppositional Alternatives. This suggests that those adolescents who lack clarity about who they are and what they will become also perceive difficulty in their problem-solving skills.

Finally, a nearly significant negative correlation was discovered between Scholastic Achievement and the two scales of Personal Awareness and Planning and Action. Thus, those adolescents whose academic performance does not match their academic potential perceive themselves as seriously lacking in certain aspects of problem-solving behavior. Further research would be necessary to decipher whether this perceived difficulty in problem solving is a cause or effect of their academic problems.

# Implications of the Results for Theory and for Therapeutic Foster Care Programs

The theoretical foundation for the personality profiles found in this study rests with the work of Millon. The basis of his theory is that personality

patterns are deeply embedded, largely unconscious, and not easily eradicated. These intrinsic and pervasive traits emerge from a complex matrix of biological dispositions and experiential learnings. The existence of certain personality profiles found in the adolescents in therapeutic foster care at a level not found in the normative population confirms the distinctiveness of these adolescents in treatment from the general population.

Theoretically speaking, the important question is: Can these enduring personality patterns be positively influenced by the therapeutic foster care setting? If so, what length of time in placement would be necessary for this influence to occur? If not, this type of personality profile assessment might be a useful screening tool to identify adolescents with personality styles not wellsuited to being able to remain in therapeutic foster care placements and, thus, not being able to benefit from the setting. Rather than expose these adolescents to another disruption or failure in their lives, attention could be focused on seeking other treatment alternatives. Obviously, further research, using a longitudinal experimental design, is required before any conclusions can be drawn regarding the feasibility or advisability or such a screening process.

The implications of the findings of this study regarding problem-solving skills are unclear. Although it

is evident that adolescents in therapeutic foster care possess certain patterns in their responses, the meaning of those findings is difficult to ascertain due to the newness of the instrument and the lack of comparative data from other populations.

This study sheds little light on the question of whether therapeutic foster care had any effect on the adolescents' problem-solving skills. On one hand, the positive correlation of length of time in treatment with the adolescents' self-rating of problem-solving ability is encouraging. (That relationship is made more noteworthy by the fact that therapists' ratings of the adolescents' problem-solving ability tend to validate the adolescents' self-ratings.) On the other hand, length of time in treatment was not correlated with any of the four Personal Change Questionnaire scales. This latter finding could suggest the need for a problem-solving skills training component to be added to therapeutic foster care.

Another aspect of interest is the finding that older adolescents in therapeutic foster care had better problemsolving abilities. Such information may help distinguish what age should be targeted for psychoeducational interventions regarding the problem-solving process. Further research seems warranted in this regard as well.

#### Implications for Future Research

Further research on this population, and on the instruments used, could follow various paths. These are discussed in the following paragraphs.

#### Exploratory Research

A study similar to the current research, but with an expanded focus and larger population, could further explore the interrelationships of personality profiles, problem-solving skills, and behavior. For example, a study correlating the adolescents' perceived problem-solving skills with behavioral indicators could be designed, in order to explore whether the adolescents' self-ratings of their skills are a function of distorted perceptions due to personality styles or are based on reality factors.

#### Longitudinal Research

An experimentally designed study, using a larger sample, that tracks the adolescents in therapeutic foster care (and an appropriate comparison group) over time could reveal causality factors regarding change patterns. In particular, the issue of whether therapeutic foster care can influence dysfunctional personality characteristics and/or problem-solving abilities could be more adequately examined.

From a more theoretical standpoint, additional research on the Personal Change Questionnaire is also needed to develop a better understanding of how adolescents' problem-solving skills change over time. One specific finding from this study that needs to be examined in more detail is the relationship of age to the problem-solving process.

### Outcome Research

Because an experimental design could not be used with this study, conclusions could not be drawn about the findings regarding causality. A longitudinal study, using a larger sample, that compares adolescents with certain personality profiles in therapeutic foster care to adolescents in other settings (such as regular foster care and residential placements) could accomplish two important purposes. First, it could assess whether and to what extent each of these treatment modalities is able to produce beneficial effects on dysfunctional personality profiles over time; and, second, it could help indicate which setting is more beneficial for adolescents with different personality patterns. This would help establish whether this type of personality profile screening could be a useful tool for determining a treatment modality for particular adolescents.

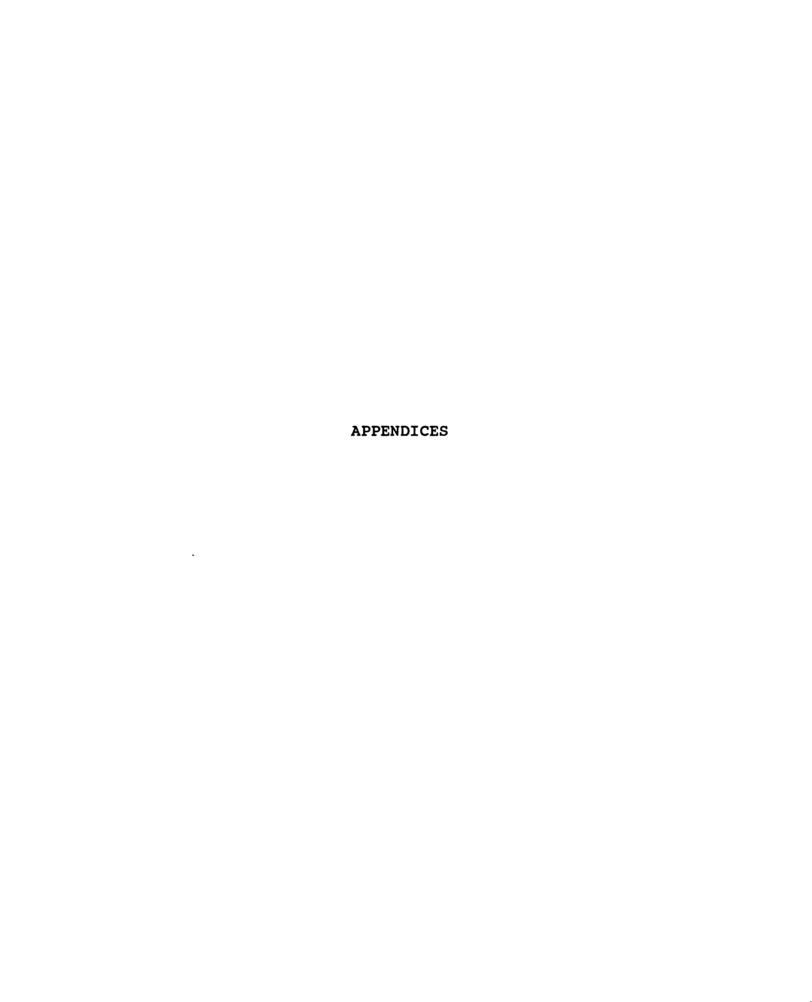
A similar approach to outcome research would also be helpful regarding the Personal Change Questionnaire. In addition to the basic task of developing a better understanding of what effect therapeutic intervention can have on the problem-solving skills of this population, such research could also be used to devise ways to better target interventions directed at the development of those skills.

### Limitations of Observational Studies

As discussed in the first chapter of this study, the findings contained herein are preliminary in nature. Because an experimental design with random assignment was not possible, causality with regard to the findings cannot be determined. However, as the focus of this study was primarily to identify and explore the population in therapeutic foster care, the results have been informative.

Some of the limitations of this study include the small sample size, the self-selection necessary in voluntary research, the newness of both instruments (particularly the Personal Change Questionnaire), and the absence of available normative data on many of the scales of both the MAPI and the Personal Change Questionnaire. It is hoped, however, that an accumulation of data on this population can begin with the findings of this study,

thereby laying the groundwork for future research into this treatment modality.



## APPENDIX A

THE MILLON ADOLESCENT PERSONALITY INVENTORY

### Millon Adolescent Personality Inventory - MAPI(C)

by Theodore Millon, Catherine J. Green, Robert B. Meagher, Jr.



#### DIRECTIONS:

94284

DO NOT WRITE IN THIS SPACE

- Use a soft, black lead pencil only and make a heavy, dark mark when filling in the circles.
- 2. If you make a mistake or change your mind, please erase the mark fully and then fill in the correct circle.
- 3. Fill in the grids according to the directions on the right side of the page. Do not fill in the special code sections below. Your counselor will complete these
- 4. The following pages contain a list of statements that young people use to describe themselves. They are printed here to help you in describing your feelings and attitudes. Try to be as honest and serious as you can in marking the statements since the results will be used to help your counselor learn about you and help you plan your future.
  - 5. Do not be concerned that a few of the statements will seem unusual to you: they are included to help teenagers with many types of problems. When you agree with a statement or decide that it describes you, fill in the ① to mark it true ( ) . If you disagree with the statement or decide that it does not describe you, fill in the ① to mark it false ( ② ② ). Try to mark every statement even if you are not sure of your choice. If you have tried your best and still cannot decide, mark the ① for false.
  - 6. There is no time limit for completing the inventory, but it is best to work as rapidly as is comfortable for you.
  - 7. This form will be scored by computer and the results will be kept confidential.
  - 8. You may begin with the first statement on the next page after filling in the Name grid and information chart on this

GRID DIRECTIONS: Print your name in the boxes; last name first - akip a box then as much of your first name as possible. Then blacken the circle below each box which corresponds to the letter in the box. Blacken the blank circles below ampty boxes. In a similar manner, full in the grids for Major Problems. ID Number (optional). Sex and Age. Either Name or ID Number grid must be completed.

NAME
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Copyright C 1976, 1982 Theodore Millon All rights recorved Printed in the Units Published by NATIONAL COMPUTER SYSTEMS, INC., MINNEAPOLIS, MN 88440

- 1 👽 🗗 I feel good showing my body in a bathing suit.
- 2 ① ① I almost always think before I act.
- 3 ① ② My parents have made a very good home for their family.
- 4 🕥 🕜 I stay cool even when I'm realty angry with someone.
- 5 🕡 🗗 I have a strong need to feel like an important person.
- 6 1 6 I get a lot of setisfaction in my achool work.
- 7 🛈 🕑 I enjoy thinking about sex.
- 8 1 i sort of feel sad when I see someone who's lonely.
- 9 ① I'm sure of my feelings about most things.
- 10 ① ① I always try to do what is proper.
- 11 Tel am a quiet and cooperative person
- 12 T I'm pretty sure I know who I am and what I want in life.
- 13 1 leel guilty when I have to
- 14 ① ① I get so touchy that I can't talk about certain things.
- 15 ① ② I try hard to do well at almost everything I do.
- 16 T e i become very excited or upset once a week or more.
- 17 ① ① When I get angry, I usually cool down and let my feelings pess.
- 18 👽 🕝 I'm quite sure that I am sexually attractive.
- 19 👽 🕡 I get along quite well with the other children at home.
- 20 TO I like to follow instructions and do what others expect of me.
- 21 Te I have more friends then I can keep up with.
- 22 ① ① I am very unessy when I'm supposed to tell people what to do.
- 23 🛈 🕖 I like the way I look.
- 24 T I do my very best net to hurt people's feelings.
- 25 ① ② I look forward to growing up and making something of myself.
- 26 ① ② I am more worried about finishing things that I start than most people.
- 27 🛈 🕝 I can depend on my perents to be understanding of me.
- 28 ① ① I would never use drugs. no matter what.
- 29 ① ② Sex le enjoyable.
- 30 ① Plather than demand things, people can get what they want by being gentle and thoughtful.

- 31 ① ① It is very important that children learn to obey their elders.
- 32 T i have a pretty clear idea of what I want to do.
- 33 ① ② It is easy for me to take advantage of people.
- 34 ① ② I'd like to trade bodies with
- 35 🕡 🕖 I like to arrange things down to the last detail.
- 36 T In this world, you either push or get shoved.
- 37 ① ① My social life is very satisfying to me.
- 38 ① ① I don't think I have as much interest in sex as others my age.
- 39 ① ② When someone hurts me, I try to forget it.
- 40  $\bigcirc$  I enjoy getting one of the highest grades on a test.
- 41 1 1 My parents are very kind to me.
- 42 ① ② I have a strong desire to win any game I play with others.
- 43 ① ① I think I have a good build.
- 44 ① ① I have almost no close ties with others my age.
- 45 🕡 🕖 I have faith that human nature is good.
- 46 ① ② If I see a person I know from a distance. I usually try to avoid him.
- 47 ① ② When I don't get my way, I usually lose my temper.
- 48 ① ② I have a better idea of the kind of person I am than other teenegers do.
- 48 ① ① My friends seem to turn to me more than to others when they have problems.
- 50 ① ② What this country really needs are more serious and devoted citizens.
- 51 🛈 😉 I make friends easily.
- 52 T I don't like looking at myself in
- 83 ① ② I usually let ether people have their own way.
- 84 ① ② I'm always busy in lots of social activities.
- 55 ① ② I don't seem to know what i went out of life.
- 86 ① ① Other people my age seem more sure then I am of who they are and what they want.
- 57 ① ② When I was a young child, my perents felt very proud of me.
- 58 ① ① I have not seen a cer in the lest ten years.

- 89 T I often doubt whether people are really interested in what I am saying to them.
- 60 ① ② Someone else will probably have to support me when I'm an adult
- 61 ① ① I find it hard to feel sorry for people who are always worried about things.
- 62 ① ① I seem to have a problem getting along with other teenagers.
- 63 ① ① Thinking about sex confuses me much of the time.
- 64 (7 (1) I would much rather follow someone than be the leader.
- 65 ① ① To get sheed in this world I'm willing to push people who get in my way.
- 66 T i am pleased with the way my body has developed.
- 67 T e l can see more sides of a problem better than others can.
- 68 ① ② I would rather be almost anyplace but home.
- 69 ① ① Becoming involved in other people's problems is a waste of time.
- 70 T E I guess I'm a complainer who expects the worst to happen.
- 71 Tel often do things for no reason other than it might be fun.
- 72 ① ① It is not unusual to feel lonely and unwanted.
- 73 T i feel pretty simless and don't know where I'm going.
- 74 ① ① I do my best to stop enyone from trying to boss me.
- 75 T P If I see someone yewn, I often start to yewn, too.
- 76 ① ② My perents often tell me i'm no good.
- 77 T I am a dramatic and showy sort of person.
- 78 T I sometimes feel I em in this world ell slone.
- 79 T i really hate to have my work pile up.
- 80 ① ① I would rather be direct with people than avoid telling them something they don't like.
- 81 🛈 🛈 I'm pretty immeture about sexual metters.
- 82 ① ① I'd rather just lie around doing nothing than work or go to school.
- 83 ① ② Lots of kids seem to have it in for me.
- 84 🗇 💿 Among the most important things a person can have are a strong will and the drive to get sheed.

112 ① ① To see some bother me.

	85 ① ② At no time in my life have I had any hair on my head or my body.
	86 ① ① I often get so stoned (either fro alcohol or drugs) that I don't know what I'm doing.
	87 👽 Punishment never stopped me from doing whatever I wanted.
	88 ① ① I very often think I em not wanted by others in a group.
	89 ① ② Others my age seem to have things together better than I do
	90 T People can influence me quite easily.
	91 ① ② I often feel so angry that I want to throw and break things.
	92 ① () I find it hard to understand why people cry at a sad movie.
	93 👽 🕡 I often say things that I regret having said.
	94 ① Ø I guess I depend too much on others to be helpful to me.
	95 🛈 🕢 I'm not answering these questions honestly at all.
	96 ① ① I have a pretty hot temper. 97 ⑦ ② I feel left out of things socially.
84	98 🛈 💽 I like to be the one in authority to take charge of things.
942	99 🕜 🕜 I've just about given up as far as school is concerned.
13	100 🛈 🕖 I like it at home.
0	101 ① I don't mind that other teenegers are not interested in my friendship.
000	102 ① ② I think teenagers are expected to know too much about sex.
00	103 ① ② I am very pleased with all the things I have done up to now.
	104 ① ② Others my age never seem to call me to get together with them.
	105 ① ① I like to tell ethers about the things I have done well.
0	106 ① I am gled that feelings about sex have become a part of my life now.
O	107 ① I get very frightened when I think of being all alone in the world.
	108 ① ① If you asked me to describe myself I wouldn't know what to say.
	109 ① ① I don't depend much on other people for friendship.
$\boldsymbol{\varkappa}$	

6 ① ② At no time in my life have i had any hair on my heed or my body.
8 ① ● I often get so stoned (either from alcohol or drugs) that I don't know what I'm doing.
7 ① ② Punishment never stopped me from doing whetever I wanted.
B ① ① I very often think I am not wented by others in a group.
Others my age seem to have things together better than I do.
People can influence me quite
l 🕤 🗗 I often feel so angry that I want to throw and break things.
l T i find it hard to understand why people cry at a sed movie.
1 ① I often say things that I regret having said.
i 🕤 🕖 i guess i depend too much on others to be helpful to me.
i 🕜 🕑 I'm not answering these questions honestly at all.
3 ① ① I have a pretty hot temper. 7 ② ① I feel left out of things socially.
•

114 ① ② Most people are better loo then I am.	king
115 ① ② All my life I have to "blow every now and then.	up"
116 ① ② A quiet hobby is more fun me than a party.	for
117 🛈 🕖 I get upset when I see a ve sick person.	<b>'</b> 'Y
118 🕡 🕖 I get upset when things I d expect happen to me.	lon't
119 🛈 🕖 I worry spout my looks.	
120 T I'm among the more popul kids at school	• 7
121 T F There are always a numbe reasons why most problem can't be solved.	r of 16
122 🗇 🕖 I do my best to get along with others by being pleas and agreeable.	ent

111 ① If I reed these questions a month from now. I'm sure I would change most of my answers.

113 ① ① I'm jeelous of the special attention that the other children in the family get.

120 🛈 🕖	I'm among the more popular kids at school	147 🛈 🧿
121 ① ①	There are always a number of reasons why most problems	148 🛈 🖸
	cen't be solved.	149 ① ①
12200	I do my best to get along with others by being pleasant and agreeable.	150 ⊙ ⊙
123 ① ①	Sex is disgusting.	
124 🛈 🛈	1 have flown across the Atlantic 30 times last year.	
125 ① ①	It is good to have a regular way of doing things so as to avoid mistakes.	FOR

# R PROCESSING **RETURN TO**

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# 125 ① ① It is good to have a regular to of doing things so as to avoi mistakes. 126 ① ② My family is always yelling and fighting. 127 ① ① I would like to continue in school and college as long as I can.

128 ① 🕑 I seem to fit in right away with any group of new kids I meet.

129 There's nothing I like more than getting in a car and zooming off.

130 T Twe done most things in my life very well.

131 ① ② Lonely kids usually deserve to be lonely.

132 ① ① If I want to do something, I just do it without thinking of what might happen.

133 ① ① So little of what I have done has been appreciated by others.

134 ① ② I heven't been paying much attention to the questions on these pages.

135 ① ② I make nasty remarks to peopl if they deserve it.

136 🕡 🕖 I often feel as if I'm floating around, sort of lost in Me.

110 ① ② I doubt if I'll make much of myself in life.

138 T P Nobody seems to care about me at home. 139 🛈 🕜 I think I'm better looking then most of the kids I know.

137 10 I'm ashamed of my body.

140 🛈 🛈 I'm very mature for my age and know what I want to do in life.

141 🛈 🗷 I like being in a crowd just to be with lots of people.

142 🕡 🕖 in many ways i feel very superior to most people.

143 🛈 🕝 Most other teenagers don't seem to like me.

144 T Most people can be trusted to be kind and thoughtful.

145 🛈 🕡 I like to flirt a lot.

146 ① ① I don't really care what I'll do in life.

1 often feel that others do not want to be friendly to me.

tt is very difficult for me to stop feelings from coming out.

I worry a great deal about sexual matters.

I can control my feelings easily.

# APPENDIX B

THE PERSONAL CHANGE QUESTIONNAIRE

## PERSONAL CHANGE QUESTIONNAIRE

<u>Directions</u>: For each statement, circle a number on how well you know yourself on a scale of 0 to 7, with 0 meaning that you "don't know" and 7 meaning that you know "very well." Statements refer to your own behaviors, thoughts, feelings, goals, etc. The word "goals" refers to plans for changing your old behaviors.

		Don't Know			Kr	now Well
1.	I know what my main problem is. Example: I get into fights at school.	0 1	2 3	4 !	6	7
2.	I know specific goals or ways that will help me solve this problem. Example: I could handle my anger by talking, not hitting.	0 1	2 3	4 !	5 6	7
3.	I know the situation in which my problem takes place. Example: I know I get angry when someone teases me.	0 1	2 3	4 !	5 6	7
4.	I know what I feel when this problem happens. Example: I get embarrassed when people tease me.	0 1	2 3	4 !	5 6	7
5.	I know what I am thinking in this problem situation. Example: I wonder if something is wrong with me.	0 1	2 3	4 !	5 6	7
6.	I know what actions I take when these thoughts and feelings happen in the problem situation. Example: I stop hanging around with kids who tease me.	0 1	2 3	4 !	5 6	7
7.	I know the consequences of my actions in this problem situation. Example: I know I'll get grounded if I fight.	0 1	2 3	4 !	6	7
8.	I know if I am proud or ashamed of myself in this problem situation. Example: I usually put myself down for letting other kids' words bother me.	0 1	2 3	A 1		7
	KIND WOLUS DOCHEL INC.	U	L J	7	, 0	,

9.	I know what I will lose if I give up my current behavior in the problem situation: Example: I lose the feeling of being strong that I get when I fight.	0	1	2	3	4	5	6	7
10.	I know what need of mine is being met by my current behaviors in the problem situation. Example: I like the attention I get when I fight.	0	1	2	3	4	5	6	7
11.	I know what punishments I will get when I change my actions in the problem situation. Example: It would feel like a punishment to lose some of the attention I get from fighting.	0	1	2	3	4	5	6	7
12.	I know the rewards I will get when I change my actions in the problem situation: Example: If I stop fighting, I will be given extra social outings at home.	0	1	2	3	4	5	6	7
13.	I know the punishments I will get if I don't change my actions. Example: I will lose friends if I keep fighting.	0	1	2	3	4	5	6	7
14.	I know what rewards I will get if I don't change my actions. Example: If I keep fighting, I will be suspended and won't have to attend school for a week.	0	1	2	3	4	5	6	7
15.	I know how much I am trying to change my actions. Example: I am willing to miss some free time to attend therapy sessions.	0	1	2	3	4	5	6	7
16.	I know the fears I will have if I don't change my actions. Example: I may have to leave this placement and go somewhere worse.	0	1	2	3	4	5	6	7
17.	I know how to avoid my fears. Example: I can act like it doesn't bother me that I may have to leave.	0	1	2	3	4	5	6	7

18.	I know I can bring about new feelings in the problem situation. Example: I know I can feel good about myself no matter what other people say.	0	1	2	3	4	5	6	7
19.	I know I can bring about new thoughts in the problem situation. Example: I can think about making friends instead of fighting when I go outside.	0	1	2	3	4	5	6	7
20.	I know I can bring about new ways of seeing things in the problem situation. Example: I can see myself being popular and having fun.	0	1	2	3	4	5	6	7
21.	I know my body could feel different in the problem situation. Example: I could feel less tense at school.	0	1	2	3	4	5	6	7
22.	I know I can have new opinions about myself in the problem situation. Example: I can think of my anger as a balloon filled with air that I can control letting out.	0	1	2	3	4	5	6	7
23.	I know I can learn new behaviors to solve my problems. Example: I could walk away when someone teases me.	0	1	2	3	4	5	6	<b>7</b> .
24.	I know the consequences of my new behaviors. Example: Walk-ing away from a fight could keep me from getting grounded.	0	1	2	3	4	5	6	7
25.	I know I can see myself in a new way. Example: I can feel strong being in control of myself.	0	1	2	3	4	5	6	7
26.	I know what needs will be met by my new behavior. Example: I'll be able to have more friends if I don't fight with people.	0	1	2	3	4	5	6	7
27.	I know where to start to make changes. Example: I know what I need to do first to stop fighting.	0	1	2	3	4	5	6	7

28.	I know I can find someone to be helpful in making this change. Example: The staff would help me change.	0	1	2	3	4	5	6	7
29.	I know I can get information for making changes. Example: My caseworker can tell me some good ideas for controlling my temper.	0	1	2	3	4	5	6	7
30.	I know I can find a role model. Example: I know someone else who learned to control their temper.	0	1	2	3	4	5	6	7
31.	I know I can give myself rewards for making changes. Example: When I learn to control my temper, I'll buy myself a new radio.	0	1	2	3	4	5	6	7
32.	I know I can make a plan for making these changes. Example: I can plan out my free time at school so I am too busy to be hanging around outside where I could end up fighting.	0	1	2	3	4	5	6	7
33.	I know I can give myself feedback on my progress. Example: I can keep track of my fights to see how I'm doing.	0	1	2	3	4	5	6	7
34.	I know it will take time to change. Example: If I work hard, I could probably learn to control my temper by my birthday.	0	1	2	3	4	5	6	7
35.	I know that I can make a backup plan if I fail to reach my goal. Example: If I lose my temper, I could decide to exercise a half hour each night so I won't feel tense at school the next day.	0	1	2	3	4	5	6	7
36.	I know I can make a plan to avoid ruining my success. Example: Each week I could look over how I have done in controlling my temper to see if I have followed my plan.	0	1	2	3	4	5	6	7

37. I know I can keep a diary or chart to follow my change. Example: I can make a chart that includes how many fights I have gotten into that week.

0 123456 7

Please give a score on how well you feel you are dealing with your problems: (Circle one.)

Poorly Very Well 0 1 2 3 4 5 6 7

APPENDIX C

THE SURVEY

# THE SURVEY

To: Intensive Foster Care Program Branch Agency:	
From: Charlene Crickon Kushler Date: December 11, 1989	
The following adolescent has been select conducted on Intensive Foster Care:	ed for the study being
Please complete the following information	on on this adolescent:
Age:	Race: Caucasian
	Black
Sex: M or F	Hispanic
Family Status: (please circle)	Indian Oriental
Biological or Adopted	Biracial
Temporary or Permanent Ward	Other
Length of time in Intensive Foster Care Length of time in regular foster care pr Number of previous foster care placement History of residential placement or psyc yes or no	rograms: months
For the purpose of evaluating this adole rate this adolescent on how well he/s problem at this time from your perspect 7 below.	she is dealing with his/her
Poorly 0 1 2 3 4	Very Well 5 6 7
This survey needs to be returned by Dece	ember 20, 1989, to:

Charlene Crickon Kushler c/o Central Office Child and Family Services 2157 University Park Drive P.O. Box 348 Okemos, Michigan 48805



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