Family constellation and family dysfunction.

Glenn Alan. Israel
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LA THÈSE A ÉTÉ
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NOUS L'AVONS REÇUE
FAMILY CONSTELLATION
AND FAMILY DYSFUNCTION

by

Glenn Alan Israel

A Thesis
submitted to the Faculty of Graduate Studies
through the School of Social Work
in Partial Fulfillment
of the requirements for the Degree
of Master of Social Work at
The University of Windsor

Windsor, Ontario, Canada
1981
RESEARCH COMMITTEE

Professor Forrest C. Hansen   Chairman
Professor Stewart Moore       Member
Dr. James Porter              Member
ABSTRACT

The purpose of this research project was to determine if the birth order of parents and their children could be used as predictors in the assessment of family functioning. A theory of birth order conflict formulated by Toman (1976) was utilized and tested in the study. Literature was reviewed in three areas: family constellation, implications of the theory of birth order conflict for social work, and family etiology of child dysfunction. Three hypotheses and four subhypotheses were developed to determine the validity of birth order conflict as an indicator of actual marital and family dysfunction. A purposive sample of families was drawn from The Child's Place, Windsor population. Families who met the criteria for the study and who had attended the agency since January 1, 1979 were divided into a treatment group and a contrast group. Data for the study were collected by self administered mailed questionnaires and a Personality Inventory for Children (PIC). Data were also partially utilized from a pre-test conducted by agency social work staff.

The findings comparing the treatment and contrast groups were generally insignificant. Parents in the
contrast group tended to be slightly older than treatment group parents and typically had achieved a higher educational and occupational level. All contrast group parents and the majority of treatment group parents were married at the time of the study. Families in the sample typically had two children per family each being of preschool age. Of the children who attended the agency programme there was a higher proportion of male children in the treatment group than in the contrast group.

After statistical testing and analysis of the data no evidence was found to support any of the hypotheses. No significant relationship was found between the degree of birth order conflict and the degree of disturbance in the child. No significant relationship was found between the degree of birth order conflict and the degree of disturbance in the family. Finally, no significant relationship was found between the degree of birth order conflict and marital breakdown.

It was concluded that this study found no evidence to indicate that Toman's formulation of the birth order of parents and their children could be used as predictors in the assessment of family functioning. Comments were made about the limitations of the study and recommendations were made for further research.
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CHAPTER I
INTRODUCTION

The researcher's interest in the topic for this research project stemmed from his MSW field placement experience in family counselling at the Children's Centre of Wayne County, Michigan, during the 1980-1981 academic year. The researcher was routinely involved in the assessment and treatment of families at the Centre. Part of the assessment process involved determining the quality of a parent's primary family life and the impact of this experience on present social functioning. As expected the quality of clients' past relationships with parents and siblings often provided important diagnostic clues about present social functioning. What was intriguing however was that the birth order position of parents in their primary families often appeared to effect present social role expectations in marriage.

A review of the literature indicated that very little research had been done on the possible impact of birth order position of spouses on the marital relationship or the possible intergenerational effect
of birth order position on the parent-child relationship (Adams, 1972). For the purpose of the study a theory of birth order conflict formulated by Toman (1976) was utilized in order to assess whether the birth order of parents and their children could provide information of value in the assessment of family functioning. Toman's theory of birth order conflict was developed more fully in Chapter II.

The sample for the study was composed of parents and their children who attended The Child's Place, Windsor. The Child's Place is an assessment and day treatment centre for preschool children and their families. The client population of the agency was divided into a treatment group of parents and children who manifested a variety of childhood disorders. An integration group of adequately functioning children attended the agency to take advantage of an enriched preschool programme. Integration children and their parents were used as a contrast group for the purposes of the study. The agency utilized a treatment team composed of a psychologist, a psychometrist, a speech pathologist, teachers, and three social workers. Social work functions at the agency included: social assessment of families, parent education, the provision of counselling on a family and marital couples group basis.
Formulas provided by Toman were utilized to measure the degree of birth order conflict present in marital and parent-child relationships. The birth order conflict measures were applied to the sample which yielded scores indicative of a predicted degree of child and family dysfunction. Scores were compared between treatment and contrast groups. A Personality Inventory for Children (PIC) was used to measure actual social, emotional or behavioural disturbance present in a child and his family. The predicted degree of child and family dysfunction, as expressed by birth order conflict scores, was compared with actual child and family dysfunction, as measured by the PIC. Birth order conflict scores were also compared between parents who had experienced marital separation or divorce and for parents who had intact marriages.
CHAPTER II

REVIEW OF THE LITERATURE

There are many factors which contribute to a person's social functioning. Physical constitution and appearance, memory, intelligence, temperament, vitality, frustration tolerance and other characteristics, which are partly hereditary in nature, all have an effect on social functioning. Environmental factors also have an impact on social behaviour. For example changes of residence, accidents, illnesses, losses of family members, friends, school performance, social class, ethnic origin, change in place of work, and religious affiliation may all have an impact on a person's social behaviour. The most influential environmental context is a person's primary family. The family exerts its influence more regularly, more exclusively and earlier in a person's life than do other life contexts. According to Sigmund Freud (1916/17) a person tends to transfer or generalize his experiences within the family to social situations outside the family.

Walter Toman (1976) theorized that one factor which had an impact on this transference process is a person's birth order. According to Toman, birth order position patterns adult relationships between spouses given usual hereditary and environmental conditions. Sibling positions
were thought to determine role preferences within and outside of the family. The matching of spouses with noncomplementary birth order was thought to be a contributing factor in marital dysfunction. Parent-child compatibility was also considered to be affected by the birth order of the parents as compared to their child.

Toman's theory was of interest to the researcher due to its possible value for family assessment purposes. For the most part social work literature ignores birth order data as being of import in formulating the social work assessment. However, Toman (1976) and more recently Murray Bowen (1978) contended that birth order data offered valuable insights into family functioning based on very simple and easily obtained information.

The purpose of this research project was, utilizing Toman's theory of birth order conflict, to determine if the birth order of parents and their children are of import in the assessment of family functioning. In order to facilitate an understanding of the research project the literature was reviewed according to the following topics:

Family Constellation
Implications for Social Work
Family Etiology of Child Dysfunction

**Family Constellation**

Albert Adler was the first person to suggest that the family constellation should be considered as a basic personality determinant, listing it as foremost among
the objective factors which offered "trustworthy approaches to the exploration of personality" (Toman, 1959, p. 199). Alder sketched the part that siblings play in a person's psychological development. He was the first to try to characterize sibling positions but he was not very systematic about it. According to Toman who commented on Adler's personality theory:

He did not take into account that the parents had also been children and siblings, and that their marital union may in varying degrees be similar to their own childhood family constellation. Adler did not take into account the effects this may have on the children (Toman, 1959, p. 199).

Toman contended that the personality profiles of children and their parents could be determined in large part according to the birth order position of each child and parent, and by assessing the complementarity in birth order position between the parents and between the parents and their children. Toman provided substantial personality profiles of children and parents (1976), however these profiles were not of direct interest to this study. Toman's theory was of interest here in order to assess the impact of the birth order of children and parents on family functioning. To this end Toman's theory will now be considered in more detail.

Toman summarized his position on the effect of the family constellation on social relationships through his
duplication theorem in which he stated:

Other things being equal, new social relationships are more enduring and successful, the more they resemble the earlier and earliest (intrafamilial) social relationships of the persons involved (Toman, 1976, p. 80).

This statement requires further clarification. "Other things being equal" pertains to usual hereditary and environmental conditions. A successful marital relationship is defined by Toman as: one which endures and does not end in separation or divorce; leads to having children; these children do not experience problems with their social environment; and ultimately these children in turn get married and also have children.

The resemblance of the present marital relationship with the spouses' earliest (intrafamilial) social relationships could be determined by comparing the characteristics of the partners' sibling configurations within their respective original families. The role preference of each partner in the present marital relationship could then be determined based on the social role learned in relation to siblings. Important characteristics of a partner's original family sibling configuration included his age rank among his siblings and the sex distribution of the siblings. Where one partner was junior amongst his siblings and the other partner was senior, together the
partners would complement each other by their age ranks. If the partners also had a sibling of the opposite sex in their original families then the present marital relationship would be similar to and would resemble each partner's earliest (intrafamilial) social relationships. The partners, therefore, would presently have a complementary relationship since by age rank and sex, their experiences in their original families complement each other. In order to further clarify the complementary marital relationship, an example will be given. If an older brother of a sister marries the younger sister of a brother they are unlikely to get into conflicts over their seniority rights. He is used to a girl his junior, and she to a boy her senior. Both are also used to the opposite sex. (Toman, 1976, pp. 80-84).

In a noncomplementary marital relationship rank conflict and or sex conflict is present. Where rank conflict is present the partners have had similar or identical age ranks in their respective original families. Neither of them is used to the age rank of the other. In their relationship they each claim their primary family age rank for themselves. Where sex conflict is present a partner has had no siblings of the opposite sex in his original family. In marriage that partner is expected to have trouble in his daily life trying to get used to the sex of his partner. An example of a noncomplementary marital relationship would
be as follows. If the oldest brother of a brother marries
the oldest sister of a sister it would be expected that
both of them would vie for the position of leadership and
of responsibility, and neither would want to subordinate
himself or let himself be helped or supported. Since
both of them have only had siblings of the same sex in
their original families, neither is used to life with a
peer of the opposite sex. The partners then have a
completely noncomplementary relationship featuring both
rank and sex conflicts.

The above discussion assumes that complementarity of
sibling roles between marital partners is preferred
over similarity of sibling roles. Where sibling roles
are similar a marital relationship may develop based on
identification whereby one appreciated the partner because
one can recognize oneself in him or her. Where sibling
roles of the partners complement each other an
interactive relationship may develop whereby the uniqueness
of each partner is appreciated by the other. In describing
these two types of relationships Toman observed:

According to Freud (1916/17), a relationship of
identification would sooner qualify as a narcissistic
relationship, a relationship of interaction as an
object relationship. The way Freud viewed it an
object relationship is a more mature relationship.
It satisfies the partners more deeply and enduringly,
as a rule, than does a narcissistic relationship.
We should concede though, that there is hardly an
object relationship that is completely void of
narcissistic or identification aspects, and there
is hardly a pure and exclusively narcissistic
relationship based entirely on identification with
the partner (Toman, 1976, p. 93).
Where one of the marital partners was an only child in his original family Toman predicted this partner would have some difficulty adjusting to marriage since he had not ordinarily been prepared for a peer relationship whether of the opposite or of the same sex. (Toman, 1976, pp. 84-88).

The completely complementary and the completely noncomplementary marital relationship describe the two extremes of a marital relationship according to birth configuration. In order to measure the amount of noncomplementarity (or birth order conflict) present in a given marital relationship Toman provided a method of quantifying this information. (Toman, 1976, pp. 263-272). The formulas which comprise the total measure of birth order conflict are described in the operational definitions section of the Methodology chapter.

Included in Toman's measure of birth order conflict, besides rank and sex conflict, is a formula called discrepancy conflict, (see Methodology chapter). While this measure was not discussed by Toman in great detail he appeared to indicate that the greater the number of siblings a partner had in his original family the less the sibling relationships in the original family would resemble the present marital relationship. The higher the number of sibling relationships in the original family the more of a negative effect on the present singular
marital relationship.

Toman also contended that in determining the amount of birth order conflict present in a marital relationship the degree of dissimilarity between parent's and their children's birth order configuration should be taken into account. Two types of positive parent-child relationships were described including relationships of identification and interaction. An integral part of the process of education in a family is the understanding and adoption of behaviour and wishes of one's parents. This process is called identification with the parents, also introjection of the parents wishes into oneself, or socialization (Freud 1916/17). Toman contended that part of this identification process was the child's acceptance of a role within the family based on experiences within the child's own sibling configuration. Thus the child identified with not only his parents but also his position amongst his siblings which together defined his family role. This identification process was facilitated to the extent that each parent, based on experiences in his own sibling configuration, could identify with the child. Toman described a parent-child relationship based on identification as follows:

If a parent tries to understand how his child feels and to identify with the child's situation, psychologically as well as logically, he is more likely to have the greatest success with that one of his children who has the same sibling position that the parent had (Toman, 1976, p. 120).
Toman states further:

As far as the identification of a parent with his children is concerned, we may thus postulate that he is likely to select that child first who is of his own sex and has a similar age rank as well as a similar sex role among his siblings to that of the parent among his own siblings. It is with that child that the parent can best identify, and the child in turn is likely to identify himself better with that parent than would his siblings (Toman, 1976, p. 121).

While a relationship based on identification required one to act like another person, a relationship based on interaction required one to act with another by asking for and giving help, cooperating and dividing the work in a family. In general Toman contended that in his direct contacts and interactions a parent preferred that child who held a position among his siblings that was similar or identical with the position of one of the parent's siblings. In this regard Toman stated:

A parent can be with and cooperate best with that one of his children whose sibling position is relatively most complementary to his own. In the most favourable case that parent has neither a rank nor a sex conflict of sibling roles with that child (Toman, 1976, p. 123).

As a rule a relationship of identification was formed between a parent and his same sex child, and a relationship of interaction between a parent and his opposite sex child.

Toman measured the degree of parent-child sibling configuration conflict by comparing the extent to which
the sibling configuration of children in a family duplicated
the sibling configuration of each parent. The method of
quantifying this data is discussed in the Methodology
chapter.

It should be noted that while Toman offered four
formulas which comprised the total measure of birth order
conflict in a marital relationship, only two of these
formulas have been empirically tested. The four measures,
which have previously been discussed, include sex conflict,
rank conflict, discrepancy conflict, and parent-child
sibling configuration conflict. Only the formulas which
measure sex conflict and rank conflict have been empirically
tested. This research will now be considered.

Toman conducted a number of research studies which
confirmed his thesis that noncomplementarity of sibling
roles of marital partners does, on the average, reduce
the duration and success of a marriage. In a study
comparing divorced couples with intact marriages he found
that divorced spouses had significantly more rank and/or
sex conflicts of sibling roles than did spouses who
remained married (Toman, 1962). In a study using a much
larger sample Toman studied the families of 2300 high
school students from the general population (1976). He
again found that complementary sibling roles among divorced
spouses were significantly less frequent than would be
expected by chance. Rank and sex conflicts, as well as
only children among the spouses, were significantly more frequent than chance among divorced marriages. Among those couples who had divorced, a positive relationship was found between the degree of complementarity of sibling roles and length of marriage. Comparison of the frequency of divorce among spouses in the sample produced significant results. Where sibling roles in a marriage were completely complementary there was not a single divorce. Of the parents whose sibling positions showed both rank and sex conflict 16% were divorced. The divorce rate in the general population at that time was 5%. Comparisons were also made for duration of marriage. Spouses with complementary sibling positions were married for an average of 16 years, whereas spouses whose sibling positions had both rank and sex conflict were married for an average of 9 years. Based on the results of this study Toman concluded:

Of course, it cannot be concluded from our data that the duplication theorem by itself describes all or even major portions of married and family life as it actually occurs. The only thing we can be sure about is that it will have to be considered in family research. It is valid to an extent. Complementarity of sibling roles of lovers and spouses is one of the factors that seems to influence the duration and the success of a relationship (Toman, 1976, p. 105).

It follows that complementarity of sibling roles of parents affect the parent-child relationship since the adequacy
of a child's social adjustment largely depends on the quality of the marital relationship.

In a study of parents of children who needed psychological counselling, Toman and Gray found that the parents had more rank and/or sex conflicts of their sibling roles than could be expected by chance (Toman and Gray, 1961).

Toman summarized his research on sibling roles by stating:

We may conclude that practically all tests of the duplication theorem turned out positive. Complementary sibling roles of lovers and spouses affect their relationship favourably, while noncomplementary sibling relationships, including those of only children, tend to have unfavourable effects. The field experiments we reported always dealt with hard, objective data that were quite unlikely to have been distorted by the subjects' self evaluations or by the researcher's ratings (Toman, 1976, p. 106).

While the research conducted by Toman and his colleagues on the duplication theorem produced substantially positive results, other researchers have presented mixed and sometimes conflicting findings.

In a study conducted at a student and faculty counselling centre of a university, the clientele showed no significant deviations from chance in regards to rank and sex complementarity of sibling roles (Levinger and Sonnheim, 1965). The possible reasons for this negative finding and a possible source of methodological error were discussed by Toman (1965b).
Baxter (1965) found a correlation between the rank conflicts of sibling roles among the parents of college students and a psychological index of intramarital conflict. Sex conflicts of sibling roles, however, showed no significant correlation with this psychological conflict index. With a sample group of junior executives Kemper (1966) demonstrated that they judged their own marriages more favourably if they had no rank conflict with the sibling roles of their wives. Two additional studies confirmed a positive relationship between the degree of complementarity of sibling roles, (absence of rank and sex conflict), and success in adult heterosexual relationships (Mendelsohn, Linden, Gruen and Curran 1974, Weller, Natan, and Hazi 1974). However, two other studies produced generally negative results (Birtchnell and Mayhew 1977, Critelli and Baldwin 1979). The research of Birtchnell and Mayhew was particularly important since it comprised the most exhaustive independent test of the duplication theorem to date, utilizing a sample of 2000 spouses.

Based on their negative findings Birtchnell and Mayhew concluded that while the theorem may apply in individual cases it did not generally apply. Meanwhile Critelli and Baldwin concluded that while there may be a relationship between sibling role complementarity and the duration of a marital relationship, the length of a relationship may not in itself be a valid indicator of
the quality of the relationship.

A possible methodological reason for the divergence of findings in tests of the duplication theorem was indicated by Critelli and Baldwin.

Previous evidence supporting complementarity was primarily obtained in European samples and indicates a relationship between complementarity and marital longevity. The difference between European and American samples may be crucial. The more traditional, role structured European family may result in a greater emphasis on sibling-role relationships which would presumably mediate a complementary effect (Critelli and Baldwin, 1979, p. 470).

It should also be noted that one of the studies which supported the duplication theorem was conducted utilizing a sample of Israeli spouses (Weller, Natan and Hazi 1974). Another possible methodological problem in the research is that no standardized method of assessing the complementarity of sibling roles was generally utilized.

Implications for Social Work

Part of Toman's theory concerning the family constellation pertained to the personality profiles he has formulated based on birth order position. In this regard Bowen stated:

His ten basic sibling profiles automatically permit one to know the profile of any sibling position, and, all things being equal, to have a whole body of presumptive knowledge about anyone. (Bowen, 1978, p. 385).

Bowen found Toman's profiles to be "remarkably consistent with my own observations of normal siblings" (Bowen, 1978, pp. 477-478). According to Bowen, Toman provided a new
dimension toward understanding how a particular child was chosen as the scapegoat or what Bowen called the "object of the family projection process" (Bowen, 1978, p. 385). Toman found that parental preferences for a particular child among their own children seemed to depend on complementary aspects of the sibling roles of the parent and the child (Toman, 1976, pp. 289-290). He concluded that the problem child in a family was frequently that child who had either an identification conflict with the same sex parent or an interaction conflict with the opposite sex parent; or both.

In regards to a family assessment Bowen stated:

In evaluating a family, a note about the sibling position of each parent and whether or not the profile of each parent was reasonably typical, conveys invaluable information about the way this family will adapt itself to life, to the emotional forces in the family, and to working on its problem in family psychotherapy (Bowen, 1978, p. 478).

Bowen further emphasized the importance of birth order information in the family assessment:

Based on my research and therapy, I believe that no single piece of data is more important than knowing the sibling position of people in the present and past generations (Bowen, 1978, p. 385).

Bowen maintained that Toman's personality profiles were so accurate that they could be used to reconstruct the family emotional process of past generations, to understand the emotional process in the present nuclear and extended family, and to make postulations about the future.
The findings of Mendelsohn, et al, supported Toman's duplication theorem. They commented that the theorem implied that the social skills necessary for adult marital relationships were based on childhood heterosexual sibling interaction. It therefore followed that:

Interpersonal skills may be facilitated when children have the opportunity to experience a variety of peer roles by interacting with others of different age and sex. Though most children acquire such familiarity, it is possible that those who do not often become socially inept (Mendelsohn et al, 1974, p. 206).

Thus in assessing a client's social functioning the social worker should be aware of the importance of heterosexual sibling and peer interaction in the person's social development.

In the assessment of a marital relationship McGoldrick observed that a good place to look for clues about marital functioning was the couple's two basic models for the marriage relationship. This consisted of the marital relationships of the parents of the partners, "and the relationships with their siblings, their earliest and closest peers" (McGoldrick, 1980, p. 106). McGoldrick cited Toman's research on the relationship between complementary sibling positions and marital stability. She then discussed the subtle but powerful effect of sibling position on the marital relationship:
The most difficult thing about sibling position differences is that we are not generally aware how many of our assumptions about life are based on them. In fact, a great number of our basic life expectations come from implicit assumptions we formed in our families. We rarely realize how much we have to learn about differentness when we join with someone else (p. 107).

McGoldrick maintained that many marital problems have their source in the social roles learned in the primary family of each partner. There are many marital problems that are not really marital problems. They are problems that get focused in the marriage but really derive from the couple's finding in the marriage a different situation than they were used to in their families of origin.

The use of birth order position information therefore, may have implications for social work assessment and treatment. Based on the birth order position of the person in question in relation to his siblings and their sex a thumbnail sketch of the personality is easily derived. Intergenerational influence is partially assessed by comparing birth order information of parents and children. The marital relationship is assessed to some extent by comparing birth order information of the spouses.

In regards to treatment, understanding of the implications of birth order information may enable the social worker to develop an empathetic relationship with the client and may help enlist the client's cooperation to change his situation.
Brief interpretations of behaviour and feelings in terms of family position indicate to the patient that the therapist understands the difficulties the patient had in relating to others in the childhood family. The patient comes to us with feelings of resentment from childhood experiences with parents and siblings. While these may be dealt with generally, it is far more effective to exhibit greater understanding by being able to discuss with the patient the more specific aspects of birth order (Forer, 1977, p. 108).

An understanding of the implications of birth order position helps the social worker be more empathetic and helpful in dealing with child, parent and marital role behaviour.

Children, who are immediately involved in the complicated relationships of the birth order position, respond quickly to recognition that the therapist understands their problems. For parents, information concerning the way children relate in terms of their birth orders lessens their self blame and hence their resistance to therapy or counselling (Forer 1977, p. 109).

Forer reported that a lessening of guilt and resistance occurs for couples who learn that some of their problems may grow out of their relationship in terms of their birth orders rather than out of some basic inability to relate intimately to another person.

In summary, the foregoing discussion illustrates that knowledge of the effects of birth order position may have wide ranging implications for the social work assessment and treatment of individuals and families.

**Family Etiology of Child Dysfunction**

The goal of this research project was to determine what impact the birth order of parent and children had on family functioning. It was hypothesized that parents
with noncomplementary birth order position in relation to each other generally had unhappier marriages and less functional families than families where parents had complementary birth order positions. A symptom of family dysfunction for the purposes of this study was the participation of a child and his parents in the treatment group at The Child's Place, and Personality Inventory for Children (PIC) scores indicative of child and family dysfunction. An important assumption here is that parental dysfunction to some extent causes child dysfunction. Of the childhood disorders dealt with by the agency, parental dysfunction was an important factor in some but not in all cases.

It is generally agreed upon by personality theorists and social scientists, regardless of their theoretical orientation, that parents provide the fundamental elements which shape a child's personality.

The parental milieu begins to determine the pattern of development of the child's potentials at birth. The child's mode of adjustment to home and to society, whether this is normal, psychopathological, or sociopathological, is a mirroring of the emotional strength of the milieu in which his ego development has occurred (Wilkerson, 1974, p. 43).

Current personality theory gives emphasis to family background, patterns of interpersonal family relationships, and familial communication styles in the genesis of emotional disturbance (Bowen 1978, Howells 1979, Framo 1972).
Wilkerson therefore observes that:

> It is probable that failure to acquire knowledge in school, as well as, most antisocial and delinquent behaviour, most psychosomatic disorders, and most psychoses of childhood can be traced to failures in the process of learning, communicating, and interacting with the parents early in life. (Wilkerson, 1974, p. 44).

This view of psychosocial disturbance then leads to the conclusion that many disorders of childhood have their roots and impetus in the parent-child relationship.

In determining the etiology of childhood disorders hereditary and congenital factors must also be given due consideration as to their influence on behaviour and development. In some cases the import of such factors is readily apparent, for example in regards to organic and brain disorders (Rutter 1975). In other cases the etiology is not so easily discerned. In regards to autism and learning disabilities Whittaker objects to a blanket application of the family etiology hypothesis.

About autism Whittaker observed:

> Although the etiology of infantile autism remains unclear, there seems to be no substantial evidence to support a psychogenic explanation of this disorder. To the extent that parents of autistic children exhibit pathology at all, it appears to be a response to the child's psychosis rather than the cause of it, and recent studies point instead to a neurological and perceptual basis of autism (Whittaker, 1976, p. 93).

> Learning disability is a catchall phrase of handicapping conditions associated with the inability of a child to perform
school tasks at a level expected of him. Various terms are used under the heading of learning disorder including minimal brain damage, maturational lag, perceptual disability, dyslexia, anomia, aphasia and language disorder. Efforts to determine the etiology of learning disorders have been inconclusive (Whittaker 1976). A possible reason for this is indicated by Porter (1980) who concluded that contradictory findings have resulted from research designs which have treated the learning disabled as a unitary group when in fact they should be viewed as heterogeneous not only in so far as the patterning of their abilities is concerned but also in regards to their social-emotional functioning. Porter cited the literature which indicated that families of learning disabled children resemble families of emotionally disturbed children in several important ways. Such families often show evidence of disturbed communication patterns and a tendency for the learning disabled child to be used as a scapegoat for marital tensions (Porter 1980, pp. 20-21). Porter delineated 4 groups of learning disabled children according to their social-emotional functioning. The largest group comprised 44% of the sample and contained subjects who were well adjusted in their social-emotional functioning. The remaining 3 groups comprising 56% of the sample showed evidence of a range of social, emotional and behavioural difficulties.
In concluding the discussion of learning disabilities and infantile autism it can be said that the family etiology assumption is operating in some but not all cases. Further where family pathology exists it is sometimes as a result and not the cause of the childhood disorder.

This study was interested only in childhood disorders dealt with by The Child's Place where the family etiology hypothesis was most likely to be operative. Clients were excluded from the sample when it was likely that the primary diagnostic factor did not involve a family etiology, (for example organic impairment).

In summary, this chapter has reviewed the most pertinent literature concerning the family constellation and discussed research studies which have tested Toman's theory of birth order conflict. The implications of the study of sibling roles for social work were delineated and the rationale and applicability for assuming a family etiology for child dysfunction was discussed.
CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The purpose of this research project was to determine if the birth order of parents and their children are factors of import in the assessment of family functioning. Walter Toman's formula was utilized to measure the degree of noncomplementarity in birth order (birth order conflict) present in marital and parent-child relationships. A Personality Inventory for Children (PIC) was used to measure actual social, emotional or behavioural disturbance present in a child and his family. Birth order conflict scores yielded a predicted degree of child and family dysfunction which was compared to actual child and family dysfunction as measured by the PIC. The study utilized a sample of parents and their children who have attended The Child's place, Windsor.

Classification of the Project

Tripodi, Fellin and Meyer (1969) presented a classification system of research which identified three major types of research; exploratory, quantitative-descriptive
and experimental. This research project was a quantitative-descriptive study which was defined as:

Empirical research investigations which have as their major purpose the delineation or assessment of characteristics of phenomena, program evaluation, or the isolation of key variables. These studies may use formal methods as approximations to experimental design with features of statistical reliability and control to provide evidence for the testing of hypotheses. All of these studies use quantitative devices for systematically collecting data from populations or programs. They employ personal interviews, mailed questionnaires, and/or other rigorous data gathering devices and survey procedures (Tripodi et al., 1969, p. 38).

This study examined characteristics of phenomena which relate to birth order of parents, families' participation in a treatment or contrast group, and families' social, emotional, behavioural functioning. Formal research methods were used to test the hypotheses. The sample was purposive, and employed a Personality Inventory for Children (PIC), a pre-test and mailed questionnaires.

There are four sub-types of quantitative-descriptive studies identifiable by their respective research purposes. This project was a hypothesis testing study:

Hypothesis testing studies are those quantitative-descriptive studies which contain in their design of research explicit hypotheses to be tested. The hypotheses are typically derived from theory, and they may be either statements of cause-effect relationships or statements of association between two or more variables without reference to a causal relationship (Tripodi et al., 1969, p. 39).
In this research project the hypotheses were derived from Walter Toman's duplication theorem. This theorem suggested that spouses' birth order position patterned their adult relationships. Marital dysfunction was thought to be related to the matching of spouses with noncomplementary birth order. It was assumed that a child was positively or negatively affected by the marital relationship of his parents. Where a child's parents had a noncomplementary relationship according to birth order it was thought that there was a greater likelihood that the child and/or family would be involved in social work treatment. In this study The Child's Place day treatment program for pre-school children and their parents was utilized in an attempt to associate parent's birth order conflict with a families' participation in the treatment program. A non-treatment contrast group of children who attended The Child's Place and their families was used as a comparison to the treatment group. It was hypothesized that there was a positive association between the degree of birth order conflict present between parents as measured by Toman's formula and the degree of social, emotional, behavioural dysfunction presented by children and their families as measured by a PIC. A positive association was also predicted between the degree of birth order conflict present and marital breakdown.
Hypotheses

1. There is a positive association between the degree of birth order conflict and the degree of disturbance in the child.
   Subhypotheses
   a) There are higher birth order conflict scores for parents of children who are in a treatment group than for parents of children who are in a contrast group.
   b) There is a positive association between the birth order conflict scores and the adjustment scores of the PIC.

2. There is a positive association between the degree of birth order conflict and the degree of disturbance in the family.
   Subhypothesis:
   a) There is a positive association between the birth order conflict scores and the family relations scores of the PIC.

3. There is a positive association between the degree of birth order conflict and marital breakdown.
   Subhypothesis:
   a) There are higher birth order conflict scores for parents who have experienced marital separation or divorce than for parents who have intact marriages.
Operational Definitions

Birth order conflict is the degree of noncomplementarity of birth order between two spouses and between the spouses as compared to the birth order of their children. There are four factors which affect complementarity of birth order in a family. The sum of these four factors produce the degree of birth order conflict present in a family which is expressed quantitatively by the coefficient.

Sex conflict is the degree to which a person has been exposed to siblings of the opposite sex in his original family as compared to his spouse. Sex conflict (ds) is expressed quantitatively for each spouse by the formula:

\[ ds = \frac{ns}{n - 1} \quad (1) \]

ns expresses the number of same sex siblings of a given spouse. This is divided by the number of children constituting the sibling configuration of a given spouse (n) less the spouse involved (-1). The combined sex conflict (sc) that exists between spouses according to their sibling roles is expressed by the formula:

\[ sc = \frac{ds_b + ds_s}{2} \quad (2) \]

dsb is the degree of sex conflict of the male spouse.
This is added to the degree of sex conflict of the female spouse (des) and divided by the number of spouses (2).

Rank conflict exists in a family when the spouses have had similar or identical age ranks in their respective original families. Neither of them is used to the age rank of the other and in their marital relationship each spouse claims the age rank which was learned in the primary family. The degree of rank conflict between spouses is expressed by the formula:

$$dr = \frac{njun - nsen}{\frac{n}{2} - 1}$$

(3)

$dr$ is the degree of seniority (+ coefficient), or juniority (- coefficient) of a spouse in the sibling configuration of his original family. $njun$ is the number of junior siblings a given spouse has. $nsen$ represents the number of older siblings that a person has. The number of senior siblings is subtracted from the number of junior siblings and divided by the number of children constituting the sibling configuration of a given spouse ($n$), minus the spouse involved ($-1$). Combined rank conflict (RC) that exists between spouses according to their sibling roles is expressed by the formula:

$$RC = \frac{drb + drs}{2}$$

(4)
The degree of rank conflict of the male spouse \((d_{rb})\) is added to the degree of rank conflict of the female spouse \((d_{rg})\) and divided by the number of spouses \((2)\).

Discrepancy conflict compares the number of siblings of a spouse with the number of spouses. This measure compares the extent to which the sibling configuration compares in number of relationships with the singular adult spousal relationship. The discrepancy coefficient \((d_n)\) is expressed by the formula:

\[
d_n = \frac{n-2}{n}
\]

\((5)\)

\(n\) is the number of children constituting a spouse's sibling configuration minus the number of spouses \((2)\), divided by \((n)\). The combined discrepancy conflict \((DC)\) of the spouses is expressed by the formula:

\[
DC = \frac{d_{np} + d_{ns}}{2}
\]

\((6)\)

Discrepancy conflict of the male spouse \((d_{np})\) is added to the discrepancy conflict of the female spouse \((d_{ns})\) and divided by the number of spouses \((2)\).

Parent-child-sibling configuration conflict measures the extent that a spouse's birth order configuration is dissimilar as compared to the birth order configuration of his children \((d_k)\). This is expressed in the formula:
\[ dk = 1 - \frac{nd}{n - 1} \]  \hspace{1cm} (7)

The number of dual sibling relationships of a spouse that has one or more duplicates among his children (nd) is divided by \((n - 1)\). This total is subtracted from \((l)\).

Combined parent - child configuration conflict (PC) is expressed by the formula:

\[ PC = \frac{dkb + dks}{2} \]  \hspace{1cm} (8)

\(dkb\) is the degree of parent - child sibling configuration conflict of the male spouse which is added to the same measure of the female spouse \(dks\). This total is divided by the number of spouses \((2)\).

Total index \((dt)\) of birth order conflict is provided by summing the four formulas which is expressed by the formula:

\[ dt = SC, RC, DC, PC = \frac{SC + RC + DC + PC}{4} \]  \hspace{1cm} (9)

Minimum value of the coefficient \((dt)\) is 0 while the maximum value is 1. (Toman, 1976).

The Child's Place. Windsor is an assessment and day treatment centre for preschool children and their families. A maximum of 40 children from the City of Windsor attend half day sessions, five days a week at the agency from September through July.
Treatment Group was composed of 44 children and their parents who have attended The Child's Place since January 1, 1979. These children required therapeutic intervention to deal with a variety of difficulties which included learning disabilities, behaviour disorders, speech and language disorders, developmental delay, emotional disturbance, autism and the psychoses. The parents of these children also participated in parent counselling groups and or family counselling.

Contrast Group was composed of 21 integration children and their parents. These children were functioning adequately in all aspects of their development as was determined by a variety of psychometric, medical and social work assessments. These children attended the agency to take advantage of the enriched pre-school program offered.

Personality Inventory for Children (PIC; Wirt, Seat & Broen, 1977) was designed to assess a child's social, emotional and behavioural functioning. It is composed of 600 true-false questions regarding the child's behaviour, attitudes and interpersonal relations, and is to be completed by one of the child's parents.
In scoring the PIC 16 profile scales are used to measure the most important dimensions of child behaviour. Three of the scales (Lie, F, Defensiveness) assessed and controlled for respondent reply distortion. In this study only two of the clinical scales were utilized. As a measure of the degree of disturbance in the child the adjustment scale was used which is a scale designed as a screening device to identify children who are in need of a psychological evaluation and as a general measure of poor psychological adjustment. As a measure of the degree of disturbance in the family the family relations scale was used which reflects family stability, level of inter-parent communication, father's involvement in family life, concern over discipline, general home atmosphere, and level of family participation in community activities. (Wirt, Lachar, Klinedinst, Seat, 1977). While the PIC was a relatively new instrument recent research indicated its clinical utility in assessing child and adolescent psychopathology. (Lachar and Gdowski 1979, Lachar, Butkus and Hryhorszuk 1978, Wirt, Lachar, Klinedinst, Seat 1977). As to the two scales used in this study Lachar and Gdowski found that the adjustment scale correctly identified
90% of a sample of children referred to a psychiatric clinic while the family relations scale correlated with clinician judgment of marital discord and the mother's inconsistency in setting limits with her children.

Socio-economic level was derived by comparing each family's principal wage earner to the labour force of Ontario (Blishen, 1967).

The Population

The population for this research project was composed of treatment children and their families and integration children and their families all of whom are presently attending The Child's Place or who have attended since January 1, 1979. This date was chosen as a cutoff to ensure adequate sample size. The population totalled 65 with 44 of this number comprising treatment children and their families. The remainder of 21 children and their families belonged to the integration group (contrast group).

The Sample

The type of sampling procedure used was purposive.

The basic assumption behind purposive sampling is that with good judgment and an appropriate strategy one can handpick the cases to be included in the sample and thus develop samples that are satisfactory in relation to one's needs (Sellitis, Wrightsman and Cook, 1976, p. 521).
A purposive sampling method was used to ensure adequate sample size and the exclusion of those cases which did not meet the criteria for the study. Total sample size numbered 54 out of a population of 65. The criteria for inclusion in the study for each child was: completion of a PIC upon admission to the agency programme; while a client of the agency the child lived with at least one of his natural parents and at some point in time lived with both natural parents, (foster children and adopted children whose adopted parents were both unrelated to him would therefore be excluded; neither of the child's parents were part of a multiple birth, (since in such a situation it is impossible to discern birth order to a socially relevant degree); the child's intelligence was assessed to be not less than one standard deviation below the normal range, as measured by I.Q. test; the child was assessed as being free of primary hearing impairment; the child was assessed as being free of organic problems or brain impairment as major diagnostic factors. Virtually all of the integration families from the population were included in the sample except where a family had children who had attended both the treatment and integration groups.
Data Collection Method

For the purpose of data collection three instruments were used, a pre-test form, a self administered mailed questionnaire, and a Personality Inventory for Children (PIC). A brief description of each instrument follows.

A Questionnaire was designed by the researcher so as to gain information concerning the research project. The questionnaire was five pages in length and contained seven question areas. The questions sought factual data concerning parents' socio-economic level, marital history, age and sex of children, age and sex of parent's siblings, and parent's ages, (Appendix A).

The questionnaire was precoded according to file numbers to ensure client confidentiality and to identify the respondent as belonging to either the treatment or the integration (contrast) group. The questionnaire was then mailed to the client along with two cover letters (Appendices B and C) and a stamped self addressed envelope.

The Pre-test form was an abbreviated version of the questionnaire which was less thorough as to the data collected. It was originally designed for a preliminary study which comprised nine cases. Social workers at the agency used the form to enter data gathered from files and from telephone interviews with clients. During
the main data collecting phase of the project questionnaires were sent to all clients in the sample including those clients who had participated in the pre-test. Where clients who had participated in the pre-test did not return questionnaires pre-test data was used, (Appendix D).

A Personality Inventory for Children (PIC) had previously been administered by the agency staff at the point of admission to the programme and at the conclusion of treatment. The instrument is used by the agency as a pre and post measure of treatment effectiveness. In this study two of the 16 scales were utilized, (as well as the 3 scales which are indicators of the validity of the parents' replies). The adjustment scale was used as a measure of the degree of disturbance in the child while the family relations scale was used as a measure of the degree of disturbance in the family.

Upon return of the completed questionnaire, staff at the agency, used the file numbers which had been attached for precoding purposes, to match the questionnaire with a PIC which had been administered at the point of admission to the agency's programme.

For the purposes of this study PIC scale raw score totals were converted to t scores.
Analysis of the Findings

The Sample

The sample was described according to the following categories for both treatment and contrast groups: ages of spouses, marital status history, age and sex of siblings of husband and wife, occupation and education of spouses, social-economic level for each family, age and sex of the children attending the agency and their siblings.

The Hypotheses

The submeasures for birth order conflict were applied to all families in the treatment and contrast groups resulting in four coefficients and a total index of birth order conflict coefficient for each family. Using the PIC manual as a guide each PIC was assessed for validity using the Lie, F, and Defensiveness scales which were designed for this purpose. Invalid PICs were excluded from the study. PIC scale totals for the adjustment and family relations scales were obtained for each child attending the agency from both treatment and contrast groups. Families who had experienced marital separation and divorce were tabulated.
Hypothesis 1 a.

The four submeasures and the total index of birth order conflict in the treatment group were compared with the submeasures and the total index of birth order conflict in the contrast group.

Hypothesis 1 b.

The four submeasures and the total index of birth order conflict were compared to PIC adjustment scores in the treatment and contrast groups.

Hypothesis 2 a.

The four submeasures and the total index of birth order conflict were compared to PIC family relations scores in the treatment and contrast groups.

Hypothesis 3 a.

The four submeasures and the total index of birth order conflict were compared for parents who had experienced separation or divorce and for parents who had intact marriages.

Limitations of the Research Project

A limitation of the quantitative-descriptive research design is that it is retrospective in nature as compared to an experimental design which is projective.
Since causal factors are not manipulated by the researcher and explanations are after the fact research conclusions tend to have less validity than in experimental studies. Another problem connected to the time factor which may affect the validity of the study is the involvement of one or several additional variables, which have not been accounted for. This may involve antecedent, intervening, or contingent variables.

Such additional variables may demonstrate an original relationship as spurious, may show that it can be explained by an intervening variable, or may specify the conditions under which it may be higher or lower (Finestone and Kahn 1975, p. 53).

In the present research study it was hypothesized that the sibling positions of children and parents had an effect on family functioning. It seemed obvious that variables contingent to birth order were operating in the families in the study which effected family functioning. In the ongoing process between the individual, the family and society many variables are usually at work which are difficult to control for.

The population chosen for this study posed a limitation in that some of the child disorders present in the treatment group did not readily lend themselves to an assumption of family etiology. An assumption that such an etiology was operative was necessary in order to hypothesize that there was a relationship between birth order conflict, marital dysfunction and child dysfunction. The family etiology assumption was maximized by a purposive sampling method.
which excluded those cases which obviously did not apply, (such as organic disorder). However, due to the purposive sampling method employed the sample was not likely highly representative of the agency population.

Representativeness of the sample remained an issue when considering the limitations of data collection instruments used. Sellitiz et al (1976) suggested that response rates to mailed questionnaires usually produced a low proportion of returns, from 10 to 50% (p.297). Therefore, a reduction in the number of cases in the sample was anticipated which could effect the representativeness of the sample. A test for sample representativeness was made by applying Blishen's socio-economic index for occupations in Canada and comparing the results with the general labour force of Ontario.

The PIC was a relatively new instrument for measuring personality traits of children and family functioning. Research on the PIC, while providing encouraging results, was still at an exploratory stage. While PIC scale validity varied it was generally high across the 16 scales and was high for the 2 clinical scales utilized in this study.

Another limitation of the study may be that the contrast group could not be considered representative of the general population since it was chosen using criteria that would maximize adequately functioning members.
Summary

According to Toman's duplication theorem spouses' birth order position patterns their adult social relationships given average hereditary and environmental conditions. The matching of spouses with noncomplementary birth order was thought to be a contributing factor in marital and family dysfunction. Parent-child compatibility was also thought to be affected by the birth order of the parent as compared to his child. Toman offered a formula by which the degree of birth order conflict could be quantitatively expressed.

This research project presented three hypotheses and four subhypotheses which were tested to determine the validity of birth order conflict as an indicator of actual marital and family dysfunction. The sampling method was purposive. Data was collected from 27 respondents who were members of a treatment and a contrast group, by means of information from a pre-test, self-administered mailed questionnaires and a PIC which had been previously administered by The Child's Place staff.

The collected data was used to test for sample representativeness using Blishen's socio-economic index and comparing the results to the labour force in Ontario. The data was also used to describe the sample and test the hypotheses. The limitations of the research project were discussed.
CHAPTER IV

PRESENTATION OF DATA AND FINDINGS

Data collected by the questionnaire, pre-test form and PIC are presented in this chapter. The first section describes the sample in terms of the respondents who returned questionnaires and who participated in the pre-test. The second section presents and analyzes the findings related to the hypotheses and subhypotheses leading to a discussion as to their acceptability. The research findings are then summarized.

Findings Related to the Sample

The population of this research project totalled 65 families who had attended The Child's Place since January 1, 1979. Of this number 44 cases comprised treatment children and their families. The remainder of 21 children attended an integration pre-school programme at the agency. These integration children and their families were used as a contrast group for the purposes of this study.

A purposive sample of 54 cases was taken from an agency population of 65 cases. Those cases that were included in the sample met the criteria described in the Methodology section of this theses.

From this sample of 54, 27 questionnaires (50%) were returned by the respondents. Due to a postal workers' strike
only two questionnaires were returned through the mail. The
remaining 25 questionnaires were personally delivered to
the agency by the respondents.
Selltiz et al (1976) suggests that a return rate of
from 10 to 50% should be expected from mailed questionnaires
(p. 297). The response rate for this research study of
50% was very acceptable, if not remarkable, considering
the postal strike which was in effect four days after the
questionnaires were mailed to members of the sample.

Of the 27 questionnaires returned 3 cases were excluded
from the study due to incomplete questionnaires.

In order to increase the size of the respondent group
3 cases were added to the study from a pre-test which was
conducted by the agency social work staff prior to the
mailing of the questionnaires. This pre-test was a modified
and abbreviated version of the questionnaire which collected
data for 9 cases (Appendix D). The subsequent administration
of the questionnaire collected data on 6 of the 9 pre-
tested cases. The total number of cases included in the
study therefore numbered 27 with 13 cases from the treatment
group and 14 cases from the contrast group.

Upon the return of the completed questionnaires each
questionnaire was matched to a Personality Inventory for
Children (PIC) which had been previously administered by
the agency staff for each child at the time of admission. The PIC was utilized in this study as a measure of child and family dysfunction. In two cases PIC data was not available for the respondents. In another two cases an elevated validity scale (+120F) indicated the clinical scales of the PICs were likely invalid. Thus for 4 of the 27 cases PIC data was not included in the study. The characteristics of the respondents will now be discussed.

There was little variance in age of husbands and wives between the treatment and contrast groups. In the treatment group the husbands’ age range was 24-38 years while the mean age was 30.3 years. In the contrast group the husbands’ age range was 25-37 years with a mean of 32 years. The wives had an age range of 21-34 years in the treatment group with a mean age of 27.4 years. In the contrast group the wives age range was 24-40 years with a mean age of 30.7 years.

The distribution of husbands by education is presented in Table 1. Application of Chi square indicated the difference between the two groups could have occurred by chance, $X^2 (4) = 8.59, p > .05$. Husbands in the contrast group tended to have attained a higher level of education as compared to husbands in the treatment group. The median educational level in the treatment group was the "high school graduate" category while contrast group husbands had a median level corresponding to the "some
TABLE 1

Education of Husbands

<table>
<thead>
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<th>Treatment</th>
<th></th>
<th>Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 13</td>
<td>%</td>
<td>n = 14</td>
</tr>
<tr>
<td>post graduate</td>
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<td></td>
<td>28.6</td>
</tr>
<tr>
<td>university graduate</td>
<td>7.7</td>
<td></td>
<td>14.3</td>
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<td>some college or university</td>
<td>15.4</td>
<td></td>
<td>21.4</td>
</tr>
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<td>high school graduate</td>
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<td></td>
<td>35.7</td>
</tr>
<tr>
<td>some high school</td>
<td>30.8</td>
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<td>0</td>
</tr>
</tbody>
</table>

χ²(4) = 8.59, p > .05

TABLE 2

Education of Wives

<table>
<thead>
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<th>Education of Wives</th>
<th>Treatment</th>
<th></th>
<th>Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 13</td>
<td>%</td>
<td>n = 14</td>
</tr>
<tr>
<td>post graduate</td>
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<td></td>
<td>0</td>
</tr>
<tr>
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<td>0</td>
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<td>42.9</td>
</tr>
<tr>
<td>high school graduate</td>
<td>69.2</td>
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<td>14.3</td>
</tr>
</tbody>
</table>

χ²(3) = 12.22, p < .05
college or university" category. Wives in the contrast group also tended to have attained a higher level of education as compared to wives in the treatment group. As with the husbands, the wives median educational level was the "high school graduate" category for the treatment group and the "some college or university" category for the contrast group (Table 2). The findings in regards to the distribution of wives by education proved statistically significant, \( \chi^2 (3) = 12.22, p < .05. \)

In order to describe the sample according to occupational levels respondent husbands, as the usual primary wage earner, were categorized according to Blishen's (1967) socioeconomic index and tested by Chi square. As seen in Table 3 the difference in occupation between the treatment and contrast groups could have occurred by chance, \( \chi^2 (5) = 10.8, p > .05. \) Consistent with the previously mentioned higher educational level husbands in the contrast group appear to be over represented in the upper occupational categories while husbands in the treatment group appear to be over represented in the lower occupational categories as compared to the general population of Ontario.
TABLE 3

Distribution of Husbands by Occupation Compared to the Labour Force of Ontario

<table>
<thead>
<tr>
<th>Occupational Examples</th>
<th>Blishen's SES Index</th>
<th>Treat. Group $n = 13$</th>
<th>Cont. Group $n = 14$</th>
<th>Total $n = 27$</th>
<th>Ontario Labour Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>specialist</td>
<td>70+</td>
<td>7.7</td>
<td>21.4</td>
<td>14.8</td>
<td>4</td>
</tr>
<tr>
<td>professional</td>
<td>60-69</td>
<td>0</td>
<td>7.1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>upper management</td>
<td>50-59</td>
<td>0</td>
<td>35.7</td>
<td>18.5</td>
<td>10</td>
</tr>
<tr>
<td>lower management</td>
<td>40-49</td>
<td>15.4</td>
<td>14.3</td>
<td>14.8</td>
<td>20</td>
</tr>
<tr>
<td>tradesman</td>
<td>30-39</td>
<td>30.8</td>
<td>7.1</td>
<td>18.5</td>
<td>35</td>
</tr>
<tr>
<td>labourer</td>
<td>0-29</td>
<td>38.5</td>
<td>14.3</td>
<td>29.6</td>
<td>26</td>
</tr>
</tbody>
</table>

$\chi^2 (5) = 10.8, p > .05$

Note: $\chi^2$ obtained on comparison of treatment and contrast groups.
The marital status history of respondent couples is presented in Table 4. All respondents corresponded to one of two marital categories with 76.9% of the treatment group couples and 100% of the contrast group couples being married. The findings in regards to the distribution of respondents by marital status did not prove statistically significant, \( X^2 (1) = .71, p > .05 \). However, since the agency mandate is to provide service to pre-school children and their families it follows that most of the respondents would be young married couples.

Parents in the treatment group had a high proportion of siblings of the same sex (70.8%) while in the contrast group parents had a high proportion of siblings of the opposite sex (50%). Parents in the treatment group were evenly distributed between junior and senior birth rank as compared to their siblings. In the contrast group 71.4% of the parents were of senior birth rank. In 3 cases siblings of parents were excluded from the study as they had joined the family by adoption or as part of a reconstituted family when the respondent parent was 14 years of age or older. In another case a sibling was excluded from the study who had died at one year of age. In one case two step siblings who joined the family when the respondent parent was five years of age were treated as natural siblings for the purposes of the study,
<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Treatment $\frac{n = 13}{%}$</th>
<th>Contrast $\frac{n = 14}{%}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>married</td>
<td>76.9</td>
<td>100</td>
</tr>
<tr>
<td>separated</td>
<td>23.1</td>
<td>0</td>
</tr>
<tr>
<td>mean years married</td>
<td>7.5</td>
<td>9.7</td>
</tr>
</tbody>
</table>

$\chi^2 (1) = .71, p > .05$
There was little variance between treatment and contrast groups in terms of family size. The total number of children per family ranged from 1 to 4 for both groups with a mean number of 2.2 children in the treatment group and 2.3 children in the contrast group. There was also little variance in the age range between the two groups. In treatment group families children were from 1 to 10 years of age with a mean age of 4.6 years. In contrast group families children were from 1 to 13 years of age with a mean of 4.6 years.

In reference to the child from each family who had attended The Child's Place the age range was 3-6 years for both treatment and contrast groups. The mean age was 4.3 years for the treatment group and 4.1 years for the contrast group. In the treatment group 11 of the 13 children (84.6%) were males while in the contrast group 8 of the 14 children (57.1%) were males. The distribution of children who had attended the agency according to sex did not prove significant, $\chi^2 (1) = 1.3, p > .05$. However Rutter (1975) indicated that childhood disorders, within the age range treated by the agency, were generally more prevalent in boys than girls. Rutter identified six categories of childhood disorders including emotional,
conduct, hyperkinetic, autism, developmental and schizophrenia (p. 37). All of the disorders identified can have an age of onset previous to five years of age with the exception of schizophrenia which rarely begins before seven years of age. If schizophrenia is excluded from consideration it can be concluded that emotional disorders are slightly more common in girls while all other disorders identified by Rutter are more common in boys by a ratio of three or four to one.

Findings Related to the Hypotheses

This section presents the findings of the research related to the hypotheses and subhypotheses. F Tests\textsuperscript{1} and t Tests were utilized to determine the statistical significance of the findings. Conclusions were made about the acceptability of each hypothesis and subhypothesis.

Hypotheses 1

This section discusses the findings related to Subhypotheses 1 a. and 1 b. leading to a conclusion as to the acceptability of Hypothesis 1.

Hypothesis 1 stated:

There is a positive association between the degree of birth order conflict and the degree of disturbance in the child.

Subhypothesis 1 a. stated:

There are higher birth order conflict scores for parents of children who are in a treatment group than for parents of children who are in a contrast group.

\textsuperscript{1}F Test was used to compare the variances within the treatment group and the contrast group (SAS User's Guide p. 425).
### TABLE 5
Frequency of BOC\(^1\) Scores

<table>
<thead>
<tr>
<th>BOC Scores</th>
<th>Treatment (n = 13)</th>
<th>Contrast (n = 14)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SC  RC SRC DC PG BOC Index</td>
<td>SC  RC SRC DC PC BOC Index</td>
</tr>
<tr>
<td>.80-1.00</td>
<td>6    4    1    2    8   1</td>
<td>0    2    0    0    9   0</td>
</tr>
<tr>
<td>.60- .79</td>
<td>2    1    7    1    0   7</td>
<td>8    6    6    1    3   5</td>
</tr>
<tr>
<td>.40- .59</td>
<td>2    3    3    0    4   4</td>
<td>3    2    3    7    2   9</td>
</tr>
<tr>
<td>.20- .39</td>
<td>1    3    1    4    1   1</td>
<td>0    1    4    1    0   0</td>
</tr>
<tr>
<td>.0- .19</td>
<td>2    2    1    6    0   0</td>
<td>3    3    1    5    0   0</td>
</tr>
</tbody>
</table>

\(^1\)The following abbreviations will be used in tables concerning the hypotheses: BOC = Birth Order Conflict, SC = Sex Conflict, RC = Rank Conflict, SRC = Combined Index of Sex and Rank Conflict, DC = Discrepancy Conflict, PC = Parent-Child Configuration Conflict, BOC Index = Total Index of BOC subscores, PIC = Personality Inventory for Children, ADJ = Adjustment Scores, FAM = Family Relations Scores.
Table 5 presents the range of Birth Order Conflict (BOC) coefficient scores computed for respondents associated with the treatment and contrast groups. Overall there was a slight tendency for treatment group scores to be more elevated than contrast group scores. This is illustrated by the range of the BOC Index scores which represented a mean average of BOC subscores. The BOC Index ranges from the .20-.39 category to .80-1.00 in the treatment group, while contrast group scores range from the .46-.59 category to .60-.79. Also the mode score category is higher for the treatment group than for the contrast group for Index, Sex Conflict, and Rank Conflict scores. The mode score category is however higher for the contrast group for Discrepancy Conflict and Parent-Child Sibling Confusion Conflict scores.

In order to understand the significance of the variance in the scores between treatment and contrast group the data was analyzed according to mean scores and \( t \) Test as illustrated in Table 6. As was the case in analysis of the BOC scores by mode, analysis of the data according to mean scores revealed a slight tendency for scores to be more elevated in the treatment group for Sex Conflict, Rank Conflict, and Index scores. However, the \( F \) Test proved the findings insignificant for four of the five BOC scores. The BOC Index score proved significant, \( F (12,13) = 3.97, p < .05 \). Furthermore, for none of the
### TABLE 6
Comparison of BOC Scores
by Mean Scores and t Test

<table>
<thead>
<tr>
<th>BOC</th>
<th>Treatment mean n = 13</th>
<th>Contrast mean n = 14</th>
<th>F df = 12, 13</th>
<th>P</th>
<th>t df = 25</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC</td>
<td>63.4</td>
<td>52.9</td>
<td>1.81</td>
<td>ns</td>
<td>1.00</td>
<td>ns</td>
</tr>
<tr>
<td>RC</td>
<td>55</td>
<td>51.2</td>
<td>1.14</td>
<td>ns</td>
<td>.31</td>
<td>ns</td>
</tr>
<tr>
<td>SRC</td>
<td>59.4</td>
<td>55.7</td>
<td>1.23</td>
<td>ns</td>
<td>.84</td>
<td>ns</td>
</tr>
<tr>
<td>DC</td>
<td>35</td>
<td>37.6</td>
<td>2.42</td>
<td>ns</td>
<td>- .26</td>
<td>ns</td>
</tr>
<tr>
<td>FC</td>
<td>76.9</td>
<td>81.3</td>
<td>1.63</td>
<td>ns</td>
<td>- .48</td>
<td>ns</td>
</tr>
<tr>
<td>BOC Index</td>
<td>57.7</td>
<td>55.7</td>
<td>3.97</td>
<td>.02</td>
<td>.44*</td>
<td>ns</td>
</tr>
</tbody>
</table>

* Since variance was unequal, df = 17.4 (estimated)
five scores did not reach a critical level (1.71). Therefore differences in all mean scores could have occurred by chance.

It therefore follows that hypothesis 1 a. cannot be accepted since while BOC scores tended to be slightly higher in the treatment group than in the contrast group this difference was not significant and could have occurred by chance. This finding is consistent with the research findings of Levinger and Sonnheim (1965) who also found a tendency for Sex Conflict and Rank Conflict scores to be elevated in "disturbed couples as compared to normal couples" (p. 140) although this tendency was not statistically significant.

The findings related to Subhypothesis 1 b. will now be considered. Subhypothesis 1 b. stated:

There is a positive association between the birth order conflict scores and the adjustment scores of the PIC.

The reader is cautioned as to the interpretation of correlation coefficients reported for Subhypothesis 1 b. and 2 a. Scatter plots were done on the PIC adjustment scores, Family Relations scores, and all BOC scores as a total sample and by group (treatment and contrast) to check for nonlinearity. For the most part no significant nonlinear patterns emerged. However, since scores were not normally distributed, a basic assumption underlying the correlation coefficient was violated (Malec, 1977, p. 175).
Despite this drawback it was determined that the correlation coefficient was the most appropriate measurement of association to utilize for Subhypothesis 1 b. and 2 a. BOC scores and PIC Adjustment scores were analyzed by correlation (Pearson r) as seen in Table 7. Consistent with the findings for Subhypothesis 1 a. correlation coefficients tended to be slightly higher in the treatment group than in the contrast group for the association between the PIC adjustment scores and BOC subscores for Sex Conflict and Rank Conflict. As the review of the literature indicated these two subscores could be expected to be the most valid of the four BOC subscores. The slight tendency for Sex Conflict and Rank Conflict scores to be more elevated in the treatment group along with slightly higher correlation of these scores to the adjustment scale of the PIC as compared to the contrast group, may indicate that these scores have more diagnostic validity at higher score levels. This was seen to be more evident when combined BOC measures for Sex Conflict and Rank Conflict (SRC) were correlated with PIC adjustment scores yielding a .50 correlation in the treatment group as compared to -.02 in the contrast group.

The above discussion must be qualified by the finding that tests for significance indicated that the difference reported between 17 of the 18 correlation coefficients computed in analyzing the association of BOC scores and
TABLE 7
Correlation of BOC Scores
and PIC Adjustment Scores

<table>
<thead>
<tr>
<th>ADJ</th>
<th>n</th>
<th>SC</th>
<th>RC</th>
<th>SRC</th>
<th>DC</th>
<th>PC</th>
<th>BOC Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>10</td>
<td>.35</td>
<td>.41</td>
<td>.50</td>
<td>-.43</td>
<td>-.49</td>
<td>.02</td>
</tr>
<tr>
<td>Contrast</td>
<td>13</td>
<td>-.28</td>
<td>.19</td>
<td>.02</td>
<td>.11</td>
<td>.25</td>
<td>-.22</td>
</tr>
<tr>
<td>Total</td>
<td>23**</td>
<td>.36*</td>
<td>.15</td>
<td>.33</td>
<td>-.35</td>
<td>-.16</td>
<td>.07</td>
</tr>
</tbody>
</table>

* p < .05
** PIC Adjustment Scores unavailable for 4 cases
PIC Adjustment scores could have occurred by chance. For the Sex Conflict total score findings were significant, \( t(21) = 1.73, p < .05 \) and yielded a low level of correlation to the Adjustment total score (.36). None of the other measures of association between BOC scores and PIC Adjustment scores yielded significant correlations. It follows then that Subhypothesis 1 b. cannot be accepted since statistical testing for significance and association between BOC scores and PIC Adjustment scores yielded generally insignificant results.

The method utilized in Subhypothesis 1 b. of comparing BOC scores to a measure of child functioning (PIC Adjustment scale) is without parallel in the research on the duplication theorem. Perhaps it was methodologically unsound to expect the state of a child's psychological adjustment as measured by the PIC, to be indicative of marital dysfunction which could be determined by BOC measures. It may be more appropriate to compare BOC measures to a measure of actual marital functioning.

Since Subhypothesis 1 a. and 1 b. were not accepted no evidence was found to support Hypothesis 1. No significant association was found between the degree of birth order conflict and the degree of disturbance in the child (as measured by PIC and indicated by membership in a treatment or contrast group).
Hypothesis 2

This section discusses the findings related to Subhypothesis 2 a. leading to a conclusion as to the acceptability of Hypothesis 2. Hypothesis 2 stated:

There is a positive association between the degree of birth order conflict and the degree of disturbance in the family.

Subhypothesis 2 a. stated:

There is a positive association between the birth order conflict scores and the family relations scores of the PIC.

Table 8 presents an analysis of association by correlation (Pearson r) between BOC scores and PIC Family Relations scores. Tests for significance indicated all 18 correlation coefficients for BOC scores and PIC Family Relations scores could have occurred by chance. There were no remarkable differences in association between the treatment group and the contrast group. Correlation of BOC scores and PIC Family Relations scores ranged from -.18 to .30.

A somewhat different picture results when considering only those cases where PIC Family Relations scores were elevated. According to the PIC manual (Wirt, Lachar, Klinedinst, Seat, 1977) a Family Relations $r$ score of $+65$ is a significant indicator of family disturbance (p. 62). If only those cases where high PIC Family Relations scores are analyzed three cases stand out as having scores at the $+65$ level. Comparison of mean BOC scores indicated that in the group where the PIC Family Relations scale is high
### TABLE 8
Correlation of BOC Scores and PIC Family Relations Scores

<table>
<thead>
<tr>
<th>FAM</th>
<th>n</th>
<th>SC</th>
<th>RC</th>
<th>SRC</th>
<th>DC</th>
<th>PC</th>
<th>BOC Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treat.</td>
<td>10</td>
<td>.30</td>
<td>-.03</td>
<td>.17</td>
<td>-.12</td>
<td>-.04</td>
<td>.05</td>
</tr>
<tr>
<td>Cont.</td>
<td>13</td>
<td>.06</td>
<td>-.07</td>
<td>.02</td>
<td>.10</td>
<td>.28</td>
<td>.11</td>
</tr>
<tr>
<td>Total</td>
<td>23*</td>
<td>.30</td>
<td>-.08</td>
<td>.14</td>
<td>-.18</td>
<td>.11</td>
<td>.08</td>
</tr>
</tbody>
</table>

* $P > .05$

* PIC Family Relations Scores unavailable for 4 cases.
there is one BOC measure that stands out. The Sex Conflict score has a mean of 79.7 as compared to a treatment group mean of 63.4 and a contrast group mean of 52.9. This was not a significant finding however since the results were based on the analysis of only three cases where the Family Relations scale was elevated. Further research was indicated to determine if there was a relationship between the BOC Sex Conflict measure and a high degree of family disturbance.

It must be concluded that Subhypothesis 2 a. cannot be accepted since no significant association was found generally between BOC scores and the Family Relations scores of the PIC as determined by t Test and correlation coefficient.

In related research Levinger and Sonnheim (1965) also found that Sex Conflict and Rank Conflict scores tended to correspond with "a low index of marital satisfaction" (pp. 140-141) derived from a factor analysis of 15 separate satisfaction indices. However, consistent with the findings related to this research project Levinger and Sonnheim's findings were not statistically significant. Baxter (1965) also compared BOC scores to a measure of marital functioning which he described as "a psychological index of intramarital conflict" (p. 151). Baxter found that Rank Conflict scores correlated significantly with his index of marital functioning while there was no significant association between the index and Sex Conflict scores.
It must be concluded then, based on generally negative findings regarding Subhypothesis 2 a. that there is no evidence to support Hypothesis 2. While there was some tendency toward a positive association between the BOC Sex Conflict measure and family disturbance the substantially negative findings lead to the conclusion that there was no association generally between the degree of birth order conflict and the degree of disturbance in the family.

**Hypothesis 3.**

This section discusses the findings related to Subhypothesis 3 a.

Hypothesis 3 stated:

There is a positive association between the degree of birth order conflict and marital breakdown.

Subhypothesis 3 a. stated:

There are higher birth order conflict scores for parents who have experienced marital separation or divorce than for parents who have intact marriages.

Since there were only 3 cases of marital breakdown the hypothesis could not be tested with any degree of assurance. However, for the purposes of future research the data will be presented. As illustrated in Table 9 mean BOC scores showed a higher elevation in two of the four submeasures and the Index for parents who had experienced marital separation as compared to parents who had intact marriages. There was little difference between the two groups for the remaining two submeasures. Sex Conflict and Rank
TABLE 9
Comparison of BOC scores
by Marital Status

<table>
<thead>
<tr>
<th>BOC</th>
<th>Married</th>
<th>Separated</th>
<th>F</th>
<th>p</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean n = 24</td>
<td>mean n = 3</td>
<td>df = 23, 2</td>
<td>df = 25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>56.1</td>
<td>72.7</td>
<td>1.93</td>
<td>ns</td>
<td>- .99</td>
<td>ns</td>
</tr>
<tr>
<td>RC</td>
<td>51.2</td>
<td>67.7</td>
<td>1.11</td>
<td>ns</td>
<td>- .85</td>
<td>ns</td>
</tr>
<tr>
<td>SRC</td>
<td>53.9</td>
<td>70.3</td>
<td>6.13</td>
<td>ns</td>
<td>- 1.25</td>
<td>ns</td>
</tr>
<tr>
<td>DC</td>
<td>36.2</td>
<td>37.3</td>
<td>1.21</td>
<td>ns</td>
<td>- .17</td>
<td>ns</td>
</tr>
<tr>
<td>PC</td>
<td>78.9</td>
<td>81.3</td>
<td>1.69</td>
<td>ns</td>
<td>- 1.31</td>
<td>ns</td>
</tr>
<tr>
<td>BOC Index</td>
<td>55.7</td>
<td>64.7</td>
<td>8.24</td>
<td>ns</td>
<td>- 1.31</td>
<td>ns</td>
</tr>
</tbody>
</table>
Conflict means in the separated group were 16% higher than mean scores in the married group. However, for none of the five BOC scores was F significant. Furthermore, t did not reach a critical level (1.71) for any of the scores.

While a tendency was shown for 3 of the 5 BOC mean scores to be higher in the separated group than in the married group this tendency was in no case statistically significant. Subhypothesis 3 a. therefore cannot be accepted.

The research which compared BOC to marital breakdown can be divided into two groups. The research of Toman (1962, 1976) revealed a significant association between high Sex Conflict and Rank Conflict scores and divorce. Birtchnell and Mayhew (1977) found no association between complementarity of birth order and divorce. The findings of the present research study were in general agreement with the findings of Birtchnell and Mayhew.

It must be concluded, based on the generally negative findings regarding Subhypothesis 3 a. that no evidence was found to support Hypothesis 3. The findings yielded no significant evidence to indicate there was an association between the degree of birth order conflict and marital breakdown.
Summary of Research Findings.

Parents in the sample were typically young married couples of approximately 30 years of age. Treatment group parents tended to be slightly younger than in the contrast group. In the treatment group 23.1% of the parents had a separated marital status. Contrast group parents tended to have achieved a higher educational level and a higher occupational level as compared to treatment group parents. In both groups there were typically slightly more than 2 children per family with a mean age of 4.6 years. Parents in the treatment group had a high proportion of siblings of the same sex in their primary families. Contrast group parents had a high proportion of siblings of the opposite sex and tended to be of senior birth rank. In regards to the child from each family who had attended The Child's Place the mean age was typically slightly more than 4 years of age for both groups. There was a higher proportion of male children who had attended the agency in the treatment group as compared to the contrast group. Statistical testing of the findings for the sample did not prove significant with the exception of the data for educational level of respondent wives.

The null hypotheses could not be rejected for all four subhypotheses after examination of the data and statistical testing. Therefore no evidence was found to support the three main hypotheses. Statistical testing indicated
variances in scores could have occurred by chance with two exceptions. The difference between the mean BOC Index scores for the treatment and contrast groups proved significant. The difference in means was also significant in the correlation coefficient for Sex Conflict and the PIC Adjustment scale. Sex Conflict scores were elevated in a direction supportive of each hypothesis as were Rank Conflict scores in three of the four subhypotheses. A low association was in evidence between the total Sex Conflict score and the PIC Adjustment scale. In no other instance were scores at significant levels.
CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this research project was to determine if the birth order of parents and their children could be used as predictors in the assessment of family functioning. Three hypotheses and four subhypotheses were developed to examine the validity of birth order conflict, as defined by Toman (1976), as an indicator of actual marital and family dysfunction. A purposive sample was drawn from the population of The Child's Place where clients were assigned either to a treatment group or a contrast group. The data was collected by pre-test form, mailed questionnaires, and a PIC which had been previously administered by The Child's Place staff.

Major Research Findings

Parents in the sample tended to be slightly older in the contrast group than in the treatment group. The mean ages were 31.4 years for the contrast group parents and 28.9 years for the treatment group parents.

Parents in the contrast group tended to have achieved a higher level of education as compared to treatment group parents. The median level of education for the contrast group was "some college or university" as compared to a
median educational level of "high school graduate" in the treatment group.

Contrast group husbands, as the usual primary wage earner, tended to have achieved a higher occupational level as determined using Blishen's socio-economic index.

In regards to marital status 100% of the contrast group parents and 76.9% of the treatment group parents were married. The remaining 23.1% of the treatment group parents were separated.

Parents in the treatment group had a high proportion of siblings of the same sex in their primary families (70.8%). In the contrast group parents had a high proportion of siblings of the opposite sex (50%). Parents in the treatment group were evenly distributed between junior and senior birth rank as compared to their siblings. In the contrast group 71.4% of the parents were of senior birth rank.

There was little variance between treatment and contrast groups in terms of family size and age of children. The mean number of children overall was 2.2 per family with a mean age of 4.6 years.

In regards to the child from each family who had attended the agency the mean age was 4.1 years for the contrast group and 4.3 years for the treatment group. In the treatment group 84.6% of the children were males while
in the contrast group 57.1% of the children were males.

Statistical testing of the variables in the sample proved the findings insignificant with the exception of the variable education of the respondent wives.

No evidence was found to support any of the four subhypotheses after examination of the data and statistical testing. Acceptance of the null hypothesis for the three main hypotheses was therefore indicated. For Subhypothesis 1 a, no significant difference was found between birth order conflict scores for treatment group parents as compared to contrast group parents. For Subhypothesis 1 b, no significant association was found between birth order conflict scores and the Adjustment scores of the PIC. The null hypothesis was therefore accepted for Hypothesis 1 and it was concluded that there was no association between the degree of birth order conflict as defined by Toman and the degree of disturbance in the child.

For Subhypothesis 2 a, no significant association was found between birth order conflict scores and the Family Relations scores of the PIC. The null hypothesis was therefore accepted for Hypothesis 2 as it was determined that there was no relationship between the degree of birth order conflict and the degree of disturbance in the family.

While results were in the expected direction for Subhypothesis 3 a, the small sample size of separated
parents prevented Hypothesis 3 from being tested with any degree of assurance. No significant difference was found in birth order conflict scores for parents with a separated marital status as compared to parents with intact marriages. The null hypothesis was therefore accepted for Hypothesis 3 and it was concluded that there was no significant association between the degree of birth order conflict and marital breakdown.

The reader was cautioned as to the interpretation of findings involving correlation coefficient as scores were not normally distributed. Where the PIC Family Relations scale indicated significant family disturbance the small sample of such cases rendered the findings inconclusive. A small sample of separated parents also rendered findings inconclusive in regards to marital status.

The following observations were made bearing in mind the stated qualifications as to conclusions that can be drawn from the findings. While the null hypothesis must be accepted for all three of the main hypotheses there was an overall tendency for results to be in the expected direction. For Subhypothesis 1 a. Sex Conflict and Rank Conflict scores tended to be slightly more elevated in the treatment group as compared to the contrast group. In Subhypothesis 1 b. Sex Conflict and Rank Conflict correlation coefficients tended to be slightly more elevated for the treatment group. For Subhypothesis 2 a. where the
PIC Family Relations scale indicated significant family disturbance. Sex Conflict scores were 26.8% higher than the contrast group mean. Finally, in Subhypothesis 3 a, Sex Conflict and Rank Conflict mean scores in the separated group were 16% higher than mean scores in the married group.

Conclusions

The major conclusion of this research project was that no evidence was found to support Toman's theory of birth order conflict nor to support its use as a predictor in the assessment of family functioning.

In this study it was hypothesized that parents with noncomplementary birth order positions in relation to each other generally had unhappier marriages and less functional families than parents with complementary birth order positions, and that BOC measures could be applied to determine if there was a relationship between BOC and family functioning. The PIC Family Relations Scale isolated only 3 cases where there was evidence of significant family disturbance. The findings were therefore inconclusive due to the small sample size of the dysfunctional families. It was questionable therefore whether the total sample was suitable to provide for a good test for the duplication theorem. An underlying assumption of the study was that in the sample child dysfunction was to a major extent caused by parental (marital) dysfunction. The criteria for inclusion in the
sample and a purposive sampling method were utilized to maximize the family etiology assumption. Still it appeared that for 85% of the cases in the treatment group there was no evidence of significant family disturbance as measured by the PIC Family Relations Scale. This finding led to a question as to whether the family etiology assumption was operating generally in the agency population. As indicated in the Review of the Literature family disturbance is by no means always associated with psychological disorders of pre-school children. It is suggested therefore, that further research on the duplication theorem should utilize a population, such as would be provided by a family counseling centre, where a significant degree of family disturbance would likely be in evidence.

The PIC was designed primarily to provide a measure of child psychological functioning. The Family Relations Scale, and to some extent the validity scales, could be used to assess family functioning. However, the main emphasis of the clinical scales of the PIC was the psychological assessment of the child and to a lesser degree the assessment of family functioning. In the present study it was hypothesized that there was a positive relationship between BOC scores and PIC Adjustment scale scores. It was perhaps methodologically unsound to expect
the state of a child’s psychological adjustment, as measured by the PIC, to be indicative of marital dysfunction which could be determined by BOC measures. In another section of the study the duplication theorem was more appropriately tested by comparing BOC measures to the Family Relations Scale. However it is recommended that future research on the duplication theorem should utilize, as a basis of comparison, a reliable instrument designed primarily to assess marital and family functioning.

Previous research on the duplication theorem has tested only Toman’s formulas for Sex Conflict and Rank Conflict. The present study also tested Toman’s formulas for Discrepancy Conflict and Parent-Child Configuration Conflict. The rationale underlying the Discrepancy Conflict measure was the supposition that the more siblings a person had the less the person’s eventual marriage relationship would resemble his primary family sibling relationships since marriage entailed a peer relationship with only one other person. It was assumed then that the more siblings a person had the more detrimental it was for the marriage relationship. The rationale underlying the Discrepancy Conflict measure may have been theoretically unsound and may have contradicted Toman’s theory concerning the middle sibling whose flexibility in relationships in the primary
family and in marriage was thought to be enhanced by a learned ability to relate effectively to both younger and older siblings (Toman, 1976, pp. 21-22). Thus it was implied by Toman that both birth order position and the quantity of sibling relationships (junior and senior) served to enhance the relationship potential of the middle sibling.

No evidence was found to support Toman's measures for Discrepancy Conflict or Parent-Child Configuration Conflict (PC). However the PC measure may have some theoretical significance. Bowen (1978) contended that the comparison of the birth order of parents with the birth order of their children often provided valuable clues as to why a particular child was chosen as a scapegoat for family problems. Bowen however does not provide research findings to support this view. It is therefore recommended that future research into the family scapegoating process also consider the possible effect of noncomplementary parent-child birth order.

In regards to the sample for this study 50% of the respondents returned questionnaires despite an ongoing mail strike. This may have indicated generally a very positive client-agency relationship. The return rate, under less than desirable conditions, was also indicative of client willingness to participate in research which should be taken advantage of in the interests of increased social work knowledge and improved agency service.
While birth order is a relatively objective variable that can be easily obtained, its scientific utility may be limited, since birth order may not have uniform effects across individuals. However, some researchers of the family constellation have produced significant results and their findings point to areas where further research was indicated:

- An increased understanding of family dynamics may result if the study of the family constellation was integrated with research on marital complementarity (Levinger and Sonnheim, 1965).
- Research comparing rank complementarity with dominance patterns and power relationships in marriage is indicated (Kemper, 1966).
- Further study comparing the quality of marital relationships to the degree of rank and sex complementarity utilizing a reliable indicator of actual marital conflict in an attempt to replicate the very promising findings of Weller et al., (1974).

In summary, based on the mixed findings of other researchers, further study of the possible effects of the birth order position of parents and children on family functioning was indicated. However, the findings of the present research project offered no evidence to support Toman's theory of birth order conflict nor to support its use as a predictor in the assessment of family functioning.
Thank you very much for your participation in this project. If you should have questions concerning the research project or completion of the questionnaire please contact The Child's Place by phoning 966-2211.

1. Please state the present age and sex of the child from your family who has attended The Child's Place.

   a) (____) years
   b) (____) male
      (____) female

2. What is the present age, occupation, and highest level of education achieved by the father and mother of the child when he/she attended The Child's Place?

<table>
<thead>
<tr>
<th>Father</th>
<th>Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>When at Child's Place</td>
<td>When at Child's Place</td>
</tr>
</tbody>
</table>

   a) Present age
      (_______ years)  (_______ years)
   b) Occupation
      (___________)  (___________)
   c) Highest level of education achieved
      (___________)  (___________)

3. Please state the year of:

<table>
<thead>
<tr>
<th>Marriage</th>
<th>Remarriage</th>
<th>Separation</th>
<th>Divorce</th>
<th>Widowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>19_______</td>
<td>19_______</td>
<td>19_______</td>
<td>19_______</td>
<td>19_______</td>
</tr>
</tbody>
</table>
4. **Children in Present Family**

a) List the children in your present family by age and sex.

b) Of the children listed indicate which one attended The Child's Place by checking the appropriate box beside this child's age and sex.

c) If there are children in your family from a previous marriage indicate whether each child is the present father's or the present mother's natural child by checking the appropriate box.

d) If there are foster children or adopted children in your family who are not the natural children of either present parent enter each child's age when he/she joined the family.

<table>
<thead>
<tr>
<th>Age</th>
<th>Sex</th>
<th>Attended The Child's Place</th>
<th>Father's Child</th>
<th>Mother's Child</th>
<th>Foster/Adopted Child's Age When Joined</th>
</tr>
</thead>
<tbody>
<tr>
<td>oldest</td>
<td>M( ) F( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( ) ( _______ years )</td>
</tr>
<tr>
<td>( )</td>
<td>M( ) F( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( ) ( _______ years )</td>
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<tr>
<td>( )</td>
<td>M( ) F( )</td>
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<td>( )</td>
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<td>( ) ( _______ years )</td>
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<tr>
<td>( )</td>
<td>M( ) F( )</td>
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<td>( ) ( _______ years )</td>
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<tr>
<td>( )</td>
<td>M( ) F( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( ) ( _______ years )</td>
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<tr>
<td>( )</td>
<td>M( ) F( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( ) ( _______ years )</td>
</tr>
<tr>
<td>( )</td>
<td>M( ) F( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( ) ( _______ years )</td>
</tr>
<tr>
<td>( )</td>
<td>M( ) F( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( ) ( _______ years )</td>
</tr>
<tr>
<td>youngest</td>
<td>M( ) F( )</td>
<td>( )</td>
<td>( )</td>
<td>( )</td>
<td>( ) ( _______ years )</td>
</tr>
</tbody>
</table>
5. If there are any other brothers or sisters of the child who attended The Child's Place who are not living with your present family please state their year of birth, sex, and the year they departed from the family.

<table>
<thead>
<tr>
<th>Year of Birth</th>
<th>Sex</th>
<th>Year Departed</th>
</tr>
</thead>
<tbody>
<tr>
<td>19____</td>
<td>M(____)</td>
<td>19___</td>
</tr>
<tr>
<td>19____</td>
<td>M(____)</td>
<td>19___</td>
</tr>
<tr>
<td>19____</td>
<td>M(____)</td>
<td>19___</td>
</tr>
</tbody>
</table>

6. a) Are both you and your present spouse the natural parents of the child who has attended The Child's Place? (That is, the father and mother who gave birth to the child)

   Yes (____)    No (____)

b) If either you or your present spouse is not the natural parent of this child, which natural parent, if any, presently lives with the family?

   Father (____)  Mother (____)  Neither (____)

c) If there has been a remarriage or you are a single parent, please state the age of the natural parent who does not live with the present family.

   (____ years)

d) If a natural parent is deceased, please state:

   Age when deceased (____ years)

   Year when deceased    19____
7. **Natural Parents' Family of Origin**

   a) Please enter below the age and sex of the brothers and sisters of each natural parent of the child who has attended The Child's Place. (In other words, state the age and sex of the brothers and sisters of the father and mother who gave birth to the child who attended The Child's Place.)

   Where both natural parents of the child who attended The Child's Place are not known state the age and sex of the brothers and sisters of the present parents. (For example where an unrelated child has been adopted by the present parents.)

   b) If either parent grew up with children who were not their natural brothers or sisters indicate his or her relationship to each child in the space provided, (for example, step-brother, foster-sister).

   c) If either parent grew up with children who were not their natural brothers or sisters indicate the age of each step-brother or step-sister when he or she joined the family.

   **Brothers and Sisters of Natural Father**

<table>
<thead>
<tr>
<th>Present Age</th>
<th>Sex</th>
<th>Step Relationship</th>
<th>Stepbrother's/Stepsister's Age When Joined Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
<td>(___)</td>
</tr>
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<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
<td>(___)</td>
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<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
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<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
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<td>M(<em><strong>) F(</strong></em>)</td>
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</tr>
<tr>
<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M(<em><strong>) F(</strong></em>)</td>
<td>(_________)</td>
<td>(___)</td>
</tr>
</tbody>
</table>
d) If the natural father has brothers or sisters who are deceased please state their age at death, sex, and the year of death.

<table>
<thead>
<tr>
<th>Age at Death</th>
<th>Sex</th>
<th>Year of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>(___ years)</td>
<td>M( _) F( _)</td>
<td>19___</td>
</tr>
<tr>
<td>(___ years)</td>
<td>M( _) F( _)</td>
<td>19___</td>
</tr>
<tr>
<td>(___ years)</td>
<td>M( _) F( _)</td>
<td>19___</td>
</tr>
</tbody>
</table>

Brothers and Sisters of Natural Mother.

<table>
<thead>
<tr>
<th>Present Age</th>
<th>Sex</th>
<th>Step Relationship</th>
<th>When Joined Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>(___)</td>
<td>M( _) F( _)</td>
<td>(__________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M( _) F( _)</td>
<td>(__________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M( _) F( _)</td>
<td>(__________)</td>
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<td>M( _) F( _)</td>
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<td>M( _) F( _)</td>
<td>(__________)</td>
<td>(___)</td>
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<tr>
<td>(___)</td>
<td>M( _) F( _)</td>
<td>(__________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M( _) F( _)</td>
<td>(__________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M( _) F( _)</td>
<td>(__________)</td>
<td>(___)</td>
</tr>
<tr>
<td>(___)</td>
<td>M( _) F( _)</td>
<td>(__________)</td>
<td>(___)</td>
</tr>
</tbody>
</table>

e) If the natural mother has brothers or sisters who are deceased please state their age at death, sex, and the year of death.

<table>
<thead>
<tr>
<th>Age at Death</th>
<th>Sex</th>
<th>Year of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>(___ years)</td>
<td>M( _) F( _)</td>
<td>19___</td>
</tr>
<tr>
<td>(___ years)</td>
<td>M( _) F( _)</td>
<td>19___</td>
</tr>
<tr>
<td>(___ years)</td>
<td>M( _) F( _)</td>
<td>19___</td>
</tr>
</tbody>
</table>
Dear Parent:

Your participation is requested in a research project by completing and returning the enclosed questionnaire. The purpose of the project is to determine if the birth order of children and their natural parents has an impact on their social relationships. It has been theorized that a person's birth order position has an effect on the relationship between a child and his siblings and parents. It is also thought that the respective birth order position of each parent in his/her family of origin effects present marital and parent-child relationships. It is the intention of the study to test this theory by analyzing the birth order of parents and the birth order of their children who have attended The Child's Place. It is hoped that the results of this study will provide increased diagnostic knowledge in the service of children and families who are experiencing social difficulties.

In the enclosed questionnaire you are asked factual questions concerning your family of origin and your present family. For the most part the questions require answers of either one word or a check mark. It should only take about ten minutes to complete. Please do not sign your name to the questionnaire.

Should you choose to participate in this study please complete the questionnaire and return it as soon as possible using the enclosed stamped, self addressed envelope.

Thank you very much for your participation.

Sincerely, yours

Glenn Israel
Dear

There is presently a research project underway at the University of Windsor, Social Work Department and at The Child's Place, for which your cooperation would be greatly appreciated. The purpose of the project is to determine if the birth order of children and their natural parents has an impact on their social relationships.

The research project is being conducted by Mr. Glenn Israel, a graduate student from the University of Windsor. The results of the study will be used for Mr. Israel's thesis. It is being supervised by a thesis committee from the University of Windsor chaired by Professor F. C. Hansen.

The Child's Place is interested in continued research in order to provide improved programmes to our children and families. Thus, we are requesting your participation in this project by completing and returning a brief questionnaire. Please note that your name will not appear on the questionnaire which will be coded numerically by our staff at The Child's Place. Your identity will not be known to the researcher and the information will remain confidential.

Thank you for your consideration.

Sincerely,

W. V. McDermott, Ph.D., C.Psych.,
Executive Director.

enclosure

/bar
1. Case # __________
2. Group - Treatment. __________
   - Integration __________

Parent Data
3. Parent ages - Husband _____
   - Wife _____
4. Siblings of Parents - HUSBAND
   Age ___ Sex ___
      ___ ___
      ___ ___
   WIFE
   Age ___ Sex ___
      ___ ___
      ___ ___

5. Marriage Date __________
6. Present Marital Status - Married ___ Remarried ___
   Single ___ Divorced ___ Widowed ___

7. Occupation - HUSBAND
   - Wife __________
8. Education - HUSBAND
   - Wife __________

Child Data
9. Child attending Child's Place
   Age ___ Sex ___ Age ___ Sex ___
10. Siblings
    ___ ___
    ___ ___
    ___ ___
11. Step Siblings
    ___ ___
    ___ ___
12. Siblings Deceased (age deceased) ___ ___
13. PIC to be attached which was administered at admission to the programme.
BIBLIOGRAPHY


Kammeyer, K. Birth order as a research variable. Social Forces 1967, 46, 71-80 (a).


Toman, W. Family constellation as a basic personality determinant. *Journal of Individual Psychology*, 1959, 15, 199-211.


Unpublished Material


The Child's Place. Program, goals, indicators; Technical description. (no date) (mimeograph).
VITA AUCTORIS

Glenn Alan Israel was born in Mission City, British Columbia on February 16, 1947. He received his secondary school education at Mission City Secondary School.

After serving in the Canadian Armed Forces for six years (1967-1973) Mr Israel attended Vancouver City College for one year. In 1974 he entered the Bachelor of Social Work program at the University of Western Ontario and graduated in May 1977. He was employed as a social worker at Sarnia - Lambton Children's Aid Society until his entry into the Master of Social Work program at the University of Windsor in September, 1980. He expects to graduate in September, 1981.

Mr. Israel's MSW field placement was at the Outpatient II Unit of the Children's Centre of Wayne County, Detroit, Michigan. After a one year educational leave of absence he plans to resume his employment at Sarnia - Lambton CAS.

Mr. Israel is married and he and his wife have two children.