THE UNIVERSITY OF CALGARY

A COST COMPARISON OF PLACEMENT OUTCOMES OF TREATMENT FOSTER FAMILY CARE TO RESIDENTIAL CARE

by

Douglas J. Hughes

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THE UNIVERSITY OF CALGARY

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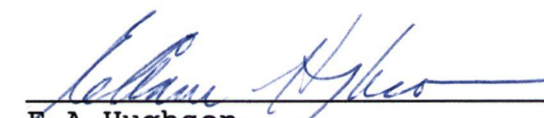
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "A Cost Comparison of Placement Outcomes of Treatment Foster Family Care to Residential Care" submitted by Douglas J. Hughes in partial fulfillment of the requirements for the degree of Master of Social Work.

Supervisor, Barbara Thomlison,
Faculty of Social Work

Dr. Floyd Bolitho, Faculty of Social Work



E.A Hughson,
Department of Educational Psychology

Date: May 6, 1992

ABSTRACT

This exploratory study examines placement outcomes for 26 treatment foster family care and 55 residential care children one year after placement. The Children's Restrictiveness of Living Environments Instrument was used to measure placement outcome.

The findings suggest that children receiving treatment foster family care have significantly less restrictive placement outcomes at one year later than children from in residential care centres. Costs were also found to be significantly less for children in treatment foster family care when compared to children receiving residential care.

However, the cost advantage enjoyed by treatment foster family care over residential care should only be one of several factors that social services managers use when deciding whether to fund or not to fund programs.

The study's finding may be useful for child welfare managers who are struggling to meet service demands and keep within budget.

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CHAPTER I

INTRODUCTION

Child protection services have evolved from the caring of orphans and abandoned children in the nineteenth century to the present focus on the abused child. There is a strong societal conviction that today's children have the right to expect protection from abuse and neglect as well as the right to a stable and healthy childhood (Falconer & Swift, 1983).

In Canada, provincial governments have primary legal responsibility for the protection of children. For example, in Alberta, the Department of Family and Social Services' legal authority is from The Alberta Child Welfare Act (Alberta Family and Social Services, 1985). As such, Alberta Family and Social Services takes as its duty the goal of protecting children while assisting them and their parents to develop a stronger and healthier family unit.

Many children and youth in need of protective services are seriously abused, neglected, disturbed, and damaged (Bryant, 1981). As such, children removed from their families experience feelings of loss, anger, guilt, and fear of the unknown. As well, children in out-of-home care often require mental health services and specialized resources to meet their needs (Terpstra, 1987). These are the children most often

referred to the Children and Family Program Services Unit of Alberta Family and Social Services.

The fact that children coming into care are severely disturbed may be due to the increased use of home-based support services. Home-based support services are offered to families to prevent foster care and keep children at home. As such, only severely disturbed children from dysfunctional families are most likely to be in an out-of-home placement. In most instances, the children in out-of-home placements require protection, guidance, and support if they are to achieve stability, self-respect, and self-control.

Along with servicing a very difficult population, child welfare agencies also face the problem of providing services during a time of declining resources. As a result, child welfare managers are under pressure to ensure that there are stringent controls on expenditures and to implement rigorous program evaluation procedures (Sarri, 1985). Accountability is paramount and programs are under pressure to show results. During these times of sharply declining resources the emphasis is on getting more value from fewer dollars.

One area where child welfare agencies are looking to increase effectiveness and efficiency is in the provision of treatment services to children who are severely disturbed behaviourially and emotionally. Often the child's condition is the result of emotional, physical or sexual abuse which results in the child coming into-the-care of the state. Many

of these children make up the majority of child welfare caseloads (Downey, 1991).

Traditionally, this population of children has been treated in very expensive and highly restrictive residential treatment centres. The residential resources are expensive because of the high per-diem rates paid to care for these children for 24 hours a day.

However, an alternative is being proposed to treat children who are severely disturbed behaviourially and emotionally. Proponents of treatment foster family care are making claims that these programs are a viable alternative to residential care placements. This proposed shift to treatment foster family care is mainly supported by preliminary research available from the Pressley Ridge Program in Pennsylvania (Almeida, Hawkins, Meadowcroft, & Luster, 1989), M.J. Colton's (1988) work in England, and Patricia Chamberlain's (1990) research in Oregon. These studies are supported by self-reports of treatment foster family care program administrators (Hull Community Services, 1991) that treatment foster family settings provide an alternative to the more restrictive residential living arrangements. Treatment foster family care supporters claim they can provide a treatment program for children with severe behaviourial and emotional problems in a family setting. A family setting is beneficial because it provides better continuity for the child by having the same treatment person working with the child everyday and at the

same time providing opportunities to model appropriate behaviours (Meadowcroft & Luster, 1990).

It is generally acknowledged that much of the appeal of the treatment foster family care movement is based on the alleged financial savings involved in using community instead of institutional care in times of shrinking budgets and spiralling costs of institutionalization (Appathurai, 1986). For example, Alberta Family and Social Services, Calgary Region, consumes approximately one third of its resource budget caring for children in residential centres (Appendix A). On the other hand, treatment foster family care costs the region only 10 percent of its budget allocated for resources (Appendix A). While incurring less cost to the Department, treatment foster family care also provides the region with approximately the same number of beds as residential care (Appendix B).

In summary, child protective services' current focus is the abused child. The abused child often exhibits severe behaviourial and emotional problems. These children often enter into out-of-home care and require specialized placements to meet their complex needs. Traditional methods of treating these children have become very expensive and alternatives are being explored. One option is treatment foster family care.

Proponents of this program claim that treatment foster care is less costly and provides effective care in a less restrictive environment than residential care. Treatment

foster family care appears to be less costly mainly because the per-diem rates paid to treatment foster family parents are less than the per-diem rates paid to residential programs. Treatment foster family care is less restrictive because the child lives in a family setting in a community. This meets the mandate of the Department to care for children in the least intrusive service available.

PURPOSE OF STUDY

The purpose of this research study was to compare placement outcomes of residential care to treatment foster family care. Residential care and treatment foster family care are two programs used by the Children and Family Program Unit of Alberta Family and Social Services to treat children with severe emotional and behaviourial problems. The level of restrictiveness and costs associated with treating children in residential care and treatment foster family care will also be explored.

The next section of the thesis describes residential care and treatment foster family care. Then, the debate between proponents of treatment foster family care and residential care is examined.

RESIDENTIAL CARE

Residential care in North America can trace its roots back to religious influences when the Roman Catholic Church responded to the placement of its young children in Protestant families by establishing children's institutions. The establishment of Catholic institutions assured the church that the religious training of its children could be guaranteed (Galaway, 1990). At this same time, there was also a growth of public-operated facilities which were set up to house large numbers of state-dependent children. Residential care facilities then evolved into specialized institutions which offered a physical separation for children who were removed from inappropriate living conditions.

It is generally recognized that the goal of group care in residential centres is to help seriously disturbed and disabled children and youth. Treatment services incorporate elements of a child's development, family, and community life in order to provide effective care.

Alberta Family and Social Services defines residential care as a contracted or department resource operated with seven or more residential spaces. Residential facilities are usually staffed 24 hours a day by child care workers and professional staff. These settings are considered alternatives to hospitals.

Many of the services offered at residential treatment centres stem from an intense medical involvement (Ainsworth & Fulcher, 1982). On-site services include educational facilities, recreational services, and psycho-social treatment services. The majority of the children live in cottages or smaller units with residents primarily using the services of the resource. However, there is a shift by many residential programs to establish more links with the community and to provide supports for the child's family while treating the child (Grad, 1990).

The level of restrictiveness is usually high in a residential setting. Children live at the institution away from family and friends and not normalized community interaction and opportunities. The childs' routines are scheduled around meetings and assessments and the residential centre usually has formal rules and consequences if procedures are not followed.

TREATMENT FOSTER FAMILY CARE

The history of treatment foster family care can be traced through two routes. The first is found in the evolution of foster families through the stages of free homes, boarding homes, special payment for dealing with difficulty of care, and finally, to treatment foster family care homes (Galaway, 1990). A second route is out of residential treatment services

for children. Bryant (1981) notes that as early as the 1960s several residential treatment programs were developing treatment foster family homes to supplement or serve as an alternative to residential treatment programs. The emergence of treatment foster family care out of residential care has also been accelerated by the deinstitutionalization movement.

Treatment foster family care is also referred to as specialized foster care, special foster care, therapeutic foster care, or other such names (Bryant, 1981). Treatment foster family care is similar to other types of foster care in that the child is placed in a family with above average parenting skills and a strong belief in the importance of a family for the child's growth. However, the similarities end there.

Treatment foster family care parents are more carefully selected, given much more education about their role, and receive more supervision and support (Hawkins & Luster, 1982). They are expected to manage difficult or handicapped children and youth more effectively; be more tolerant and accepting of them; and provide generally better parenting then regular foster parents. For these services, the family receives higher remuneration than regular foster care placements.

As well, the goals, philosophy, methods, and achievements of treatment foster family care are more systematic and planned and in this way are distinct from regular foster care. Treatment foster family care provides individualized,intensive

treatment within the context of a family (Meadowcroft & Luster, 1990). In this way, treatment foster family care provides much needed nurturance to children with serious problems while in out-of-home care.

TREATMENT FOSTER FAMILY CARE VERSUS RESIDENTIAL CARE

The Philosophy

A shift in theory and practice regarding children's care has been occurring for the better part of the past decade. The move from institutional care to family-based care is consistent with governmental policies to provide services to children in the community. This is also known as a normalization philosophy. Normalization is based on a competency oriented view of human development which provides opportunities for normalization and the development of basic life skills (Alberta Family and Social Services, 1992). This ecological perspective perceives the child in the context of the family and the family in the context of its social network and community environment.

In fact, the Calgary Region of Alberta Family and Social Services has made a significant effort to move away from institutional-based care towards smaller community-based services over the last two years (Alberta Family and Social Services, 1989).

Placement of children in more restrictive environments is also contrary to the philosophy of "the least intrusive care" as delineated in child welfare legislation (Alberta Family and Social Services, 1985). The least intrusive care means the less child welfare involvement the better. When alternative care is required, the least intrusive, and most effective, efficient service available should be accessed. For example, the ideal place for a child is at home with family and no contact with the child welfare system. For children who do not remain with their parents, the philosophy contends that the more normalized the child's environment, the better it is for the child's psychological and social development.

Least intrusive care can also be delineated by the degree of restrictiveness of the place where a child is living. Restrictiveness can be defined as a living environment which can be made restrictive by one of three factors (Hawkins, Almeida, & Samet, 1989):

1. The physical facility, including its appearance and size; its internal structure and equipment, including locks on doors or windows as well as the degree of privacy. Finally, restrictiveness is also dependent upon the physical layout of the facility.

2. The rules and requirements that affect free movement, activity or other choices within the facility.

3. The voluntariness with which children and youths enter or leave that setting permanently at a time of their choosing.

The trend to placing children in less restrictive environments which still meets their needs, along with the rapidly escalating expense of placing children in residential treatment centres, emphasizes the need to recruit foster families who can effectively work in their own homes with disturbed children (Bauer & Heinke, 1976).

The Debate

The debate between proponents of treatment foster family care and residential care has been going on for close to a decade. Both sides see merits to their programs. However, residential care and treatment foster family care do share some common ground. For example, both focus on a broad range of treatment issues and the staff are specially trained, supervised, and evaluated. It has also been determined that children in treatment foster family care and residential care also share some of the same characteristics (Naslund & Stephens, 1989). As well, Hull Community Services (1991) clearly found that the children who typically are served in group residential care can be served in treatment foster family care. Finally, Downey (1991) in her study on assessment

as a guide to placement decisions found no significant difference between the behaviours of children in group care and short-term treatment foster family foster care.

There are also some differences between treatment foster family care and residential care. For example, proponents of treatment foster family care claim there is no justification for placing children and youth in residential care facilities where, it is believed, family connectedness and community integration are lost (Galaway, 1990). As well, it has been demonstrated that specialized foster care placements are more child-oriented in their child care practices than residential facilities (Colton, 1990).

On the other hand, Aldgate (1989) states that, in instances where the permanency plan for the child is one of reunification with parents, residential or staff-modelled group care is the preferred treatment and service alternative to specialized foster care. The argument is that the child finds it easier to separate family issues when treatment takes place in a residential setting. As well, the family does not view the residential staff as a threat.

Aldgate (1989) also argues that, for older children who, because of potential inadequacy or illness cannot return to their own families, use of residential facilities is favoured over long-term foster care since the permanency plan in these cases is increased stability, preservation of access with both parents, and a clearer sense of identity for the child.

Residential care when viewed from this permanency perspective is a specialized resource necessary for those children whose problems are such that an appropriate family setting cannot be found or that such a setting is not at that point the most suitable place to help them (Grad, 1990).

Residential facilities are often viewed as an "appropriate" placement for children (Galaway, 1990). Proponents of residential care stress that children must be placed in a setting which is appropriate to their needs, including control. Appropriateness is often advanced as an argument for placing children and youth in more, rather than less, restrictive environments because of the perceived need to control childrens' behaviour. For example, danger to the public or self has to be documented for children to be admitted to a specialized secure treatment centre. Smith (1986) believes children have a right to be placed in the setting which is most appropriate to their needs but the treatment should be as normal as possible and should not stigmatize the child.

The Dilemma

The dilemma is which direction should child welfare support in an effort to treat children with severe emotional and behaviourial problems. Proponents of treatment foster care are advocating that they can serve these difficult children and do it cost-effectively. Defenders of residential centres

say they offer a highly specialized treatment program and they are best equipped to meet these children's needs.

One thing is for certain, caution needs to be exercised before rushing to close residential treatment centres and divert resources and money to treatment foster family care. Treatment foster family care is a relatively new concept and little research has been done on its efficacy. As Webb (1988) explains;

> The efficacy of specialized foster care, although suggested anecdotally, has yet to be established. The emphasis on cost-efficient therapeutic intervention in an optimal environment appears to be a positive direction in the placement and care of special needs children. However, research is required to determine whether specialized foster care, as a treatment modality, can effectively provide such care to clearly defined populations. (p. 41)

Research on the program efficiency and effectiveness of treatment foster family care compared to residential care is scarce. Until studies are completed in this area, child welfare managers will have to wrestle with the dilemma of whether to continue funding expensive residential centre or divert some of the money to treatment foster family care.

These decisions also need to be tempered with meeting the needs of the children.

PROBLEM

The problem is that residential care for children with severe emotional and behaviourial problems has become very expensive. These are also the children most often needing child protection services. Treatment foster family care is being proposed as an alternative because it supposedly costs less and treats children in a less restrictive environment. One way to compare residential care to treatment foster family care is to look at placement outcomes for children who have received both programs. Placement outcomes are defined as the place where a child is living after leaving residential or treatment foster family care. Placement outcomes can be measured by the restrictiveness of the environment where the child is residing. A lower level of restrictiveness indicates children may be doing better because they do not need as much structure in their daily living to function. A higher level means they are doing worse or the same as when referred to the program.

Therefore, the aim of this exploratory study is two-fold: first, to determine the placement outcomes of children who received treatment foster family care and children who received residential care; second, to determine the costs

associated with receiving treatment foster family care and residential care.

An exploratory study is appropriate because the theoretical underpinnings comparing placement outcomes of treatment foster family care to those of residential care are underdeveloped. There is also an absence of clear data comparing treatment foster family care and residential care on cost.

CHAPTER 2

LITERATURE REVIEW

This section reviews the literature relevant to outcome studies on children in treatment foster family care and residential care. Outcome research on children receiving treatment family foster care is practically non-existent. This is not surprising because only a very small number of program evaluation studies have been done on foster-family based care (Galaway, 1990).

Residential group care settings have also struggled to measure successful placement outcomes. Many of the studies have focused on the post-discharge environment as an intervening factor in successful adaptation and community integration (Whittaker, Overstreet, Grasso, Tripodi, & Boylan, 1988).

The first section of the literature review examines placement outcomes for treatment foster family care and residential care, which is the dependent variable of the study. Placement outcome is discussed in terms of restrictiveness and cost. The second section of the literature review examines the selected characteristics of children who have received treatment foster family care or residential care, which are the independent variables. The last section identifies four questions for study. Finally, two hypotheses are stated.

DEPENDENT VARIABLE: PLACEMENT OUTCOME

Restrictiveness

Restrictiveness has recently been identified as one outcome measure that gives a good indication of how well a child is doing. The assumption is that the lower the level of restrictiveness, then the higher the functioning of the child. A higher-functioning child would not need as many restrictions and controls and therefore can function at home and in the community.

Restrictiveness also has the advantage of being measured by merely finding out where a youngster is living. In addition to being an easy economical outcome to measure, restrictiveness provides a single, easily understood datum. Restrictiveness also provides data of obvious relevance to policy-makers and the general public. Its relevance is obvious both because the restrictiveness of child placements is closely related to the cost of the placement to the public and because child welfare policies outline that treatment should attempt to be in the least restrictive environment that can meet the child's needs. Treatment should be in the best interests of the child.

Larson and Allison (1977) evaluated the Alberta parent-counsellor program, an alternative to institutional placements, over a-two year period. Of the children discharged from

the program, 64 percent moved to non-institutional placements, including natural homes, permanent homes, permanent foster homes, group homes, and independent living. Thirty-six percent were discharged to residential treatment centres. This study suggests that the Alberta parent-counsellor program was successful in discharging children to less restrictive placements. However, no follow-up data was provided on the children discharged from the program.

In a comparison study (Kagan, Reid, Roberts, & Silverman-Pollow, 1987) of a court-related youth service program and institutional care, similar findings emerge. The results of the court-related youth program indicated that 55 percent of the 29 youths in the program returned home to their parents. Twenty-four percent remained in extended foster care and 20 percent were placed in group homes or residential centres for children. Twenty families agreed to participate in follow-up interviews. Fifty-two percent remained with their families and 62 percent were able to avoid institutional placement.

Bauer and Heinke (1976) looked at 42 children leaving a Wisconsin treatment foster family program. They found that 29 percent returned to live with their birth parents and 25 percent went into adoptive homes. Twelve percent entered independent living situations while 22 percent entered a group home, boarding home, receiving home, or another treatment home. Only seven percent entered institutions immediately after treatment foster family care.

Lewis (1988) examined placement outcomes for youth who had left residential settings. This exploratory study reviewed post-group home termination living arrangements for 206 children from 14 groups homes by examining data drawn from department computer records. The results of the study determined that about two-thirds (67%) of all the children and youths leaving group care were placed initially in a less restrictive environment. These placements included regular foster care or biological parents.

Bullock (1990) examined outcomes of 12 children who were referred to treatment foster family care from a residential centre. All of the 12 children were highly institutionalized and were long-term child welfare cases. This exploratory study found that only one child successfully used treatment foster family care as a bridge to the most minimum restrictive environment offered by independent living. Five children used treatment foster family care as a temporary and turbulent link between leaving the institution and living on their own. Six stayed in a treatment foster family care home for a short period of time and then moved on to become homeless. Some entered long-term custody.

This study also examined 104 older adolescents discharged from two residential facilities from 1982 through 1985. Of the 104 discharged only one in six achieved independence without experiencing transitional difficulties.

The treatment foster family care program by Pressley Ridge Schools (Almeida et al., 1989) evaluated outcome data collected for the basic indicators of living on all its youths discharged between July 1983 and June 1985. Information obtained on each youth included where the youth was living, the restrictiveness of that living situation, the youth's school placement during the preceding year or amount of schooling completed, employment or dependency status, community or antisocial problems, any negative police contacts that may have occurred since discharge, and lastly, marital status, and whether a youth had any children. This exemplary exploratory study described the children who had left Pressley Ridge Schools one, two and three years after discharge. The study results indicate that 76 percent of the youths discharged were living in settings less restrictive than the treatment foster care program from which they were discharged.

Hull Community Services (1991) discovered that 74 percent of children discharged from the short-term treatment foster family care program went to family or relatives. None of the children was discharged to a more restrictive environment such as a group home or a residential institution.

Cost

The outcomes of human service programs can be fully evaluated only when their costs are considered (Posavac & Carey, 1989). White (1988) suggests that two methods of examining costs in relation to programs have emerged. The first is a cost-effectiveness analysis and the second is a cost-benefit analysis. A cost-effectiveness comparison can be made by simultaneously considering the costs of two or more alternatives and the effects of the alternatives on whatever scale is available. However, in a cost-benefit study, the monetary value of both the costs and the benefits of the program must be estimated. Cost-benefit analysis does not require comparisons between two alternatives, whereas cost-effectiveness analysis can only be done if two or more programs are being compared.

Chamberlain's (1990) experimental study design examined the effectiveness of a specialized foster care program for delinquent youth. The study hypothesized that fewer subjects in special foster care treatment would be incarcerated less frequently in follow-up than would subjects in institutional care. Significant differences were reported between the two groups on the rate of successful versus unsuccessful program completion and in post-program institutionalization rates.

This study also examined costs associated with post-program institutionalization rates for the two groups. During the first year after treatment, six of the 16 adolescents in the experimental group (38%) versus 14 of 16 in the comparison group (88%) were re-institutionalized. At a rate of 75 dollars per day, the first year cost to the state for the six incarcerated special foster care subjects was $103,650. The cost for the 14 incarcerated comparison subjects was $191,850. This amounts to a difference of over $88,000 and 1173 days between the two groups.

In year two of follow-up, seven of 16 subjects in the experimental group and 10 of 16 in the comparison group were incarcerated. The difference in the cost for incarceration between the two groups was $122,000 ($150,000 for the experimental subjects and $272,000 for the comparison subjects).

The costs of caring for children at a Yugoslavian institution were examined during an international treatment foster care conference in that country (Hudson, Galaway, & Maglajlic, 1990). The centre employed 30 staff to care for 90 children from infancy through adolescence. Monthly costs of care per child at the institution was 4300 dinar per month. The authors suggested that a net saving of 147,500 dinar and between 45 to 90 jobs could be created if Yugoslavian families were to take on one or two children from the institution.

DeBucquois and Francaux (1989) surveyed Belgium residential institutions and foster families. They concluded that the existing foster care system seemed to be simultaneously more effective and less costly than institutional care. The costs of foster care were found to be constant and higher for foster families actively being supervised by a service. These families average $28,000 per child per year. For institutional care, costs per bed and per day were found to be linked with the degree of difficulty of the child. For example, less difficult children averaged $65,000 per child per year while more difficult children averaged $80,000 per child per year.

Knapp and Fenyo (1989) compared hidden costs of providing residential care to family foster care. Hidden costs were defined as the costs of recruiting, assessing, selecting, and matching foster families, administrative overhead costs, and all the extra costs of foster care borne by foster families but not met by foster care payments.

Their work indicated that in absolute terms the hidden costs of foster and residential care were not greatly different for placements lasting more than three months. The biggest difference came in short term placements where field social worker costs differed significantly between the two types of care. The authors also concluded that when hidden costs of the two types of child care were added into the equation, the cost advantage enjoyed by foster family care narrowed slightly but did not disappear.

INDEPENDENT VARIABLES

The independent variables identified in the literature review are age, gender, ethnicity, length of time in program, and child welfare status. This study attempted to follow a group of children who were part of the Downey (1991) and Hoffart (1990) studies and therefore the same independent variables as used in those studies were selected.

This is an exploratory study and limited information is available to make comparisons, therefore the most common independent variables were selected. Studies which looked at similar characteristics of children in residential and treatment foster family care are discussed below.

Age

A study by Naslund and Stephens (1989) surveyed foster homes and residential programs in the Calgary Region of Alberta Family and Social Services to determine the profiles of children in care in that region. The average age of children in the study was 11.22 years with foster care serving a younger population (8.35 years) and residential programs an older one (13.28 years).

Bryant (1981) and Webb (1988) found that placement of children in treatment foster family programs occurred from birth to 18 years of age, although the vast majority of

treatment foster family programs serve children in their adolescent and preadolescent years.

Galaway, Nutter, and Hudson (1991) suggest treatment foster family clients were primarily white males between the ages of 12 and 18 years who were referred from the child welfare system. They also found that most referrals for treatment foster family care came from child welfare agencies.

Bauer and Heinke (1976) found that the age range of children accepted into the treatment foster family care program operated by the Wisconsin Department of Health and Social Services was from two and a half to 17 years of age. About half of the children were 12 or younger at the time of placement and the other half were teenagers.

Children and youth served by Pressley Ridge Schools (Almeida et al., 1989) were mainly referred by child welfare with the average age being 13.5 years. The current ages ranged from four to 18 years of age.

Hull Community Services (1991) had 80 percent of its population falling between six and 16 years of age. The age of the child was therefore included in this study as an important continuous variable.

Gender

The Naslund and Stephens (1989) study suggested that in June of 1989 the child welfare population in residential care and foster care was comprised of 56 percent male and 44 percent female. There was also a suggestion that males were more likely to be placed in a residential facility than in foster care.

Downey (1991) used an exploratory study to compare the behaviours of children in assessment foster care and group homes in the Calgary Region of Alberta Family and Social Services. She concluded that there were no significant differences in their behaviours. Her study contained 51 children with 33 percent being female and 67 percent being male.

Bauer and Heinke (1976) had 85 percent males in their study while 15 percent were females. Sex ratios of children tended to follow roughly those typical of placement of emotionally disturbed children with two boys to one girl (Gillham, 1983).

The Pressley Ridge Schools (Almeida et al., 1989) population was evenly split between male and female. Hull Community Services (1991) identified children referred to its short term treatment foster family care program as being 60 percent female and 40 percent male.

Gender was included in this study as a nominal variable.

Ethnicity

Naslund and Stephens (1989) found that only 16.5 percent of the population was native while 83.5 percent was non-native. Downey (1991) also had a small native population in her study. Only seven of the 51 children were native.

The majority of the children and youth served by Pressley Ridge Schools (Almeida et al., 1989) was mainly black. Caucasians made up the next largest group.

Ethnicity was included in this study to determine which children are currently being served by these two programs.

Length of time in program

Naslund and Stephens (1989) found the average length of stay for children in foster care was 2.7 years, while children's stay in residential programs was one year. The average length of stay for children in the Hull Community Services' (1991) short term program was 78 days with a range from one to 189 days.

Length of time was included in this study as an important variable related to the amount of services children received. Length of time was also used to calculate the costs per child.

Child welfare status

Naslund and Stephens (1989) found that the largest child welfare status category was permanent guardianship orders at 48 percent with custody agreements being the second largest at 25 percent.

Downey (1991) found that 51 percent of her sample had custody agreement with guardian as their child welfare status. The second largest group was permanent guardianship order at 25 percent.

Eighty-eight percent of the children in the Hull Community Services (1991) study were either under apprehension or in custody agreements.

Child welfare status was included in this study to determine if the child's status had changed in one year. Child welfare status is also a measure of how involved a child is with Alberta Family and Social Services. For example, a permanent ward is in-the-care of the Department until 18 and represents extensive child welfare involvement.

SUMMARY

The outcome studies on treatment foster family care and residential care suggest that treatment foster family care and residential care provide treatment for children of both sexes, ages, and from some ethnic groups. The literature also

suggests that treatment foster family care discharges children to less restrictive environments than residential care. Furthermore, other studies indicate that treatment foster family care placement outcome costs for children and youths are lower than costs associated with residential service. The independent variables included in the study included age, gender, ethnicity, length of time in program, and child welfare status.

QUESTIONS FOR STUDY

The aim of this study was to determine placement outcomes for residential care and treatment foster family care. As well, costs associated with residential care and treatment foster family care were to be explored. The purpose of the study was to explore the possibility that treatment foster family care is a cost-effective alternative to residential care. The literature review has identified four questions for this study which addressed this problem.

1. What are the placement outcomes of children who have received treatment foster family care and residential care?

2. What are the costs associated with treating children in treatment foster family care and residential care?

3. What are the characteristics of the children in treatment foster family care and residential care?

4 What is the length of stay for children in treatment foster family care and residential care?

HYPOTHESES

An hypothesis is a tentative answer to a research question derived from a thorough review of the literature (Weinbach & Grinnell, 1987). The review of literature on studies of treatment foster family care and residential care along with the research questions suggest two possible relationships which can be explored. The two hypotheses are stated below.

1. CHILDREN RECEIVING TREATMENT FOSTER FAMILY CARE WILL HAVE SIGNIFICANTLY LESS RESTRICTIVE PLACEMENT OUTCOMES THAN CHILDREN RECEIVING RESIDENTIAL CARE.

2. CHILDREN RECEIVING TREATMENT FOSTER FAMILY CARE WILL HAVE SIGNIFICANTLY LESS PLACEMENT OUTCOME COSTS THAN CHILDREN RECEIVING RESIDENTIAL TREATMENT.

CHAPTER 3

RESEARCH DESIGN

STUDY SETTING

The study took place within the Children and Family Program Services Unit of Alberta Family and Social Services, Calgary Region.

The mandate of the Department of Alberta Family and Social Services is to protect and promote the physical, mental, and social well-being of Albertans (Alberta Family and Social Services, 1989). The mission is therefore to ensure the development and delivery of services which protect and promote well-being, while encouraging and supporting individual, family and community independence, self-reliance, and responsibility to the greatest degree possible.

Alberta Family and Social Services' philosophy and primary intent is to maintain children in their homes. However, it is an unfortunate fact that sometimes it is necessary to place a child out of home for a period of time. The first option in these cases is placement of the child with other members of the family or family friends. When this is not possible or does not meet the needs of the child, foster care is a second option. Finally, when foster care is also not an option and for reasons specific to the needs of the

individual child, a referral to services provided under Children and Family Program Services is then sought.

THE PROGRAMS

Children and Family Program Services provide programs for out-of-home care of children. Residential care and treatment foster family care are two programs of Children and Family Program Services and they are two programs in this study.

The selection of the residential and treatment foster family care programs into this study was determined by two previous studies. The Downey (1991) study examined behaviours of children living in either a contracted assessment receiving foster or group home. Hoffart (1990) looked at behaviours of children living in institutions and long-term group home care. The purpose of using the programs from these two studies was to follow up the children one year later. The information from all three studies would give Alberta Family and Social Services a snapshot of a select group of children in its care.

Under an agreement with Alberta Family and Social Services the names of the three residential care and three treatment foster family care programs will not be used, in order to ensure confidentiality. The study will explain the basic characteristics of the programs.

Residential Programs

The three residential programs included in the study are the major treatment programs contracted by Children and Family Program Services of Alberta Family and Social Services. Children and Family Program Services provides all the programs for children in out-of-home care. The goal of the residential programs in this study is to assess the child, offer treatment, control behaviours, and discharge the child back to the community. All three house the children and provide treatment on site. Treatment is often varied and can take many forms from psychological testing to behaviour management. Children are confined in accordance with the centre's need to control the child's behaviours. The centres are staffed 24 hours a day by qualified child care staff and professionals. Children are usually discharged when they have achieved their goals or turn 18 years of age.

Treatment Foster Family Care Programs

The treatment foster family care programs in the study are all considered short-term care in that children are not to stay longer than three to six months. The goal of the programs is to offer safety, assessment, support, and treatment for children who require short-term, out-of-home care. The treatment foster care parents are all professionally trained and

receive regular evaluations. Family-based treatment services such as family counselling and mental health counselling are provided for children with emotional and behavioral problems.

Stated support services to the foster families include 24-hour, on-call crisis support, monthly group meetings with other foster parents, weekly in-home meetings and observations and daily phone contact with the liaison social worker.

COMPARABILITY OF RESIDENTIAL CARE TO TREATMENT FOSTER FAMILY CARE

The need for like-with-like comparisons of cost is paramount (Knapp & Fenyo, 1989). It is the only way to get a true picture of which program is cost-effective. Alberta Family and Social Services consider residential programs and treatment foster family care programs to be the responsibility of Children and Family Program Services (PARC). All the children proceed through a central screening committee to Children and Family Program Services and then to either a residential program or a treatment foster family program. All the children and youth in the study were referred to the residential programs and treatment foster family care programs by the Calgary Regions Program and Referral Committee. This screening committee meets regularly to discuss and recommend the most appropriate resource placement available for children under the care of the Department within the Calgary Region.

The choices range from returning children to the community to live on their own or with a parent, to placement in a secure treatment facility. Hawkins et al. (1989) suggest the following similarities can be found between treatment foster family care and residential care.

These include:

- planned procedures for teaching and motivating adaptive behaviour;
- personnel who are not highly credentialed mental health professionals, for the most part, but instead are trained by the agency;
- the planned procedures are fairly consistent from client to client;
- procedures are applied 24 hours a day and procedures are directed at individually selected goals.

The residential programs and treatment foster family care programs in this study exhibited all of the above similarities. Residential and treatment foster family care programs are both contracted by Children and Family Program Services to serve severely behaviourally and emotionally disturbed children. As such, the above characteristics are also written into their contracts.

POPULATION

This study attempted to use the identical children in the Downey (1991) and Hoffart (1990) studies. Downey (1991) purposely selected a cross section of children living in either short-term treatment foster family care or group home care in the City of Calgary between June 1, 1991 and July 31, 1991. Hoffart (1990) purposely selected a cross section of children living in institutions and long-term group home care between May 1, 1990 and June 30, 1990. The purpose of using the same sample from these two studies was to follow up these children one year later. This information would then assist Alberta Family and Social Services with planning for children in its care.

The following process was used to select the sample. First, a list of case records from both the Downey (1991) and Hoffart (1990) studies was compiled. This list was then compared to the billing list used by Alberta Family and Social Services to pay the residential and treatment foster family care programs for that same time period.

However, there were discrepancies between the lists compiled by Hoffart (1990) and Downey (1991), and the Alberta Family and Social Services' billing list. The Hoffart study matched the billing list except for one name but the Downey list only matched the billing list on 11 of the case records. The discrepancies were caused by the coding schemes used by

Downey (1991) and Hoffart (1990) which made it difficult to identify the children.

The present study overcame this problem by using the following process to select children into the study. First, the number of beds Alberta Family and Social Services paid for in the identified program for that billing period was determined. For example, Alberta and Family Social Services paid for six beds in treatment foster family care program number two during that time.

Second, the case records of children who participated in the Downey (1991) and Hoffart (1990) studies and who matched the billing list were admitted into the study.

Third, when the case records from the Downey (1991) and Hoffart (1990) studies did not match the names submitted for billing, the names of children submitted for billing were used. Therefore, the children admitted into the study included children in the Downey (1991) and Hoffart (1990) studies and children on the billing list.

Two criteria had to be satisfied for a child to be included in the study.

1. The child had to be in one of the three residential programs or one of the three treatment foster family care programs within the Calgary Region as shown on the Child Welfare Information System.

2. Only children who were in one of these programs during the months of May, June, or July 1990, which was one year earlier, were included.

The population was therefore defined as being the total population of children (newborns to 18 years of age), who were under the care of either one of the three residential treatment programs or one of the three treatment foster family care programs during May, June, or July, 1990 in the Calgary Region.

The final population from the three residential programs was 55 children and the treatment foster family care programs was 26 children. Of the 55 children in residential care, 16 were in program one, 17 were in program two and 22 were in program three.

Treatment foster family care had 26 children, with 14 children in program one. Treatment foster family care program two and three each had 6 children. Table 3.1 breaks down the number of children by program type.

Table 3.1

Number of Children by Program Type

Program Type	Number of Children	Percent
Residential Care		
Number 1	16	28
Number 2	17	32
Number 3	22	40
Sub-total	55	100
Treatment Foster Family Care		
Number 1	14	54
Number 2	6	23
Number 3	6	23
Sub-total	26	100
Total	81	100

METHOD

A posttest only comparison group design (Grinnell, 1988) was used for the study. The selection of a posttest only comparison group research design allows for some data to be generated on factors associated with outcome but no causes. The posttest only comparison group design is appropriate because there is an absence of clear data indicating that treatment foster family care for children is a cost-effective alternative to residential care.

INSTRUMENTATION

Dependent Variable

Placement outcome was the dependent variable in this study. Placement outcome was operationalized by the Children's Restrictiveness of Living Environments Instrument (Thomlison & Krysik, 1992). The instrument ranks 34 mutually exclusive living environments for the degree of restrictiveness. The mean restrictiveness scores were determined by averaging the scores for the number of placements a child has occupied. The change in the level of restrictiveness a child has experienced is measured on a seven-point category partition scale. For example, the Children's Restrictiveness of Living Environments Instrument assigns a value of 3.57 to treatment foster family care and 4.64 to residential care. Therefore, a value can be given to the level of restrictiveness of the place where a child resides.

The instrument also provides a procedure for measuring the costs associated with a setting by calculating the number of days in a placement and multiplying by the corresponding per-diem cost. Costs are associated with the level of restrictiveness by virtue that the more restrictive an environment then the higher the cost. For example, the costs associated with a child living in a highly restrictive environment such as secure treatment are very high. Secure

treatment has a rating of 6.58 on the Children's Restrictiveness of Living Environments Instrument.

The Children's Restrictiveness of Living Environments Instrument has an alpha coefficient of .99 which represents a high degree of internal consistency. The test-retest reliability is at the .05 level of significance. Correlation coefficients for test-retest reliabilities are presented in Appendix C. An example of the Children's Restrictiveness of Living Environments Instrument is contained in Appendix D.

Independent Variables

The independent variables chosen from this study were the same ones used in the Downey (1991) and Hoffart (1990) studies. As such, the instrument to measure the independent variables was constructed by combining the instruments from the Downey (1991) and Hoffart (1990) studies. This would then allow some comparisons to be made with those two studies. The instrument was pilot tested using ten open case records from the Child Welfare Information System. The five specific demographic variables gathered are listed below:

Age. Age of the identified child in treatment foster family care or residential care at the date data was collected. Age was entered in years.

Gender. Female or male. Gender was dichotomous variable, and coded as male = 1 and female = 2.

Ethnicity. Non-native, native, metis, other, and unknown. Non-native was coded = 1, Native was coded = 2, Metis was coded = 3, Other was coded = 4, and unknown was coded = 5.

Length of time-in-program. The total number of days the child remained in treatment foster family care or residential care from intake to termination was recorded. Follow-up days are not included.

Child Welfare Status. The level of child welfare status indicated on the case files at the point of exit from treatment foster family care or residential care was included. The eight levels of status included: support agreement, supervision order, custody agreement, temporary guardianship order, permanent guardianship order, apprehension, and no legal status. Each variable was set up as a dichotomous yes/no variable. For example if the child welfare status was permanent guardianship the data were coded as permanent guardianship = 1, and not permanent guardianship = 0.

DATA COLLECTION

The data was collected by the researcher using the Child Welfare Information System at Alberta Family and Social Services from May 28 to June 10, 1991. Case records were coded by number, and a separate code translation was kept in the investigator's office file.

VALIDITY

Six closed child welfare case records were compared with the computer records to see if the information matched the paper file records. No difference in information was found.

RELIABILITY

A pilot test was conducted using the names of children from another program. The pilot test indicated that the demographic instrument had to be changed to allow for the inclusion of "No Status" in the Child Welfare Status section of the instrument. That change was made before data collection began. No other reliability checks were done.

METHODOLOGICAL LIMITATIONS

Four methodological limitations have been identified. These include:

1. Non-equivalent programs: No pretest data was collected so there was no evidence that the programs were equivalent in the beginning.

2. Internal validity: The programs were not equivalent, because they were at different levels of development.

3. Intervening variables: The posttest only comparison group design does not control for intervening variables.

4. Archival data: There is no control over the quality of the data put into the child welfare information system case records.

SUMMARY

A posttest only comparison group research design was used to collect archival data from the Child Welfare Information System at Alberta Family and Social Services. The Children's Restrictiveness of Living Environments Instrument was used to collect placement outcome data for a population of 81 children

who were residing in either a residential program or a treatment foster family care program in May, June, or July 1990. A questionnaire was used to collect data for the independent variables.

CONFIDENTIALITY

A letter of consent was granted by the Calgary Regional Manager of Alberta Family and Social Services to access case records in the Child Welfare Program (Appendix F). As well, the study was approved by the University of Calgary Ethics Committee.

Only the researcher had access to the data. The data will be destroyed six months after completing the study. The identity of clients and their families will remain confidential as no personally identifiable information was obtained.

CHAPTER 4

FINDINGS AND DISCUSSION

The subject of this thesis is whether children in treatment foster family care have less restrictive placement outcomes than children in residential settings one year later. The second problem area which is addressed here concerns the costs associated with treating children in these two programs.

This chapter begins with a discussion of the findings as they relate to the dependent variable. Placement outcome is discussed by restrictiveness and then cost. This discussion will also include the testing of the two hypotheses. Finally, the independent variables are discussed.

DEPENDENT VARIABLE: PLACEMENT OUTCOME

Restrictiveness

This section looks at the level of restrictiveness of the placement outcome for children one year following residential care and treatment foster family care. A lower level of restrictiveness indicates an improvement in the child's behaviour. A higher level of restrictiveness indicates that the child may be doing not as well. The lower the level of restrictiveness also indicates that the child maybe closer to

living back in the community. A change in restrictiveness is also a good indication that the child has achieved the goals that were set out by the program and can now live in an environment which offers more choices to the child.

The results indicate that children as a group who received residential care were living in a placement environment with a mean restrictiveness rating of 3.61 and a SD of 1.18 on the Children's Restrictiveness of Living Environments Instrument. This suggests that some children who were living in a residential centre in 1990 were now living in a less restrictive living arrangement such as a long-term group home.

Residential care children had a minimum restrictiveness value of 1.51 and a maximum value of 6.40 for their living arrangements. These values seem to indicate that some residential care children had placements that ranged from a self-maintained residence to a closed youth correction facility, which is one of the more restrictive placements on the Children's Restrictiveness of Living Environments Instrument.

The living environments of children as a group in treatment foster family care children at one year later had a mean rating of 2.91 and a SD of .50 on the same instrument. This rating corresponds to either supervised independent living or an independent living preparation group home. The placements ranged from a minimum mean value of 2.45 to a maximum value of 3.57. These values indicate that one year later some children who were in a treatment foster family home

were in either the home of a biological parent or remained in the treatment foster family home.

The difference in restrictiveness of the children as a group between residential care and treatment foster family care in restrictiveness change was found to be significant with a t value of 3.77. Table 4.1 shows the mean restrictiveness scores by program type for the residential and treatment foster family care programs.

Table 4.1

Mean Restrictiveness Scores and Standard Deviations (SD) by Program Type

Program Type	Mean Score	SD	t
Residential Care	3.61	1.18	3.77*
Treatment Foster Family Care	2.91	.50	
Total	3.39	1.06	

*p< .05 (two-tail)

In the next section residential and treatment foster family care are examined by the mean restrictiveness scores broken down by type of program. These mean restrictive scores indicate how successful individual programs were in placing children in less restrictive environments.

Residential care mean restrictiveness scores ranged from 3.24 for program number two to 4.07 for program number one. These values indicate that all the residential programs were successful in achieving lower restrictiveness scores.

Treatment foster family care restrictiveness scores ranged from a minimum mean value of 2.73 for program one to a maximum value of 3.27 for program three. As with the residential care programs, the treatment foster family care children as a group were living in less restrictive environments at one year later. Treatment foster family care children had placements that varied from the home of a biological parent to remaining in a treatment foster family care home.

The differences in restrictiveness of placement outcome between the residential care and treatment foster family care programs were found to be significant with an F-ratio of 3.1525 and an F-probability of 0.0123. Further analysis using a one-way analysis of variance found residential program number one and treatment foster family care program one to be significantly different at the 0.05 level. Table 4.2 shows the mean restrictiveness scores for the program types of care.

Table 4.2

Mean Restrictiveness Scores by Program Type of Care

Program Type	Mean Score	n	F
Residential Care			
Program 1	4.07	16	3.1525*
Program 2	3.24	17	
Program 3	3.57	22	
Total	3.61	55	
Treatment Family Care			
Program 1	2.73	14	
Program 2	2.96	6	
Program 3	3.27	26	
Total	2.91	26	

*$p < .05$ (two-tailed)

Test of Hypothesis one:

As stated in chapter two, hypothesis one is:

> *Children receiving treatment foster family care will have significantly less restrictive placement outcomes than children receiving residential care.*

The results of the study support hypothesis number one in that children as a group from treatment foster family care were found to have significantly less restrictive placement outcomes than children as a group requiring residential care. Treatment foster family care children tended to be living in less restrictive environments such as supervised independent living or an independent living preparation group home while residential care children were in environments such as long-term group homes. Given the average age of treatment foster family care children (10.9 years) the results suggests that treatment foster family care children either went to less restrictive environments such as the home of their biological parents or moved on to a long-term group home. The minimum and maximum restrictiveness values of the nominal placements support this assumption. The minimum restrictiveness value was 2.45 while the maximum value was 3.86. The mean restrictiveness level falls in the middle of these two values.

The results also suggest that in two of the three treatment foster family care programs the children did not move to a more restrictive environment than a treatment foster family care home. The one treatment foster family care program

in which children did move to a more restrictive environment was found to be in a no more restrictive environment than a long-term group home.

However, in all of the three residential care programs the maximum placement restrictiveness values were either at the same or at a more restrictive value, with one program having a score that was the highest on the Children's Restrictiveness of Living Environments Instrument. When looking at the minimum restrictiveness values for residential care, it is interesting that two out of the three programs had minimum values which were the lowest on the instrument. This could be attributed to residential care children turning 18 and not being eligible for child welfare status anymore.

Children in residential care programs showed a larger decrease in restrictiveness than children in treatment foster family care. Residential care children had a 0.988 change in restrictiveness on the Children's Restrictiveness of Living Environments Instrument while treatment foster family care children had a 0.682 change. When this change is superimposed upon the Children's Restrictiveness of Living Environments Instrument, it supports the mean restrictiveness levels found for residential care and treatment foster family care. For example, a 0.988 decrease in restrictiveness for residential care children would see them move from a residential centre to long-term group home. A 0.658 decrease in restrictiveness for treatment foster family care children would see them relocate

from a treatment foster family care home to a supervised independent living program.

A change in restrictiveness can also be seen by examining the Child Welfare status of residential care and treatment foster family care children. For example, all the children in this study had child welfare status one year earlier. Child welfare status is necessary for a child to be eligible for placement in either residential care or treatment foster family care (Alberta Family and Social Services, 1989).

Now one year later 39 percent of treatment foster family care children had no child welfare status while 16 percent of residential care children had no child welfare status. This indicates that 39 percent of the treatment foster family care children were living back in the community with no child welfare status. These children were not under the control of Alberta Family and Social Services and in a minimally restrictive environment.

When these results are looked at along with the mean ages of residential care (14.5 years) and treatment foster family care (10.9 years) children, there is also an indication that the majority of residential care children lost child welfare status because of their age. However, treatment foster family care children lost child welfare status because they were returned to a biological parent or a relative, not because they reached the age of 18.

From a restrictiveness point of view, the residential children who graduated from the child welfare system were classified to be in the least restrictive placement possible. They were given values for a self-maintained residence. That means a drop of 3.12 on the Children Restrictiveness of Living Environments Instrument. Thirty-nine percent of the treatment foster family care children because of their age did not go into a self-maintained residence but went to live with parents. This change is only a 1.12 difference on the Restrictiveness of Children's Living Environments Instrument. Therefore, the older children residential children who left the system showed a greater drop in restrictiveness than treatment foster family care children. Even with some of the residential children having the least restrictive rating on the Restrictiveness of Children's Living Environment, the mean restrictiveness rating for residential children was greater than the mean restrictiveness rating for treatment foster family care children.

Cost

This part examines cost in relation to placement outcome and its relationship to residential and treatment foster family care. Costs were calculated by dividing the total cost of a program by the number of beds in the program and the number of days the program operated in a year. This figure is

the per-diem cost to Alberta Family and Social Services for that service. Placement outcome costs were determined by multiplying the per-diem rate by the number of days spent in the program. Therefore, costs are also an indicator of how long children stay in residential or treatment foster family care and the amount of service received.

Per-diem cost

The costs of residential care and treatment foster family care are dependent on per-diem costs and the amount of time children spent in residential care and treatment foster family care programs. Per-diem costs for the various levels of restrictiveness ranged from zero dollars for a self-maintained residence to $268.00 a day for a residential care program. The average cost of residential care per day was $197.75 while the mean cost of treatment foster family care per day was $78.10.

Average cost

The average cost of residential care was found to be $101,705.57 per child. The SD was $41,881.63. The mean cost for treatment foster family care per child was $23,834.66 with a SD of 11,541.96. The average cost for the total population was $76,709.97 per child. A comparison of residential care to treatment foster family care produced a t value of 6.68 and

the relationship was found to be significant. Table 4.3 displays the mean cost per child by type of placement.

Table 4.3

Mean Cost per Child by Program Type

Program Type	Mean Cost ($)	n	t
Residential Care	$101,705.57	55	6.68*
Treatment Care	$23,834.66	26	
Total	$76,709.97	81	

*p < .05 (two-tailed)

The next section will discuss cost of individual residential care and treatment foster family care programs. Costs were determined by per-diem rates and days in the program. A high cost indicates either a high per-diem rate or a high number of days in the program.

Residential care costs ranged from a average cost of $60,679.53 for program number two to $160,355.46 for program number one. Residential care had a minimum cost of $14,293.80 to a maximum cost of $470,265.54. Treatment foster family care programs varied between $14,317.28 for program number one to $40,099.89 for program number two. Treatment foster family care minimum and maximum costs ranged from $65.41 to $67,472.20.

Analysis of variance, produced an F ratio of 10.51 with the F probability being significant at the .05 level. A

multiple comparison found residential care program one to be significantly different from all other programs while residential care program number three was significantly different from treatment foster family care program one. Table 4.4 displays the mean cost per child by the individual program types.

Table 4.4

Mean Cost ($) per Child by Individual Program Type

Program Type	Mean Cost($)	n	F
Residential Care			
Number 1	$160,355.46	16	10.51*
Number 2	$60,679.53	17	
Number 3	$90,753.04	22	
Treatment Foster Family Care			
Number 1	$14,317.28	14	
Number 2	$40.099.89	6	
Number 3	$29,776.63	6	
Total	$76,709.97	81	

*$p < .05$

Test of hypothesis two

As stated in chapter two, hypothesis two is:

> *Children as a group receiving treatment foster family care will have significantly less placement outcome costs than children receiving residential treatment.*

Cost was also found to be significantly less for treatment foster family care than residential care. This is not surprising given the fact that maintaining children in residential care facilities tends to cost more than treatment foster family care homes (Hawkins et al., 1989).

The present study found that the mean cost of a residential care program was $103,929.34 while the mean cost of treatment foster family care was only $28,064.60. Given these figures, it is not unexpected that costs are significantly different. On the surface, this study suggests that substantial amounts of money can be saved by redirecting funding from residential care to treatment foster family care. However, the time spent in individual programs also has to be considered. The longer a child stays in a program the more money it costs. Not only does it costs the state but it also costs the child. One must wonder what effect it would have on a child living in a treatment resource for close to two years.

INDEPENDENT VARIABLES

The independent variables are age, gender, ethnicity, length of time in program, and child welfare status. Each of the independent variables is discussed below.

Age

The average age of the total population (81) was 13.4 years. The average age for residential care was 14.5 while it was 10.9 for treatment foster family care. The mean ages indicate that older children are being placed in residential care while younger children live in treatment foster family care homes. These results mirror the results of the Naslund and Stephens (1989) study. Table 4.5 displays the mean age by program for children in the study.

Table 4.5

Mean Age in Years by Program

Program	Mean Age in years	n
Residential Care	14.5	55
Treatment Care	10.9	26
Total	13.4	81

Gender

There was a higher percentage of males in treatment foster family care (65%) than residential care (61%). These results were different than the Naslund and Stephens (1989) study but similar to Bauer and Heinke (1976). Table 4.6 displays gender status of children by program.

Table 4.6

Placement by Gender

Gender	Residential Care n	%	Treatment Care n	%	Total n	%
Males	34	61	17	65	51	63
Females	21	39	9	35	30	37
Total	55	100	26	100	81	100

Ethnicity

Ethnic similarities existed between residential care and treatment foster family care. Seventy-three percent (40) of residential children and 80 percent (21) of treatment foster family care children were non-native. The next largest category for both programs was unknown. These results are consistent with Naslund and Stephens (1989) and Downey (1991).

Table 4.7 displays ethnicity by program for children in the study.

Table 4.7

Ethnicity by Program

Ethnicity	Residential Care n	Residential Care %	Treatment Care n	Treatment Care %	Total n	Total %
Non-native	40	73	21	80	61	75
Native	5	9	2	7	7	9
Metis	5	9	0	0	5	6
Other	0	0	0	0	0	0
Unknown	5	9	3	13	8	10
Totals	55	100	26	100	81	100

Length of time in program

The average number of days children spent in either residential care or treatment foster family care for the total population was 480 days. The average number of days children spent in residential care was 542 with a SD of 338. The mean number of days children spent in treatment foster family care was 350 with a SD of 242. The level of significance was at the 0.005 level with a t value of 2.90. The range for length of time in care is the reason for the large SD. The range was from one to 1137 days in care for residential care and one to 605 days for treatment foster family care.

Table 4.8

Mean Time in Days by Program

Program	Mean number of days	SD	n	t
Residential Care	542	338	55	2.90*
Treatment Care	351	242	26	
Totals	480	321	81	

*p < .05 (two tailed)

The amount of time children spent in treatment foster family care is a bit surprising because the programs selected for this study are supposed to be short term which assumes children are discharged after 90 days. As well, 17 percent of treatment foster family care children were still in the same home one year later. This could reflect the difficult time Alberta Family and Social Services has finding out-of-home placements for difficult children.

Child welfare status

Fifty-three percent (29) of children in residential care programs were still permanent wards one year after receiving residential treatment. This seems to indicate that residential care is the program of choice for permanent wards of Alberta Family and Social Services.

Twenty-three percent of the treatment foster family care children were permanent guardianship orders at one year follow-up. However, 39 percent of the children who received treatment foster family care had no child welfare status one year later as compared to 16 percent of the residential care children. In other words these children had no child welfare involvement at one year follow-up. Table 4.9 displays child welfare status for children in the study at one year.

Table 4.9

Child Welfare Status by Program at One Year

Child Welfare Status	Residential Care		Treatment Care		Total	
	n	%	n	%	n	%
Support Agreement	5	9	3	11	8	10
Supervision Order	1	2	2	8	3	4
Custody Agreement	7	13	2	8	7	9
Temporary Guardianship Order	4	7	3	11	7	9
Permanent Guardianship Order	29	53	6	23	35	43
Apprehension	0	0	0	0	0	0
No status	9	16	10	39	19	23
Total	55	100	26	100	81	100

SUMMARY

The data analysis indicates that residential care children are non-native children aged 14.5 years with 53% having permanent ward status one year later. They tended to stay in residential care facilities an average of 542 days, which cost $101,705.57 per child. The children in this study had placement outcomes with a mean restrictiveness value of 3.51 on the Children's Restrictiveness of Living Environments Instrument, which corresponds to a long-term group home.

Treatment foster family care children had a mean age of 10.5 years and were also predominately non-native with 39 percent of them having no legal status one year after receiving treatment foster family care. They tended to stay in treatment foster family care homes for an average of 351 days which cost an average of $23,834.66 per child. One year later, treatment foster family care children had mean placement outcome restrictiveness scores of 2.91. This corresponds to supervised independent living situations.

The change in restrictiveness can also be seen by looking at the child welfare status of the children one year later. Thirty-nine percent of the treatment foster family care children had no child welfare status one year later. This is significant because it shows the child is not living in a child welfare resource. As such, the child has not child welfare involvement.

Both restrictiveness and cost were found to be significant at the .05 level when comparisons were made between residential care and treatment foster family care. Finally, the results of the study support the two hypotheses.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

This final chapter discusses program, policy and practice issues as they relate to the findings.

PROGRAMS

The results of this study suggest that the treatment foster family care programs examined are viable and effective alternatives to the residential care programs selected. Thus, if more treatment foster family care programs like the ones in this study were available, many of the children referred to Children and Family Program Services could be served in less restrictive family environments with apparently at least as good success rates. In fact, 39 percent of the treatment foster children had no child welfare status at one year follow-up compared to 16 percent of the residential children. These results indicate that treatment foster family care can help reduce the extensive use of government intervention in the care of children.

Colton (1988) and Hudson et al. (1990) have suggested closing institutions and paying previous employees of the institutions to care for children in their own homes. In rural communities, treatment foster family care programs could

provide the possibility of introducing revenues into the communities. Providers could be located in the child's community and the income earned by the providers could flow back into each community, many of which are economically depressed.

However, as this study is exploratory in nature, the results should not be the sole factors that managers use to make future program funding decisions. Other factors such as which program best meets a child's needs and individual program costs need to be considered. The best interests of the child should be the most important principal guiding service.

Treatment foster family care also faces the challenge of finding enough qualified, trainable people to open their homes to these problem children. The success of treatment foster family care programs in the future will be their ability to adapt and change with the new demands placed upon them by the child welfare
system.

POLICY

One major policy area that comes to light when analyzing the results of this study is "creaming" that is, specific programs taking the children with the most chance of succeeding. Creaming on the part of treatment foster family care is suspected of the programs in this study because the average

age of treatment foster family care is lower than the literature suggests. The average age in this study is 10.9 years while other studies found the average age to be 12 years of age (Hudson, Nutter, & Galaway, 1990) to 13.5 years of age (Meadowcroft, 1990).

The above difference could also be the result of the Calgary Region's Program and Referral Committee channelling older children into residential programs and leaving the younger children to treatment foster family care. This could be a reflection of some workers inadvertently giving up on adolescents and attempting to give younger children the less restrictive family environment.

It could also be that treatment foster care programs have the same problems as regular foster care in that they have a difficult time attracting foster homes which serve teenagers. Creaming, or taking the children with the higher probability of success, is a policy issue that treatment foster family care programs have to address in their attempt to serve as an alternative to residential care. More research is needed in this area to determine which age of child is best served by treatment foster family care.

The results of this study can also be used in formulating public policy. This could be accomplished if program administrators shift from advocating their individual program to pooling resources to solve a problem. A commitment could be

made then to systematically and dispassionately examine alternative solutions until the problem is solved or ameliorated.

For example, program administrators often argue that the incidence of child abuse in this country is unacceptably high, and then assume that their program is the best one to ameliorate the problem. However, if they were to systematically examine the cost-effectiveness of alternative approaches, valuable progress could be made in solving the problem. As the pressure for program accountability increases, so will the demand for such systematic evaluations of choosing from alternatives. In the future, cost analysis may demonstrate that the best program may not always be the most cost-effective. Such information will not only be useful in selecting from alternatives, but also in improving ongoing programs.

PRACTICE

The logic of cost analysis is very tempting for human service managers who want to make a case about whether or not to fund a program. For example, this study employed a very common approach to cost analysis. The total program budget was divided by the number of people served and days in a year, to arrive at a per-diem cost. This figure identified the cost to Alberta Family and Social Services to buy a service for a child in a program. If only the obvious public costs are

considered in comparing the costs of having the child live in residential care versus treatment foster family care, one could conclude that Alberta Family and Social Services could save substantial amounts of money.

However, such a conclusion would be premature. Along with the social costs and psychological costs for the child, this mathematical calculation misses "hidden" costs. For example, contributed resources from outside the organization such as parent transportation, use of tutors, and donated equipment are ignored (White, 1988).

Treatment foster family care also has hidden costs such as having one treatment foster family care parent available at all times to handle emergencies. White (1988) suggests that the stress of dealing with a severely emotionally disturbed child, for example, may contribute to increases in divorce rates with concomitant increases in unemployment compensation and child support payments. Residential care child care workers are on shifts and have days off so the same problems may not exist. Some other examples of treatment foster family care hidden costs include:

1. the costs of recruiting, assessing, selecting and matching foster families;

2. the support costs of field social worker's and treatment foster family care liaison social workers;

3. the costs of other services received by children in foster placements and by their birth and foster parents;

4. the administrative overhead costs;

5. the hidden costs of foster care borne by foster families but not met by boarding out payments;

6. the cost to foster families to own a home that accommodates the needs of a special child; and

7. the cost of respite care for treatment foster care parents.

Knapp and Fenyo (1989) found that hidden costs averaged 176 percent of the rates paid to foster parents but could be as much as 360 percent for those children in care for only a few days. Fifty percent of the hidden costs were claimed by case social worker and foster liaison social worker time. Proponents of an expanded treatment foster family care should not overlook these staffing burdens, nor their implications for placement supervision and quality assurance, particularly during the early days of a new placement.

The hidden costs of treatment foster family care have their equivalents for residential care. All residential care children are on a field social worker's caseload which means field social workers have to attend tracking meetings and supervision meetings about the child at the residential care facility. Residential care children also receive special health and education services not provided within the budget of the residential facility.

RECOMMENDATIONS

This study supports the arguments put forward by some child welfare agencies (Grad, 1990) that treatment foster family care is more cost-effective than residential care. As well, treatment foster family care placement outcomes were found to be less restrictive than residential care. These findings suggest that treatment foster family care should be expanded and funds diverted from residential care to treatment foster family care so the fostering end of the resource continuum can be expanded. However, a number of questions still need to be addressed before closing residential care facilities and moving totally to treatment foster family care. Some areas of further research include:

1. Further study of residential care and treatment foster family care programs to determine all the ingredients that contribute to program costs. If all resources needed to implement a program are not documented, findings may mislead those considering the implementation of a similar program. For example, a treatment foster family care program in a university town has access to student volunteers while a similar program in a large city may have to pay all of its personnel. Only when all the costs have been identified can a true cost analysis be done.

2. Cost-effectiveness analysis of individual treatment foster family care programs to determine which alternative is best suited to meet the needs of children. This study found a 16 thousand dollar difference between the lowest and highest priced treatment foster family care program. A similar study of residential care programs would also be beneficial.

3. Further outcome studies which explore variables such as recidivism, community adjustment, school adjustment, and contacts with the law. This along with comparisons of children's characteristics will give a clearer picture of which treatment foster family care or residential program is having the most success with a specific population of children.

4. A longitudinal study which follows children and programs for longer periods of time. Meadowcroft (1990) suggests an ongoing monitoring approach to evaluation. This approach contrasts with the present study which is more of a snap-shot approach. A major problem with such a periodic approach to evaluation research is that treatment foster family care programs do not stand still. They inevitably change after the evaluation is done and important new information needs are likely to go unattended, at least until the next evaluation is conducted.

5. Further study into the most appropriate and cost-effective continuum of care and the place that treatment foster family care should occupy on that continuum.

SUMMARY

This study compares the restrictiveness of placement outcomes and cost of residential care to treatment foster family care. The results indicate that the differences are significant for both restrictiveness and cost. However, this descriptive study is a snap-shot of 81 children who were in either a treatment foster family care or residential care facility in May, June, or July of 1990 and their living environments one year later. The findings suggest that treatment foster family care should be considered as a viable alternative to residential care. However, study is needed in this area to obtain a more complete analysis of the relationship between residential care and treatment foster family care.

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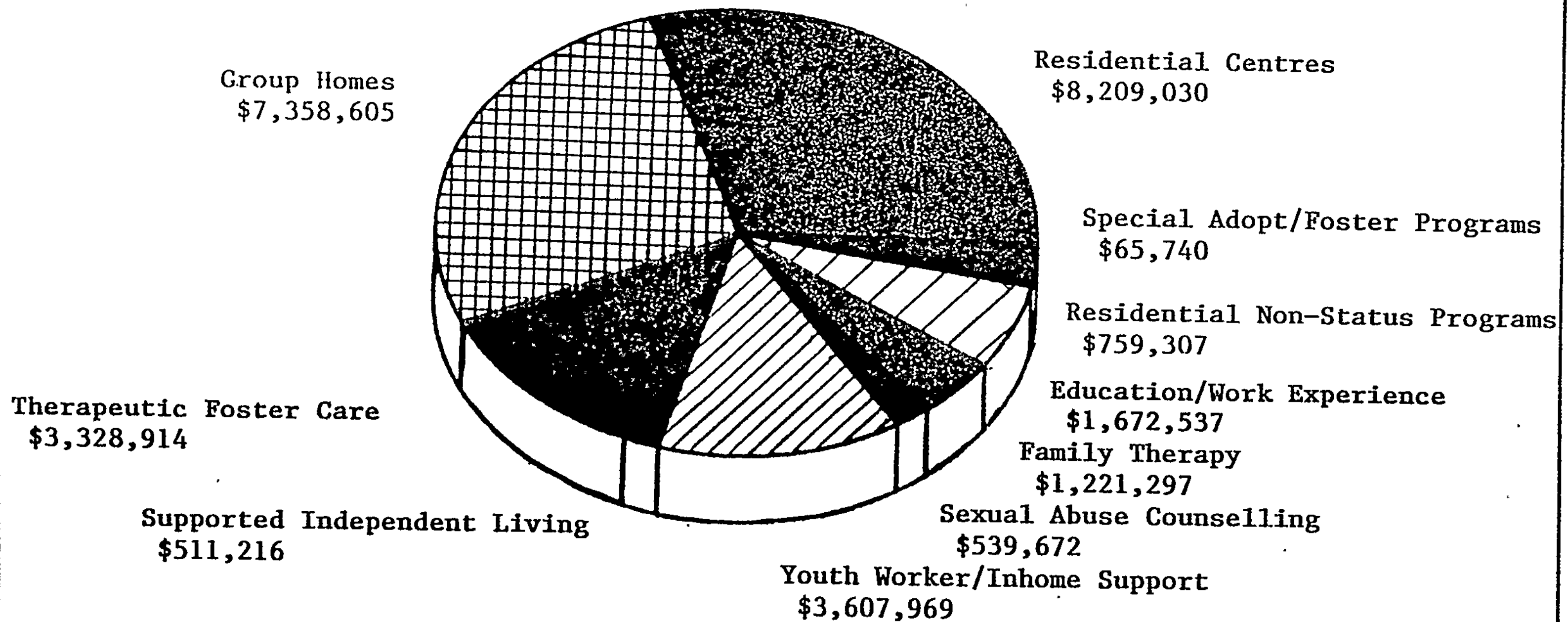
APPENDIX A

CALGARY REGION

TOTAL CONTRACT AND DISTRICT OFFICE FUNDING

CALGARY REGION JANUARY 1, 1991

Funding for Families Served Per Year



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APPENDIX B

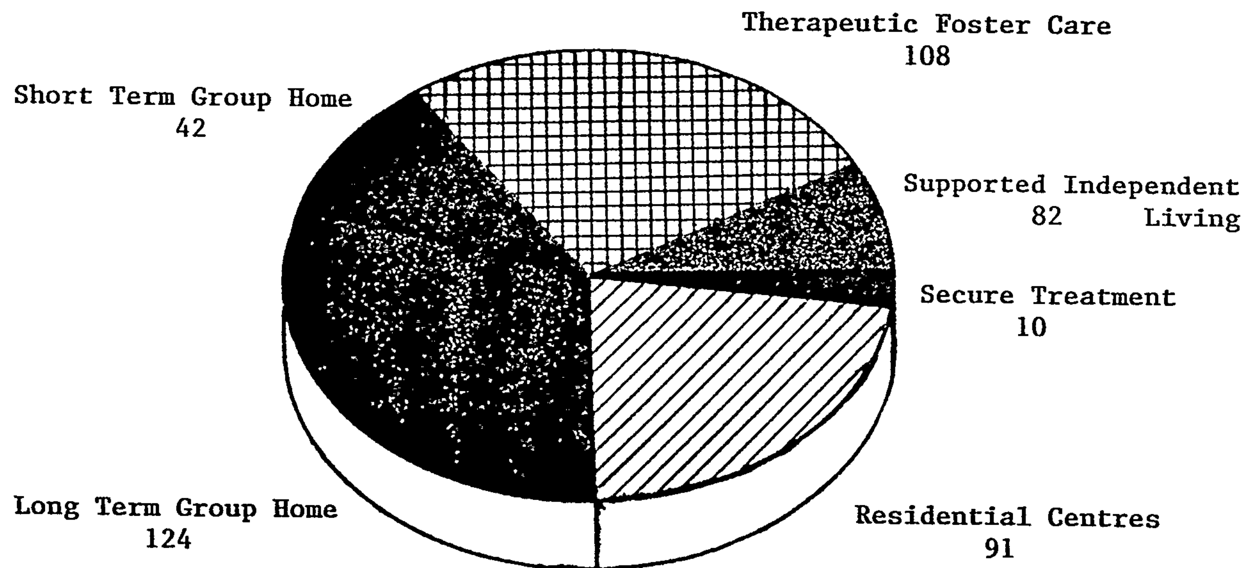
CALGARY REGION

1991 RESIDENTIAL PROGRAMS: CONTRACT SPACES

RESIDENTIAL PROGRAM

1991 Residential Programs:

Contract Spaces



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APPENDIX C

RESTRICTIVENESS OF CHILDREN'S LIVING ENVIRONMENTS VALUES RANK ORDERED BY MEANS, STANDARD DEVIATIONS, AND TEST-RETEST CORRELATION COEFFICIENTS

Restrictiveness of Children's Living Environments Values, rank-Ordered by Means, Standard Deviations, and Test-retest Correlation Coefficients

Rank	Living Environment Value	Mean (N=64)	SD	r (N=43)[a]
1.	Self-maintained residence	1.51	.90	.62
2.	Private boarding home	2.10	1.12	.67
3.	Home of child's friend	2.18	.95	.58
4.	Home of family friend	2.33	.97	.64
5.	Home of relative	2.40	.92	.69
6.	Home of biological parent	2.45	1.17	.63
7.	Homeless	2.60	2.31	.63
8.	Adoptive home	2.66	1.01	.68
9.	Supervised independent living	2.75	1.08	.42
10.	Independent-living preparation group home	3.09	1.08	.47
11.	Regular foster care home	3.13	.94	.71
12	Family emergency shelter	3.38	1.30	.62
13.	Receiving foster care	3.48	1.23	.63
14.	Treatment foster family care home	3.57	1.02	.64
15	Special-need foster home	3.58	1.03	.61
16.	Long-term group home	3.61	1.11	.66
17.	Youth emergency shelter	3.85	1.33	.48
18.	Receiving group home	3.86	1.04	.36
19.	Medical hospital	4.00	1.22	.67
20.	Private residential school	4.14	1.15	.45
21.	Wilderness camp	4.18	1.21	.54
22.	Ranch-based treatment centre	4.45	1.16	.53
23.	Open youth correction facility	4.60	1.19	.52
24.	Adult drug/alcohol rehabilitation centre	4.62	1.45	.62
25.	Cottage-based treatment centre	4.63	1.10	.47
26.	Psychiatric group home	4.85	1.22	.73
27.	Youth drug/alcohol rehabilitation centre	4.97	1.25	.59
28.	Armed services base	5.13	1.51	.62
29.	Young offender group home	5.40	1.18	.58
30.	Psychiatric ward/hospital	5.50	1.37	.57
31.	Psychiatric institution	6.10	1.01	.74
32.	Youth correction facility	6.40	.82	.67
33.	Adult correction facility	6.56	.73	.60
34.	Secure treatment facility	6.58	.64	.59

[a] All Pearson r correlations were significant at the .05 level (two-tailed test).

APPENDIX D

RESTRICTIVENESS OF CHILDREN'S LIVING ENVIRONMENTS INSTRUMENT

Restrictiveness of Children's Living Environments Instrument

Instructions for calculating the restrictiveness of children's living environments:

A. Complete the child and rating information.
B. On the right side of the items in column B, number the child's placements in sequential order and record the corresponding number of days in each placement, e.g., (1,30) indicates first placement, 30 days.
C. Record the corresponding Restrictiveness Score for each placement into the Restrictiveness Formula in column C, i.e., R_{p1}, represents the restrictiveness score of the child's first placement. Calculate the totals.
D. Record the corresponding per diem cost and the number of days in each placement in column D. Calculate the totals.

A. Child Name: ____________ (last) ____________ (first)   Rater Name: ____________

Child Birthdate: ______ / ______ / ______ (year) (month) (day)   Date Completed: ______ / ______ / ______ (year) (month) (day)

Child Identification Number: ____________

B. Restrictiveness Scores

Rank	Mean	Living Environment Value
1.	1.51	Self maintained residence
2.	2.10	Private boarding home
3.	2.18	Home of child's friend
4.	2.33	Home of family friend
5.	2.40	Home of relative *(4,450)*
6.	2.45	Home of biological parent
7.	2.60	Homeless
8.	2.66	Adoptive home
9.	2.75	Supervised independent living
10.	3.09	Independent living preparation group home
11.	3.13	Regular foster care home
12.	3.38	Family emergency shelter
13.	3.48	Receiving foster care
14.	3.57	Treatment foster family care home *(3,270)*
15.	3.58	Special needs foster home
16.	3.61	Long-term group home
17.	3.85	Youth emergency shelter
18.	3.86	Receiving group home *(1,30)*
19.	4.00	Medical hospital
20.	4.14	Private residential school
21.	4.18	Wilderness camp
22.	4.45	Ranch based treatment center
23.	4.60	Open youth correction facility
24.	4.62	Adult drug/alcohol rehabilitation center
25.	4.63	Cottage based treatment center *(2,145)*
26.	4.85	Psychiatric group home
27.	4.97	Youth drug/alcohol rehabilitation center
28.	5.13	Armed services base
29.	5.40	Young offender group home
30.	5.50	Psychiatric ward in a hospital
31.	6.10	Psychiatric institution
32.	6.40	Closed youth correction facility
33.	6.56	Adult correction facility
34.	6.58	Secure treatment facility

C. Restrictiveness Equation

R_{p1} ____ − R_{p2} ____ = ________

R_{p2} ____ − R_{p3} ____ = ________

R_{p3} ____ − R_{p4} ____ = ________

R_{p4} ____ − R_{p5} ____ = ________

Total ______

D. Cost Equation

T_{p1} ____ x C_{p1} ____ = ______

T_{p2} ____ x C_{p2} ____ = ______

T_{p3} ____ x C_{p3} ____ = ______

T_{p4} ____ x C_{p4} ____ = ______

T_{p5} ____ x C_{p5} ____ = ______

Total # Days in Placement ____   Total Cost of Placement ____

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APPENDIX E

DEMOGRAPHIC INSTRUMENT

DEMOGRAPHIC INSTRUMENT

1. Code # ___________________

2. Child's Gender (Circle one number)

   1. Male

   2. Female

4. Child's ethnic background (Circle one number)

   1. Non-native

   2. Native

   3. Metis (mixed)

   4. Other ___________________

   5. Unknown

5. Child's status (Circle one number)

   1. Support Agreement

   2. Supervision order

   3. Custody Agreement

   4. TGO

   5. PGO

   6. Apprehension

6. Date child entered program (yymmdd) ___________________________

7. Date child exited program (yymmdd) ___________________________

APPENDIX F

PROGRAM CONSENT

ALBERTA FAMILY AND SOCIAL SERVICES

FAMILY AND SOCIAL SERVICES
Calgary Region

Main Floor, Deerfoot Junction, Tower 3, 1212 - 31 Avenue N.E., Calgary, Alberta, Canada T2E 7S8 403/297-4575

May 8, 1991

Douglas Hughes
c/o Faculty of Social Work
University of Calgary
2500 University Drive N.W.
Calgary, Alberta
T2N 1N4

Dear Douglas:

I have read your proposal A Cost Comparison of Placement Outcome between Treatment Foster Family Care and Residential Care. I approve your accessing case records in the Child Welfare Program in order to obtain research data.

The following conditions apply:

1. The signed **Alberta Family and Social Services Statement of Agreement to Guidelines for Research** are adhered to.

2. The researcher sign an Oath of Confidentiality.

3. The Department of Family and Social Services (Regional Manager of Child Welfare) be provided with a copy of all research reports written (including but not limited to thesis, dissertations and publications).

Please indicate in writing your agreement with these conditions.

Sincerely,

Gene Tillman
Regional Manager
Child Welfare

/pj