Resources utilized by parent in child rearing and knowledge of infant development
by Billie Lynn Warford

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE in Home Economics
Montana State University

Abstract:
Parents knowledge of infant development and resources utilized were investigated in a sampling of parents of preschool children in Bozeman, Montana. Respondents were 45 married couples age 20 through 45 with children enrolled in preschool programs in Bozeman. The survey instrument included demographic information and a knowledge of infant development section.

Primary resources listed by mothers included instincts, followed by extended family, spouse, books, and friends. Instincts were also listed by fathers as the primary resource followed by spouse, family, books, and friends. Age of parents, level and area of education, preparation in child development, and degree of parental confidence had no significant relationship to parents' knowledge. Mothers in general had more knowledge of infant development, revealed more" preparation in child development, and utilized more resources than fathers.

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Date May 25, 1977

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TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Parents knowledge of infant development and resources utilized were investigated in a sampling of parents of preschool children in Bozeman, Montana. Respondents were 45 married couples age 20 through 45 with children enrolled in preschool programs in Bozeman. The survey instrument included demographic information and a knowledge of infant development section.

Primary resources listed by mothers included instincts, followed by extended family, spouse, books, and friends. Instincts were also listed by fathers as the primary resource followed by spouse, family, books, and friends. Age of parents, level and area of education, preparation in child development, and degree of parental confidence had no significant relationship to parents' knowledge. Mothers in general had more knowledge of infant development, revealed more preparation in child development, and utilized more resources than fathers.

CHAPTER I

Introduction

New research points to the importance of the first three years of life for the development of the child. With more emphasis being placed on the importance of these early years, the role of the parents takes on increased significance. The job that parents do in raising their children will have more of an impact on our society than any other profession.

> This year six million Americans will take the step that will significantly change their own lives and profoundly change the next generation: they will have children. How they raise these children will have a greater impact on American society than the way they vote, the technologies they produce, the wars they wage or the art they create. And yet, perhaps never before in U. S. history have parents faced more choices, felt more pressures, or sought more professional help in the rearing of their children (Newsweek, September 1975, p. 48).

American society places the responsibility of raising children on teachers and parents, with the home playing a more responsible role (Hawkins, 1972). This occurs because most of the first five years of life is spent at home. As "Many of the child's behaviors, including his perceptions, skills, values, and even attitudes are formed before the child ever enters school". In fact:

> Most mental health efforts to change the home environment are too little and too late. Child-guidance clinics, juvenile courts, family service clinics, and other agencies spend vast amounts of time, money, and energy correcting problems that incompetent parents create (Hawkins, 1972, p. 30).

Since problems which occur at the school level have their foundations earlier in the child's development, the time between birth and

and three years of age is crucial (White, 1975; Gordon, 1975).

> In this brief span of time how the mother or primary caretaker interacts with the child can do more to influence the child's competence in later life than at any other time before or after. Yet nobody warns her of the dangers of this period, nor of its promise. She makes her daily decisions purely on instinct, because until recently even the professionals were unaware of it (Pines, 1975, p. 88).

Foundations for the idea that infancy is crucial for development were laid back in 1762, when Jean Rousseau recommended that education begin in the cradle. New research suggests that in the next ten years we may see the elimination of terms such as 'preschool' and the recognition that learning begins at birth (Gordon, 1975, p. 6).

Importance of the Study

Marriage used to be relatively simple in our society, but the changes which are now occurring are deeply affecting the family system (Swerdloff, 1975). Women are seeking more autonomy in both family and non-family roles. There is decreased frequency of inter-generational family relations as most newly-wed couples live apart from parental homes. This tends to contribute either to isolation of the new parents from their cultural traditions of child training, or to their exposure to different ways of child rearing which present a challenge to them (Brim, 1959, p. 17).

Where then do new parents seek help with child rearing? Do new parents still rely on the knowledge or advice of their own parents, or do they take advantage of the wide variety of available community

resources, such as parenting classes sponsored by a public agency, professionals in the field or health agencies, or lectures? Also widely available are the enormous number of child rearing books. Millions of copies of Spock's Baby and Child Care have been sold. Other child development professionals have written best sellers (Ginott, Ilg & Ames, 1955).

Need of the Study

Even with so many available resources, authorities believe that parents today are not prepared for parenting. American society places more restrictions on driving a car than raising a child. The vast majority of educated women in this country do not know the ramifications of child rearing (Pines, 1975, p. 88).

Until we know the ways in which parents prepare themselves for parenthood--where they turn to find help in raising their children--which resources are used, and how often, as well as the level of parenting knowledge, we cannot use our resources wisely.

Statement of the Problem

It is important therefore to identify resources parents utilize when they need help raising their children as well as to obtain a measure of parents' knowledge of infant development.

The following assumptions were made:

1. Parents utilize resources when they need help in raising their children.

2. Infant development follows a sequential developmental pattern which can be utilized for measuring parents' knowledge.

Questions to be Answered

This study will attempt to answer the following questions:

1. What resources are parents utilizing to obtain information on raising their children?

   a. Is the extended family important?

   b. How widely used are community resources?

   c. Are books on child rearing an important source of information?

   d. Are mothers and fathers utilizing the same resources?

   e. Which resources are more primary or secondary?

2. What is the relationship between parents knowledge of infant development and their

   a. level of education

   b. area of education

   c. previous preparation in Child Development

   d. age

   e. number of children

   f. degree of parental confidence

   g. age considered crucial for intellectual development

3. How do mothers compare with fathers in knowledge of infant development?

Definition of Terms

Many of the terms used throughout this paper have a wide variety of interpretations. For purposes of this paper, the following terms were operationally defined:

Infancy was limited to the period of time from birth until two years of age.

Parents were limited to married couples, residing together, with at least one preschool aged child enrolled in a day care center or preschool in Bozeman, Montana.

Preschool child is generally defined as a child between the ages of two through five years of age. In Bozeman, Montana five year olds are eligible to attend kindergarden. The term preschool child in this paper refers to children aged two through four years of age.

Day Care Programs fall into two main types: the day care center or day care home. Both these facilities are licensed to care for children while the mother or father are unable to do so during the day. The term day care program refers to both types of day care situations.

Preschool was used to refer to any program which provides a variety of experiences concerned with the development of the child aged three to five.

Limitations of the Study

The parents involved in this study were married couples residing together with children enrolled in a preschool or day care program in

Bozeman, Montana. These parents may not be representative of single parents or those parents who did not volunteer to participate.

The sample was restricted to 45 couples because of time and money limitations. The small sample size will limit any conclusions which might be made.

CHAPTER II

REVIEW OF LITERATURE

The importance of parents and the role they play in raising their children is crucial for the development of the child. This review of literature covers research in child development related to these areas:

1. Infancy, the period of time from birth to three years of age
2. Environmental influences on the development of a child
3. Parents, the primary teachers of their children, controlling these environmental factors
4. Programs aimed at preparation for parenthood
5. Parents utilizing resources to help them in raising their children

Importance of Infancy

> Few would dissent from the proposition that infancy is the most critical period of human development, the period in which the basic framework for later development is established. Despite this, it is only recently that we have been able to investigate what goes on during infancy (Bower, 1977, p. viii).

The critical nature of development during infancy has been supported by the work of Burton White. As a result of extensive research into the lives of preschool children, White came to the conclusion that by the age of three most of a child's potential has been developed and that the period of eight to eighteen months seems to be the critical learning time in a child's life.

Bower's (1977) investigations of the period of infancy were aided

by the development of new techniques and showed that the newborn infant was an extremely competent social, learning, and perceiving organism. "The newborn's ability to learn is so astonishing that it would need only the slightest exposure (to a stimuli) for any connection to be learned" (p. 17). Newborn infants are capable of grasping an object, imitating other people, and recognizing their mothers, according to Bower, and this is contradictory to earlier research concerning the abilities of newborn infants.

The critical nature of infancy is synthesized by Gordon (1975) as follows:

1. The infant is a far more capable being in terms of ability to experience the outside world than was thought a decade ago.
2. The infant influences his environment, and the development of his capabilities is related to the responses his environment makes to him.
3. Infants survive in a variety of caretaking situations--the limits of good caretaking are not yet known.
4. Although early deprivation may be reversible, the infant period is a crucial one for setting the stage for adequate growth-both physically and psychologically. "Therefore, what we know should be applied now, even while we continue to develop our knowledge" (p. 3).

Parenthood

Parents are the primary teachers of their children and parents largely control the environmental factors that influence the child's development (Pickart & Fargo, 1971). While this reflects the current view, there was a time when parents were told there was little connection between development and learning:

> If you were a parent you were supposed to buy (Gesell (1941), which was the standard 'bible'. If you had a two-year old you turned to the right page in Gesell and checked out your child. If he or she was behaving like a two-year old, you sighed with relief; if the child was behaving like a one-year old, you locked the child in the backroom. But you did not do anything about it (Gordon, 1975, p. 173).

Importance of Environment

Today the parents' role as an environmental influence on their child's development is significant, since parents "are and create the major portion of the growing child's environment" (Pichart & Fargo, 1971).

During the 1960's research conducted by Hunt (1961) and Bloom (1964) supported the view that a child's development is profoundly influenced by his environment. Both theories strengthened the belief that the period of early childhood is a time when the environment can have a large effect on the development of a person.

It is important, therefore, that parents have an understanding of the way children grow in order to be able to structure as stimulating an environment as possible (Conney, 1974). Ilg & Ames (1962) urge

parents to learn all they can about child behavior to enable them to use their knowledge to "provide the best possible environment for the child" (p. 12). This is further emphasized by three recent studies.

Kilbride, Johnson, and Streissguth's (1971) study of thirty-two full-term two-week old infants and their mothers showed that mothers' knowledge of infant development influenced their verbal interaction with their infants. Significant social class differences appeared. Seventy percent of the middle-class mothers thought their infants could see and learn at birth, but only 24 percent of the lower-class mothers believed their infants could do so. The amount of verbal interaction between mothers and their infants seemed to be related to maternal beliefs about the way infants see and learn.

In Seegmiller and King's (1975) investigation, infants scoring higher on the Bayley Mental Scale at 22 months of age had mothers who were more highly involved with their child's achievement. These mothers were more knowledgeable about child development and were generally more able to meet and to understand the needs of the child (Liley, 1969).

Elardo, Bradley, and Caldwell (1975) observed a number of children six months old and later when they were three tested them using the Stanford Binet Intelligence Test. They reported many ways in which what they saw in the home at six months of age could be related to the performance of the children at three years of age.

Need for Preparation

> Given the importance of the parental role in early childhood, it is ironic that so few parents are properly prepared for parenthood...Our society does not educate its citizens to assume the parental role (White, 1975, p. 5).

LeMasters (1970) cites a variety of problems faced by parents in modern America and states that poor preparation for the parenthood role magnifies the problem. He further charges that males in particular are not adequately prepared for their roles as fathers, "Girls have dolls and buggies, later, home economics and child development; women's magazines feature articles on child rearing, men's magazines feature sports and girls in scanty outfits" (p. 145). Benson (1967) argues that mothers may receive socialization for the mother role but this socialization is not equivalent to the training and knowledge they will need to perform their duties.

Authorities suggest the birth of the first baby is a crisis for many couples (LeMasters, 1957; Dyer, 1965; Jaccoby, 1969). This transition to parenthood is made difficult for both mothers and fathers by a lack of guidelines to successful parenthood (Rossi, 1968). However, researchers suggest preparation for parenthood can be an effective means for lessening the crisis which often accompanies parenthood and should be emphasized for all couples contemplating having children (Dyer, 1963; LeMasters, 1957).

Methods for Improvement

The accumulating evidence suggests that parents have great

> influence upon the behavior of their children, particularly their intellectual and academic achievement, and that programs which teach parents skills in educating their children are effective supplements or alternatives for preschool education (Schafer, 1972, p. 227).

Combining the new research which points to the importance of the first few years of life and the realization that parents are the prime educators of the child during this time, new programs have emerged around the country in an effort to prepare parents for these responsibilities.

Brookline Early Education Project. The Brookline Early Education Project (BEEP) is a publically operated program aimed at parents with babies. All families living in the Boston suburb of Brookline were invited to join in the experiment which provides an intensive series of medical and psychological examinations devised to detect any problems in the child at key periods of development. A teacher visits the home on a regular basis and works with the parents to teach them how to respond to their children's needs according to their developmental stage.

> BEEP has clearly built the foundations of a totally new type of public school system for babies and young children-a system in which parents do the actual teaching, but receive extraordinary technical support: masses of information, home visits, training, consultants, books, toys, highly specific tests of the baby's physical, intellectual and emotional state, occasional child care, referrals and strong advocacy whenever necessary. Nothing like it has ever been tried before (Pines, 1975, p. 88).

Other Programs. Toledo, Ohio has a parent-infant enrichment program for women between twelve and nineteen. Its goal is to help

these young women assume their role as parent and educator of the child, provide necessary parenting skills, and help to strengthen the family (Wagner, 1976).

Another pilot program in Des Moines, Iowa focuses on the use of schools as a hub of community activities. It offers parent training programs, discussion groups, and other programs as a part of the public schools and community college system, encouraging community support for family life programs.

In addition to programs offered by schools and colleges, other community organizations offer classes for parents. These include the American National Red Cross, hospitals that offer instructions to expectant mothers to help develop skills to care for the infant, Public Health Departments, churches which offer classes in parenting skills, and pediatricians who give advice concerning the social and emotional health of the child (Spock, 1974).

Education of Parenthood Project (EPP). Supported by the Office of Child Development in HEW and the National Institute of Mental Health. The purpose of the project was to assist in the design and implementation of parenthood education curricula by local school systems. The approach of this program varies from the other programs mentioned in that it is aimed at children and youth rather than parents. The Exploring Childhood Program is an outgrowth of EPP. Nationally operated, it focuses on helping high school students view childhood

and adolescence as an important time for becoming a person. Its aim is to prepare students to become aware of the importance of the family and the responsibilities of parents (Schaefer, 1972).

Resources Used by Parents

Traditional supports for parenting are changing:

> Parents do not have the support that was once generally available. The extended family is rare in contemporary society, and with its demise the new parent lost the wisdom and daily support of older family members. The increased mobility and new housing patterns of American families have all too often deprived the family of a variety of community activities that supported parenting and family life (Zigler, 1975, p. 41).

These changes which are occurring in American society are affecting parents and the resources to which they can turn when they need help or information in rearing their children.

Instincts

Whether or not there is an innate instinct for parenting is an ongoing argument among researchers. Some research indicates there may well be an inherited potential for parenting (Barash, 1977). Dr. Spock advises: "Trust yourself...You know more than you think you do" (1968, p. 3) and continually urges parents to trust their common sense. He concludes "what good mothers and fathers instinctively feel like doing for their baby is usually best after all" (p. 5).

Drs. Salk (1969) and Dodson (1971) also favor the use of instinct over external resources for parents. The latter advises parents to trust their hearts above theory. In an unsure situation, "science may

tell you one thing, but your heart tells you another--trust your own heart" (p. 232). Love seems more important than scientific information. Both Dodson and Salk agree that after all is said and done instinctive parental feeling is the most trustworthy guide.

On the other hand, Drs. Ginott (1971) and Gordon (1970) believe that love is not enough and instinct is insufficient. Good parents need skills. Love which is not communicated or which is communicated in harmful ways, will not be effective and may be counterproductive. Therefore, parents need to learn skills in communication. Dr. Ginott does not believe that common sense and instincts are to be trusted over knowledge and skills. Skinner reflects an extreme position, preferring to turn the task of child raising over to specialists, and believes that an ordinary parent cannot do a good job (LeShan, 1970, p. 10).

Callahan (1973) does not think there is any innate parental instinct, or any common sense or even any heart which has not been socially learned:

> Also, unfortunately, parental instinct, common sense, and heart can all be wrong. Particularly when a culture such as ours is undergoing rapid change and is so unsatisfactory to many of its members. We may need change in child rearing practices when past instincts and common sense endorsed physical punishment, racism, social injustice, aggression, and apathy. Family breakdown, alcoholism, drug use, and child abuse increase may be telling us something about the state of our hearts. When things are falling apart or changing, and parents are reading how-to books because they are searching for a better way, relying on a concept of common sense will not do...I would rather parents trust their head and thereby be open to new information and

better ways of doing things (p. 73).

Extended Family

LeMasters (1970) sees the switch from a primarily rural to a primarily urban society as a source of many problems for today's family. It reduces the assistance from the extended family. In addition, mobility has forced a decline in large family units and industrialization, in whatever form it develops, is seen by some as undermining the extended family system (Benson, 1968). Since the nuclear family is much more independent from the kin group, three developments in particular have been noted: 1) the responsibilities of the extended family have been altered; 2) other social agencies have emerged to handle various matters formerly handled by the extended family; and 3) the nuclear family has become the focal point for both expressive and instrumental family interaction (Benson, 1968, p. 85).

Researchers have called the assistance and communication between parents and grandparents the "lifeline of the modern kin network" (Sussman & Burchinal, 1962, p. 24). Research showed that the nuclear family still plays an important role, although in modified form. Services include care of children, advice giving, counseling, and cooperating with social agencies. Social activities are principal functions of the kin family network (Sussman, 1953; Sussman & Burchinal, 1963; Babchuk, 1965).

Quarantelli's 1960 study of disaster victims reported the

extended family was used most often as a source of help. He concluded that the extended family was protective and supportive and that the kin group is the preferred, sought, and major source of short and long-run help in time of crisis.

Books

Millions of how-to parent books are sold each year in America. Parents are feeling over-whelmed and inadequate:

> In their distrust of their own experiences, more and more parents are turning to experts for advice. The market for how-to parent books is booming with new treaties on "Father Power" and "The Myth of the Hyper-Active Child" joining the more traditional works of Dr. Spock (Newsweek, Sept. 1975, p. 48).

Books are an effective way to reach parents. Readers of how-to parent books may not be able to find their way through the works of Frued, Montessori, Gesell, Piaget, or many other researchers. "Parenting manuals help to disseminate important ideas" (Callahan, 1973, p. 66).

The phenomenon of how-to parent books reflects one important aspect of American society: a typically American desire to do better--the desire to do better than one has been doing, better than the neighbor and kinfolk, or better than his own parents.

> It is no surprise that a guide book such as Dr. Spock's book on baby and child care continually nudges the Bible on the best-seller lists, for more parents than ever have the faith. They believe that parenting can be improved, should be improved, and will be improved with informed parents (Callahan, 1973, p. 65).

CHAPTER III

PROCEDURES

The problem of this study was to identify those resources utilized by parents for rearing children as well as understanding extent of parents' knowledge about their development.

Population

Parents of preschool children living in Bozeman, Montana were selected as the population for this study. Since parents with children enrolled in preschool or day care programs in the city were: 1) accessible; 2) would in general be young and might rely on some type of resources; and 3) live within a two mile radius of Bozeman, they were selected as the sample.

Information concerning fathers was particularly important because there is little understanding of what fathers know about child development or the resources they employ. Both parents were asked to complete the questionnaire so comparisons could be made between mothers and fathers.

A list of local preschools and licensed day care programs secured from the Director of the Community Coordinated Child Care Services showed 10 programs in which a total of 329 children were enrolled. Although an attempt was made to contact each program director, two were unavailable. Of those that remained, one refused to participate, and another was deemed inappropriate due to limited enrollment. Directors of six programs agreed to help gather data explaining the study and

distributing letters to parents at their centers, inviting them to participate in the study. Parents were asked to sign their name, address, and phone and return the form to their center if they were willing to participate in the study. They could then be contacted to participate in the study (Appendix A).

Enrolled in these six programs were 184 children, or 55% of those known to be registered in preschool or day care programs in Bozeman, Montana.

Instrument

The questionnaire was designed to obtain a measure of parent's knowledge of child development with particular emphasis on infant development. Although several scales were available (Bayley, 1969; Uzigiris & Hunt, 1975; Gesell & Ilg, 1949; Cratty, 1970; Caplan, 1970; Stone & Church, 1973) each was geared for use by child development professionals rather than parents.

Behavioral milestones or landmarks considered to be the most significant during the period of birth to two years of age and which could be easily recognized by parents were selected for use. These included items of physical, social, language, intellectual, and general development. A total of 48 items composed the first listing. They permitted a fill-in response model so that parents would supply the correct age at which this behavior normally occurred.

The questionnaire was then presented to a panel of child develop-

ment professionals to determine if these items were: 1) important in developmental sequence; 2) important to parents; 3) accurate; and 4) expressed clearly.

Following this evaulation, minor changes were made concerning the length of the instrument and the type of response. The number of items was reduced to 40 and the fill-in response was changed to tabular columns, although age at which the behavior occurred was still required.

In order to gather information with regard to the respondent's background, a general information section was devised. It included sex, age, level and area of education, number of children, resources utilized, books used, degree of parental confidence, and age considered crucial for intellectual development.

To further refine the instrument, the questionnaire was completed by 10 married couples whose children were enrolled in the MSU Day Care Program, Bozeman, Montana. After parents completed the questionnaire they were asked:

1) Were the directions clear?

2) Was the form arranged so that it was easy to complete?

3) Was the language easy to understand?

4) How did you feel about the information requested?

All respondents completed the general information section and felt the information was pertinent. Six fathers and three mothers refused to complete the knowledge section of the instrument because the

language was too specialized and the nature of the response was threatening.

The instrument was again revised. To reduce the threatening response a Likert-type scale of Agree, Disagree, or Undecided was substituted for the age at which the behavior occurred. The statements contained the age at which the behavior should occur and parents were to respond whether they agreed with the age supplied in the statement.

Instrument Validity. To determine if the questionnaire was measuring knowledge of infant development, the revised questionnaire was administered to 20 students enrolled in a beginning level Child Development class which had just completed a unit on infant development. Student scores ranged from 22 to 35 out of a possible score of 40.

Reliability. To measure the reliability of the instrument the scores of the Child Development students were tested using Split-Halves Reliability. Using the Spearman-Brown formula (Tuckman, 1972) a reliability of .80 was found.

Item Analysis. An item analysis was calculated using the scores of the Child Development students. Items with a difficulty index between .33 and .67 were retained as being adequately difficult. Five items with an index below .33 were reworded. Items with an index of discrimination above .60 were retained as being adequately discriminating. Five items were eliminated (Tuckman, 1972).

The final questionnaire had two sections, the general background

information section about the participants and a second section which contained 35 items on infant development (Appendix B).

Method of Collecting Data

The most effective means for distributing the questionnaire was determined to be the U. S. mail. Parents who had indicated a desire to participate were contacted either in person or by phone. Married couples residing together and living within a two mile radius of Bozeman, Montana were mailed questionnaires. A total of 60 pairs of questionnaires was mailed.

To motivate participants to return questionnaires, in the initial phone contact parents were told the purpose of the study and encouraged to complete and return the questionnaire quickly. Included with each pair of questionnaires was a cover letter which explained the study, stressed the importance of completing them, and where to return them. If a questionnaire was not returned, the parents were reminded at their center with a written note. Parents were also instructed how to obtain a second instrument if for some reason the first one was lost.

Analysis of Data

Items on the knowledge of infant development section were scored so that higher scores reflected a higher level of knowledge. Each correct response received one point making the highest possible score 35. If the response was marked Undecided, it was marked zero and considered incorrect.

Means and variances were estimated for each respondent. Data were stratified according to the characteristics included as part of the background information: sex, age, number of children, level and area of education, resources utilized, degree of parental confidence, and age considered crucial for intellectual development. Means and variances were estimated for each stratum.

Mean comparisons were made using a standard t-test. Statistical significance was assumed at p.05 or less.

CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this study was to determine resources parents utilize when they need help in raising their children and to obtain a measure of parents' knowledge of infant development.

Description of Sample

A total of 171 parents of preschool children were invited to participate in the study. Of the 55 couples who confirmed their desire to participate, 45 couples (88%) actually completed and returned the survey.

The 45 couples who participated in the study were predominantly college educated (70%). The sample leaned toward younger adults, with the median age being in the 30-35 age group. The ages ranged from 20 to 45 with fathers being slightly older than mothers. There appears to be a trend toward smaller families in the educated segments of our society (Scanzoni & Scanzoni, 1976). This study would tend to agree with this trend as nearly three-fourths of the respondents have one or two children and only one-fourth have three or more children (Table 1).

Over 93% of the respondents had some education beyond high school. Only four mothers and two fathers did not have some college. More fathers had degrees above the Bachelor's than did mothers. Of the mothers, 51% had a Bachelor's Degree, 11% had a Master's Degree. For the fathers, 26% had a Bachelor's, 13% a Master's and 38% listed

TABLE 1
Description of Sample

Variable	Mother N	Father %	Mother N	Father %
Age				
20-25	8	17.8	5	11.1
26-30	14	31.1	10	22.2
31-35	20	44.4	22	48.9
36-40	3	6.7	6	13.4
41-45	0	0.0	2	4.4
	45	100.0	45	100.0
Level of Education				
High School	4	8.9	2	4.4
Attended College	13	28.9	8	17.8
Bachelor Degree	23	51.1	12	26.7
Master Degree	5	11.1	6	13.3
Above Master's	0	0.0	17	37.8
	45	100.0	45	100.0
Area of Education				
Nursing/Medicine	8	28.6	4	12.9
Education	16	57.2	4	12.9
Business	2	7.1	8	25.8
Social Science	2	7.1	4	12.9
Science/Engineering	0	0.0	7	22.6
Agriculture	0	0.0	4	12.9
	28	100.0	31	100.0
Preparation in Child Development				
High School Class	9	14.8	0	0.0
College Class	29	47.5	12	26.7
Nursing/Medicine	8	13.1	4	8.9
Community Class	8	13.1	1	2.2
No Preparation	7	11.5	28	62.2
	61*	100.0	45	100.0
Number of Children	Couples			
One Child	14	31.2		
Two Children	20	44.4		
Three or More	11	24.4		
	45	100.0		
Degree of Parental Confidence				
Very Confident	10	22.3	18	40.0
Usually Confident	20	44.4	19	42.2
Sometimes Unsure	15	33.3	8	17.8
	45	100.0	45	100.0
Crucial Age of Intellectual Development				
Birth-3 Years	31	68.9	13	28.9
3-5 Years	4	8.9	23	51.1
Over 5 Years	2	4.4	3	6.7
Every Year	8	17.8	6	13.3
	45	100.0	45	100.0

* Seven mothers reported multiple preparation

themselves as having education above the Master's level. No mothers had degrees beyond the Master's Degree. This finding is congruent with the traditional sex roles of our society, which expects men to achieve a higher educational level than women (Swerdolff, 1975).

The majority of mothers participating in this study (18%) had some preparation in child development, either a high school class (15%), college class (48%), community classes (13%), or specialized training in nursing (13%). Fathers did not reveal preparation to this extent. Only 27% of the fathers had a class in child development, 9% had specialized training in medicine, and only one father reported having been in any community class. Only 12% of the mothers reported no preparation in child development while 62% of the fathers had none. This is again a reflection of the traditional patterns in our society. Women have been responsible for the child rearing while men have been responsible for monetary support (Swerdolff, 1975). Women have felt the necessity of preparing themselves for raising children as evidenced by the large percentage of women in this sample who had some preparation in child development.

Parents responding to this survey reported various areas of education. Mothers responding were educated in fields considered to be traditionally women's: education (58%) and nursing (29%). Only two mothers reported having degrees in social science and two in business. Fathers also represented areas considered traditionally male:

25% having degrees in business, 23% science and engineering. Four fathers reported having degrees in the areas of education, social science, agriculture and medicine.

The majority of parents responding to this questionnaire were usually confident in their abilities as parents. Fathers were more confident than mothers, with only 14% being sometimes unsure of themselves. Of the mothers, 22% were very confident in their abilities and 44% were usually confident. Nearly one-third of the mothers reported being unsure of themselves. Fathers were more confident in their abilities and 44% were usually confident. Nearly one-third of the mothers reported being unsure of themselves. Fathers were more confident than mothers, with 42% being very confident and 44% usually confident. No mothers or fathers in this sample reported themselves as unsure-- this was a very confident group of parents.

Parents were asked to indicate what age they considered most crucial in the intellectual development of the child. More mothers than fathers said that the first three years of life were the most important. More fathers said the preschool years were the most important. Eight mothers and six fathers expressed the opinion that every year was important. Only two mothers and three fathers indicated that the years after five were the most crucial in the intellectual development of the child.

Representativeness of Sample

The 1970 U. S. Census revealed that there were 1020 families with husband and wife having children under six years of age in Bozeman. At that time there were only 107 children enrolled in preschool programs in Bozeman. The number of preschools has increased substantially since 1970 and there are now 329 spaces for children in preschool programs in Bozeman. This sample represents 13.7% of those parents known to have children enrolled in preschool programs.

In 1970, 22% of the population in Bozeman was between the ages of 20-24. Seven years later this age group would be in 27-31 age range which is heavily represented in this sample by 31% of the mothers and 22% of the fathers.

In Bozeman the median number of years of schooling completed for males over 25 is 13.6, for females 25 and over 12.9. In this sample, fathers had a median of 16.7 years while mothers had a median of 15 years. Both these groups exceed the average number of years of schooling and are not representative of the population as a whole.

Examination of Data

Scoring

A total score on knowldege of infant development was calculated for each respondent. Higher scores reflected more knowledge of infant development, with 35 being the highest score possible. Data were stratified according to information obtained on the general information

section: mother or father, age of parents, level of education, area of education, preparation in child development, resources utilized, degree of parental confidence, and age considered crucial for intellectual development of the child.

Primary Resources

Primary resources utilized by parents in childrearing were shown by questions like, "When you need help or information about raising your children, where do you go first?" It was surprising to find that both mothers (40%) and fathers (46%) rely heavily on their instincts in childrearing (Figure 1).

Spock (1969), Dodson (1971), and Le Shan (1970) all advise parents to rely on themselves and do what comes naturally in child rearing. Apparently parents in this sample feel confident in their abilities as parents and that their instincts provide a basis for raising their children. Several parents indicated that they relied completely on their instincts and did not feel the need to seek additional help. Perhaps the advice of the 'experts' for parents to trust themselves is being heeded by a large number of parents.

For mothers the next most widely used resource was the extended family (24%). Only four fathers used this as a primary resource. Fathers relied more on their wives for help (27%) than mothers relied on husbands (13%). This is congruent with the finding that the majority of mothers had some previous preparation in child development

suggesting fathers tend to rely more on mothers. Fathers who had not received a good deal of preparation in child development were not relied on as a primary resource by many mothers.

Books were used by more mothers (15%) than fathers (9%) as primary resources. Friends were rarely used as a primary resource by either mothers or fathers (7% each). No mothers reported using a doctor as a primary resource, but one father who was also a physician listed one doctor (Figure 1).

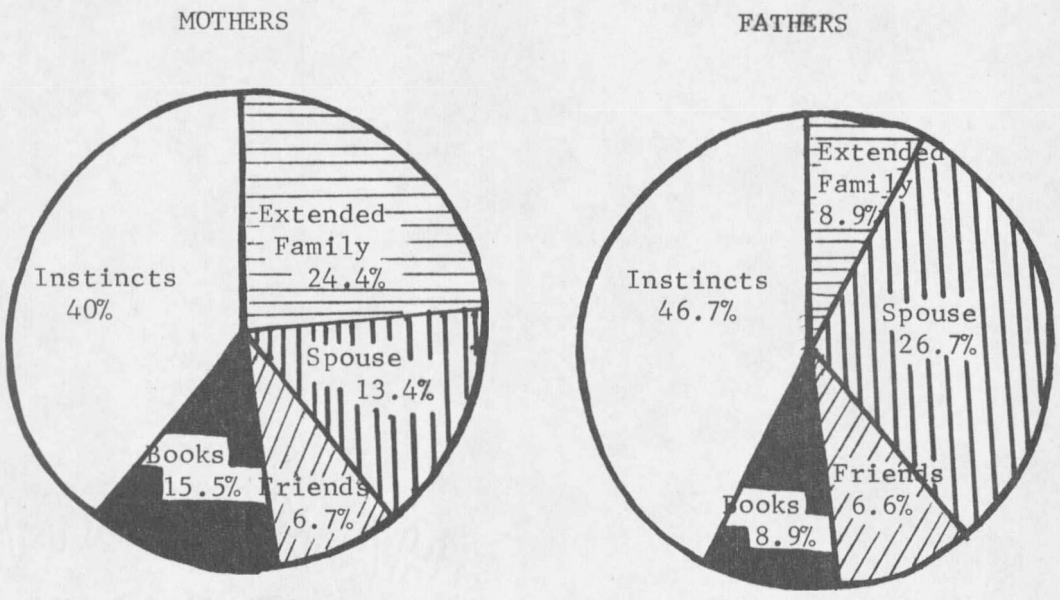

Figure 1. Primary resources utilized by parents in childrearing.

Secondary Resources

Secondary resources of parents were identified by, "If your first choice is not available, which resource do you go to next?" In general, mothers used more resources than did fathers. Several mothers

and fathers indicated more than one secondary resource, making percentage estimates of parents impractical. Numbers of parents using each resource as secondary will be reported. Several mothers (23) and fathers (11) reported using a doctor as a secondary resource, mentioning that this was generally in the case of a medical problem. The extended family was a more valuable resource for 21 mothers than for five fathers (Figure 2).

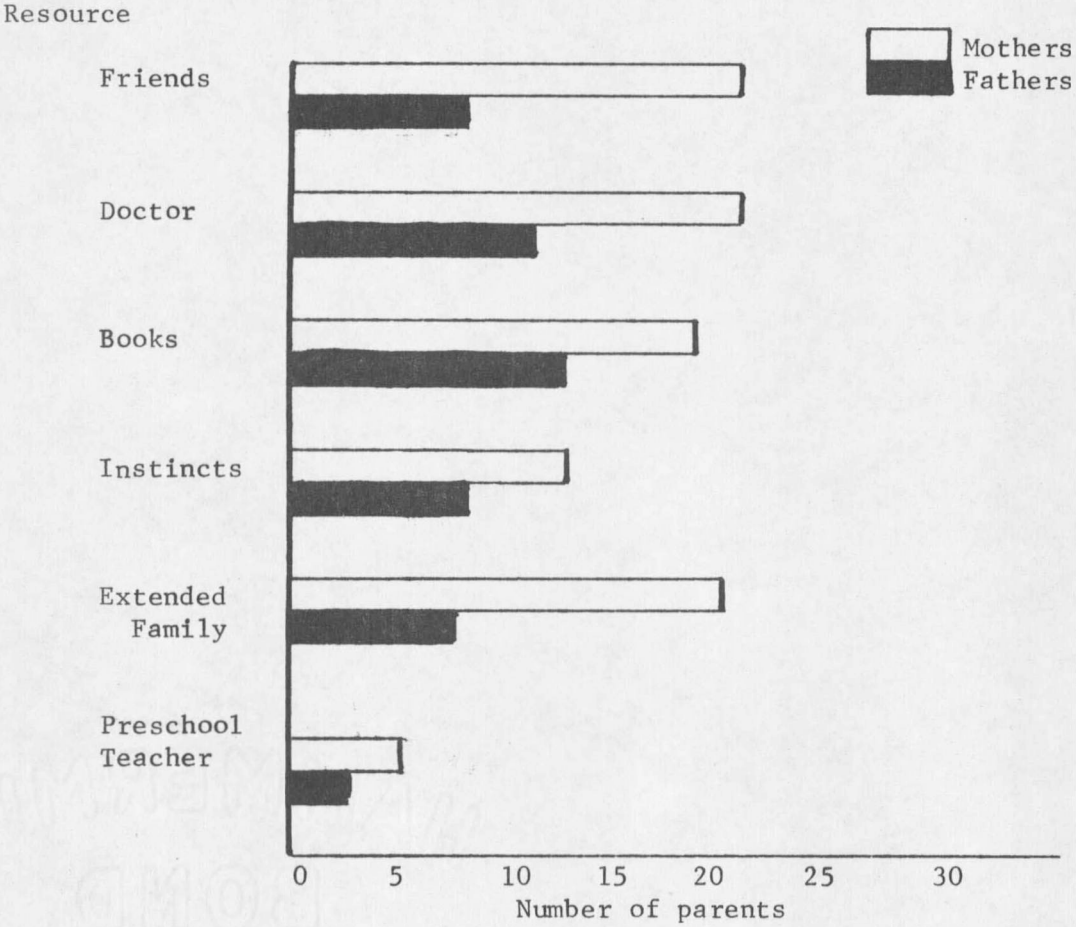

Figure 2. Secondary resources utilized by parents in childrearing.

The child's preschool teacher was a valuable resource for five mothers and two fathers. Books were used by twenty mothers and twelve fathers.

Books. To discover which books are frequently used by parents, they were asked to indicate the ones they had read or used. Dr. Spock's Baby and Child Care was read by more mothers (29) and fathers (17) than any other book. Almost half the fathers who reported reading books listed Spock's book. No other book was read by nearly as many mothers or fathers (Figure 3).

Ginott's Between Parent and Child was second most popular with mothers and was read by five fathers. Ilg & Ames was third most popular with nine mothers and three fathers, followed by a wide variety of other books.

Although parents in this sample are a highly educated group on the whole, only a small number of mothers (7) used books as a primary resource. Nearly half the mothers (23) used books as a secondary resource. Fathers use fewer books than mothers, with only four fathers using books as a primary resource, and 12 using them as a secondary resource. The majority of fathers in this study have not used books as a source of information about raising children, but for mothers, books are an important source of information. This is congruent with the finding that more mothers than fathers prepare themselves for parent-

Books	Number of Mothers	Number of Fathers
Baby and Child Care - Spock	29	17
Between Parent and Child - Ginott	17	5
Child Behavior - Ilg & Ames	9	3
Better Homes and Garden Baby Book	8	3
How to Parent - Dobson	7	1
First Three Years of Life White	6	1
Children the Challenge - Dreikurs	5	0
How to Raise a Human Being Salk	3	2
Parent's Magazine	3	1
Bible	2	1
Parent Effectiveness Training Gordon	2	0
The Magic Years - Fraiberg	2	0
How to Father - Dobson	0	1
Growing Child Series	1	1
Total	99	39

Figure 3. Books on childrearing frequently used by parents.

hood.

Differences Between Mothers and Fathers

All mothers scored significantly higher than all fathers indicating they were more knowledgeable about infant development than fathers. The mean score for all mothers was 28.07 and for all fathers 25.18. Mothers had more preparation and training in child development though fathers had a higher level of education. Mothers used more resources than fathers.

The differences between mothers and fathers were not significant within all groups. To determine areas where variations occurred it was necessary to examine responses by stratum.

Level of Education. Mean scores of mothers and fathers as related to level of education made little difference on knowledge of infant development for mothers. Mean scores for mothers without a college degree were slightly higher than for mothers with a Bachelor's Degree. Mothers with a Master's Degree scored highest but these differences were not significant. Only four mothers had no college and 13 mothers without a degree had some college. Level of education appears to make little difference but there is a lack of people with a high school education or below to be sure of the effect of additional study. For mothers with a college education, level of education made little difference.

A Bachelor's Degree had a negative effect on father's mean score

due to the wide range of scores, and fell outside the 95% limits of all fathers. Fathers without a college degree had an overall mean score slightly higher than fathers with a Bachelor's or fathers with a Master's or above. Only ten fathers did not have a college degree so the number represented by this group is small. For fathers with a college education, level of education had no significance.

When comparing mothers to fathers some significant differences were revealed. Mean scores of all mothers with a Bachelor's Degree differed significantly from scores of fathers with a Bachelor's at p.05 level or less. Mothers with a Master's Degree scored significantly higher than fathers with a Master's Degree or above.

Mothers without a college degree did not differ significantly from fathers without a college degree or from fathers with a Master's degree or above, but they did differ significantly from fathers with a Bachelor's. Mothers with a Master's differed significantly from fathers at all levels. This might indicate that for mothers, increasing education may differentiate them from fathers. Education seemed to have little effect on father's scores. Any conclusions, however, are limited due to the educationally biased sample.

Area of Education. Mean scores of parents and area of education were not significant. Mothers with a degree in nursing scored higher on knowledge of infant development than mothers with degrees in education. Only two mothers had degrees in social science and their mean

score was 32 but these may not be reflective of other mothers (Figure 4).

Fathers with degrees in agriculture, medicine, and science and engineering scored highest while fathers with degrees in education, business and social science scored lower. None of these differences were significant.

When comparing fathers to mothers some significant differences were revealed. Mothers with degrees in nursing and social sciences differed significantly from fathers with degrees in business and social science. However, these findings must be taken cautiously due to the small number of respondents in each of these areas.

Area of education seems to have little affect on knowledge of infant development, but mothers and fathers with degrees in medicine or nursing scored slightly higher than parents from other areas of education. Some emphasis is placed on infant and child growth and development in the medical field so this may account for the slightly higher scores.

Preparation in Child Development. Mothers with no previous preparation in child development scored lower than the mean score for all mothers. Mothers with a class in child development scored higher than mothers with no preparation. Mothers with specialized training or community classes scored highest but these differences were not significant.

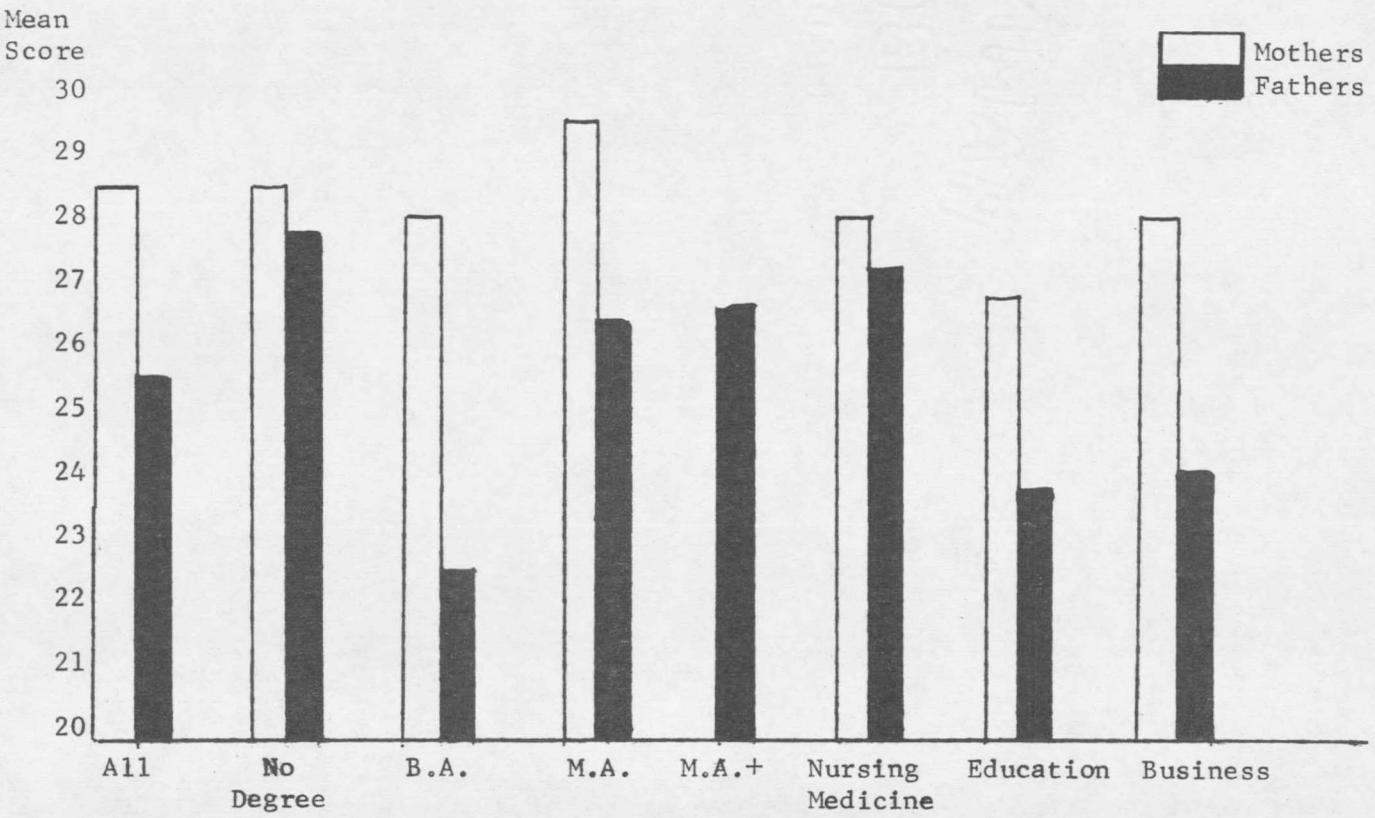

Figure 4. Level and area of education and mean score on knowledge of infant development.

Fathers with no previous preparation in child development scored lower than any other group. Fathers with a class in child development scored somewhat higher than fathers with no preparation, but fathers with specialized training scored higher than any group of fathers. Fathers with no preparation did not differ significantly from all fathers, but the difference approached significance (t-1.72, 32) and may be meaningful.

When comparing mothers to fathers, mothers with no preparation in child development did not differ significantly from fathers at any level. In other words, mothers who had no preparation in child development scored more similar to fathers, who scored lower than other groups of mothers. Perhaps the preparation mothers have had in child development does make a significant impact on their knowledge of infant development. The majority of fathers have had no preparation in child development and their lower scores reflect their inadequate preparation.

Fathers with no preparation in child development differed significantly from mothers with a class in child development at p.05 or less, and from mothers with specialized training at p.05 or less. These differences are highly significant. Preparation in child development, whether through classes or special training plays an important part in the knowledge parents have of infant development. Preparation in child development appears to be more important than level or area of education in the knowledge parents have of infant development. The majority of

mothers in this study have had some preparation in child development and their scores are higher than mothers or fathers who have had no preparation. Preparation in child development is important in the knowledge parents have of infant development (Figure 5).

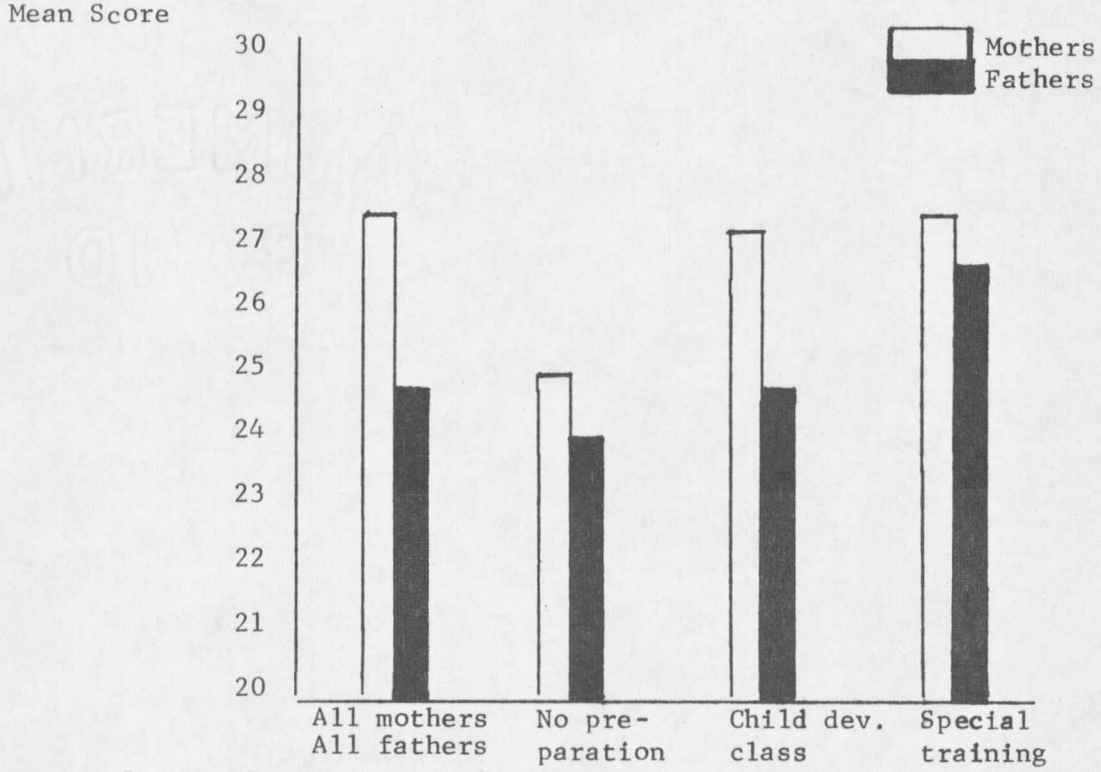

Figure 5. Preparation in child development and mean scores on knowledge of infant development.

Parents knowledge and primary resources. No significant differences were revealed between parental knowledge and resources utilized (Figure 6). It was speculated that parents who used books might have more knowledge of infant development. This was not supported by the results. Mothers who used instincts as their primary resource scored slightly higher than all mothers, but nearly the same as mothers who

used books or extended family.

Fathers who used the extended family scored lower than any group of fathers, but no significant differences were found between any group. Resources utilized by parents did not seem to be related to their knowledge of infant development.

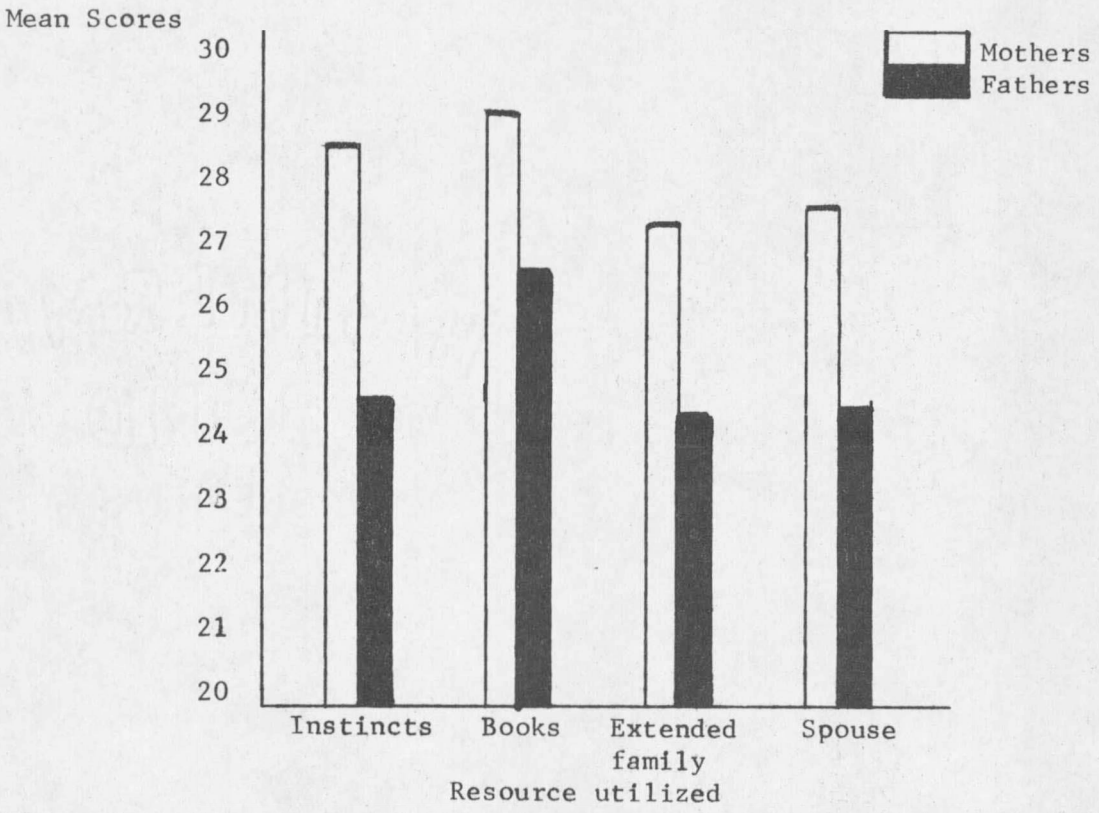

Figure 6. Primary resource and mean scores on knowledge of infant development.

Age of Parents and Knowldege of Infant Development. When comparing age of parent to score on knowledge of infant development no relationship was found for mothers or fathers. One reason for this

might be that the majority of mothers and fathers in this study were very similar in age, between 25-35. Had parents under 20 and over 40 been represented differences may have been evident.

Number of Children. Mothers with one child scored lower than mothers with two children, and scored significantly lower than mothers with three children.

For fathers the number of children did not produce any significant differences in their knowledge of infant development at any level.

Mothers with three children scored highest of all the mothers and fathers. This might indicate that mothers with three or more children have greater knowledge of infant development. Since mothers are normally the primary caretakers of infants raising an infant may be more of a learning experience for mothers than for fathers.

Degree of Parental Confidence. It has been stated by Dr. Spock and other child care experts that parents with more confidence in their abilities as parents are generally more effective parents. It was hypothesized that parents who were usually confident in their abilities as parents might be more knowledgeable about infant development. The data did not support this hypothesis. Mothers who were very confident scored higher than mothers who were usually confident or sometimes unsure, but these differences were not significant. Fathers who were very confident scored higher than fathers who were

usually confident or sometimes unsure, but these differences were not significant.

Mothers who were usually confident differed from fathers who were usually confident at p.05. This difference must take into consideration the two fathers with extreme scores of five who rated themselves as usually confident. Mothers who were very confident did not differ from fathers who were very confident or from fathers who were sometimes unsure, but they did differ from fathers who were usually sure of themselves at p.05.

Crucial Age of Intellectual Development. It was hypothesized that those parents who feel the infant years are the most important for the intellectual development of the child would be more knowledgeable about infant development. Significantly more mothers (31) than fathers (13) said that the first three years of life were most crucial for intellecutal development. Significantly more fathers (21) than mothers (4) said the preschool years, age 3-5, were most crucial. Only three mothers and two fathers believed the years over six to be most important. Eight mothers and six fathers expressed the opinion that every year was equally important in the child's intellectual growth.

Mothers who said the first three years and every year to be most crucial scored higher than mother who said 3-5 or over six were most important, but these differences were not significant.

Fathers who said every year was important scored higher than

fathers who said the first three years or ages 3-5 or over six were crucial. Fathers who believed the ages over six were most important scored lowest but these differences were not significant.

There was no statistical support for the idea that parents who said the first three years were crucial for intellectual development scored higher than other parents. But slightly over half the mothers and over one-fourth of the fathers believed that the infant years, from birth to age three, were most crucial for intellectual development of the child.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

The time from birth to three years of age is a critical period in a child's life. How the primary caretaker responds to the child and structures his/her environment is important to later development (White, 1975).

Parenting can be made easier and more successful by preparation for parenthood programs (LeMasters, 1970). Many childrearing experts (Spock, 1969; Dodson, 1970) recommend that parents rely on their parental instincts in raising their children, while others (Ginott, 1971; Ilg & Ames, 1955) recommend that parents become knowledgeable and skillful in ways of successful parenting. The purpose of this study was to determine knowledge parents have of infant development and resources used.

A questionnaire was mailed to 110 parents of preschool children in Bozeman, Montana. In addition to a demographic section concerning characteristics of respondents, a measure of parents' knowledge of infant development was obtained.

Responses were received from 45 couples (88%) of those receiving questionnaires. The knowledge of infant development section was scored so that the highest possible score was 35. Analysis was confined to descriptive analysis and t-tests to establish significant relationships.

The typical mother in my sample was between 31 and 35, had two children, a Bachelor's Degree probably in Education or nursing, had

attended a college class in child development, was usually confident in her abilities as a parent, and believed the period of birth to three years of age was crucial for the intellectual development of her child. The typical mother relied on instincts as her primary resource in child-rearing. When she needed additional help or information she used her extended family, friends, doctor, and books as secondary resources. She had probably read one or two books on childrearing. In general, she was fairly knowledgeable about infant development, with a mean score of 28 out of a possible 35. Her age, level and area of education, degree of parental confidence, and resources utilized had no significant impact on her knowledge. However, her class in child development seemed to increase her knowledge, as did having three or more children.

A typical father in this sample was around 35 years of age, had two children, education at the Master's level or above, from a wide variety of fields, had no preparation in child development, was very, or usually confident in his abilities as a parent, and considered the preschool years, ages three to five, to be most crucial in the intellectual development of his child. The typical father relied on his instincts in parenting, although his wife was also an important primary resource. If he needed additional help or information in raising his children he used friends, a doctor, or books as secondary resource. He did not use as many secondary resources as his wife and had not read

as many books, although he may have read Dr. Spock.

In general, the typical father was less knowledgeable about infant development than his wife, with a mean score of 25 out of a possible 35. His age, level and area of education, degree of parental confidence, resources utilized, number of children, or preparation in child development had no effect on his knowledge. If he had specialized training in the medical field he was slightly more knowledgeable than other fathers.

Conclusions

The study answered the following questions: 1. Are parents utilizing resources to help them in raising their children? Results indicate that both parents tend to rely heavily on their parenting instincts. The majority of mothers indicated instincts as their primary resource followed by extended family, books, spouse, and friends. Mothers tended to use secondary resources frequently with extended family, doctor, friends, books, and instincts listed as important.

Fathers tended to rely on their instincts as their primary resource followed by spouse, books, family, and friends. Fewer fathers used secondary resources than mothers and these were listed as books, doctor, instincts, and friends.

The majority of mothers had attended a class in child development at the college level, while the majority of fathers reported no preparation in child development. More mothers prepared themselves for

parenting than fathers by attending classes or programs.

2. Only number of children and level of education showed a significant relationship to knowledge of infant development for mothers. As level of education increased, knowledge of infant development also increased, although this was not a significant relationship. The level of education for this sample was high, and there were few respondents who had not had any college. Although no significant relationship was found, further research is needed.

Mothers with three or more children scored significantly higher than mothers with one child, suggesting that because mothers were more involved with child care, they were more aware of developmental stages. Number of children had no effect on fathers knowledge.

No significant relationships were found to exist between area of education, age of parents, degree of parental confidence, preparation in child development, resources utilized, or age considered crucial for intellectual development.

The parents in this sample were similar in age, educational background, degree of confidence, and amount of preparation in child development. Had there been a wider representation of other groups in this sample other relationships may have been revealed.

3. The data supports the conclusion that mothers are more knowledgeable than fathers about infant development, and that mothers prepare themselves more for their parental responsibilities. They are consequently

significantly more knowledgeable about infant development than fathers.

Recommendations

To Improve This Study

Sampling Procedures. The sample responding to this study was an educationally select group. This may have biased the information obtained. This was especially true of the fathers almost half of whom had Master's degrees or above.

Parents surveyed had children enrolled in a day care or preschool program in Bozeman, Montana. These parents were chosen due to their accessibility. Parents with children enrolled in preschool programs may be aware of the importance of the early years and be more knowledgeable about child development in general. Had other parents of preschool children been contacted the sample would have been more representative.

Instrumentation. The validity of the instrument was not fully substantiated and bears further investigation. The difficulty of the instrument may need to be increased. To establish this it would be adviseable to administer the present questionnaire to parents with lower levels of education.

For Other Studies

More studies need to occur to discover additional ways parents prepare themselves for parenthood and their parental responsibilities. The following are suggestions for further research into this area:

1) Obtain information about child care. Which parent for example, is the primary caretaker of the child, and how much time does each parent spend in childrearing activities.

2) Determine why fathers are not preparing themselves for their parenthood role. Will this change as changes occur in the women's role in our society?

3) Expand the scope of the study to see how the knowledge parents have affects their childrearing attitudes? It is possible parents have knowledge of infant development but do not practice what they know.

4) Look at parents who prefer to keep their young children at home and compare them to parents with children in day care situations.

5) Explore the area of preparation for parenthood. Which programs or opportunities are most helpful to parents.

6) Explore the area of instincts in parenting - define instincts, their sources, and their impact on parenthood preparation.

7) Explore the various books listed by parents as helpful. Why were these particular books selected? Why are parents relying on books?

8) What is the role of the extended family in parenting? Is it the same for urban and rural families?

9) Explore knowledge and attitudes of single parents toward childrearing.

10. Explore the area of adoptive parents. These parents chose parenthood do they prepare themselves more for parenthood than other parents?

SELECTED BIBLIOGRAPHY

Ambrose, A. Stimulation in Early Infancy. New York: Academic Press, 1969.

Barash, D. P. Sociobiology and Behavior. New York: Elsevier, 1977.

Bardwick, J. M. Evolution and Parenting. Journal of Social Issues, 1974, 30(4), 39-62.

Bayley, N. Bayley's California First Year Mental Scale. Berkeley: University of California Press, 1969.

Benson, L. Fatherhood: A Sociological Perspective. New York: Random House, 1968.

Bettelheim, Bruno. Crib Mates. In Smart & Smart (Eds.), Readings in Child Development and Relations. New York: Macmillam, 1972.

Biller, H. B. & Weiss, S. D. The Father-Daughter Relationship and the Personality Development of the Female. Journal of Genetic Psychology Monographs, 1970, 116, 70-93.

Bloom, B. S. Stability and Change in Human Characteristics. New York: Wiley, 1964.

Bower, T. G. A Primeron Infant Development. San Francisco: W. H. Freeman and Company, 1977.

Bowlby, J. Child Care and the Growth of Love. Baltimore, Maryland: Penquin Books, 1964.

Brim, O. G. Education for Child Rearing. New York: Russell Sage Foundation, 1959.

Bronfenfenner, U. Is 80% of Intelligence Genetically Determined? Influences on Human Development. New York: Dryden Press, 1975.

Bronfenbrenner, U. The Changing American Child-A Speculative Analysis. Journal of Social Issues, 1961, 17, 6-18.

Bronfenbrenner, U. Two Worlds of Childhood: U. S. and U. S. S. R. New York: Russell Sage Foundation, 1970.

Caldwell, B. M. What is the Optimal Learning Environment for the Young Child? American Journal of Orthopsychiatry, 1967, 37(1), 8-21.

Callahan, S. C. Parenting: Principles and Politics of Parenthood. Baltimore, Maryland: Penquin Books, Inc. 1973.

Caplan, F. The First Twelve Months of Life. Princeton, New Jersey: Edeom System Inc., 1971.

Cooney, P. K. A Study of the Effect of the Seattle Community College Pre-Three Parent Cooperative Program on Parental Attitude, Knowlege and Behavior. (Unpublished dissertation, University of Washington, 1974).

Cratty, B. J. Perceptual and Motor Development in Infants and Children. Los Angeles: Macmillan Co., 1970.

Cox, A. The Assessment of Parental Behavior. Journal of Child Psychology and Psychiatry, 1975, 16, 255-259.

Dodson, F. How to Parent. New York: The New American Library, Inc., 1971.

Elardo, R., Bradley, R., & Caldwell, B. M. The Relation of Infants' Home Environments to Mental Test Performance from Six to Thirty-six: A Longitudinal Analysis. Child Development, 1975, 46, 71-76.

Ginott, H. G. Between Parent and Child and Between Parent and Teenager. New York: Avon Books, 1971.

Gordon, I. J. The Infant Experience. Columbus, Ohio: Charles E. Merrill Publishing Company, 1975.

Gordon, Thomas. Parent Effectiveness Training. New York: Peter H. Wyden, 1970.

Greenberg, K. R. A Tiger by the Tale. Chicago: Nelson Hall, 1974.

Gutelius, M. F. Factors Promoting Success in Infant Education. American Journal of Public Health, 1975, 65(4), 384-387.

Hawkins, R. P. It's Time We Taught the Young How to be Good Parents. Psychology Today, November, 1972, 28-30+.

Head Head Start. The New York Times Magazine, October 1975, 26-31.

Highberger, R. & Schramm, C. Child Development for Day Care Workers. New York, N. Y. Loughton Mifflin Co., 1976.

Hunt, J. M. Intelligence and Experience. New York: Ronald Press, 1961.

Huntinghouse, D. S. Programs for Infant Mothering to Develop a Sense of Self and Competence in Infancy, Washington, D. C.: Children's Hospital of the District of Columbia, April 3, 1971. (Eric Document Reproduction Service No. Ed056748). Paper presented at the bicentennial meeting of the Society for Research in Child Development, Minneapolis, Minn.

Ilg, F. L., & Ames, L. B. Child Behavior. New York: Harper & Row, Publishers, 1955.

Jacoby, A. P. Transition to Parenthood: A Reassessment, Journal of Marriage and the Family, 1969, 32,720-727.

Johnson, D., Leler, H., & Brandt, R., & Others. The Houston Parent-Child Center: A Parent Education Program for Mexican-American Familes. American Journal of Orthopsychiatry. 1974, 44(1), 121-128.

Kilbride, H., Johnson, D., & Streissguth, A. P. Early Home Experience of Newborns as a Function of Social Class, Infant Sex, and Birth Order. (Unpublished Master's Thesis, University of Washington. 1971).

Kirkland, P. Education for Parenthood. Today's Education. November 1975, 74-76.

Kruger, W. S. Education for Parenthood and School-Age Parents. Journal of School Health, 1975, 45(5), 292-295.

LeMasters, E. E. Parenthood as Crisis. Marriage and Family Living. November, 1957. 352-355.

LeMasters, E. E. Parents in Modern America. Homewood, Illinois: Dorsey Press, 1970.

LeShan, E. Natural Parenthood: Raising Your Child Without a Script. New York: Signet Books, The New American Library, 1970.

Miller, M. Des Moines Family Learning Center. Today's Education, November 1975, 68-70.

O'Keefe, R. A. Home Start: Partnership with Parents. Children Today, 2, 1973, 12-16.

The Parent Gap. Newsweek, September 1975, 48-56.

Pickart, E., & Fargo, J. Parent Education: Toward Parental Competence. New York: Appleton-Century-Crofts, 1971.

Pines. M. A Child's Mind is Shaped Before Age Two. Annual Edition Readings in Human Development 75/76. Guildord, Conneticutt: Duskin Publishing Group, Inc., 1975, 88-90

Quarantelli, E. L. A Note on the Protective Function of the Family in Disasters. Marriage and Family Living, 1960, 22(3), 262-264.

Rossi, A. S. Transition to Parenthood. Journal of Marriage and the Family, 1968, 30(1), 26-39.

Salk, L. & Kramer, R. How to Raise a Human Being. New York: Random House, 1969.

Scanzoni, L. & Scanzoni, J. Men, Women, and Change. New York: McGraw-Hill Book Company, 1976.

Schaefer, E. S. Parents as Educators: Evidence from Cross-Sectional Longtudinal and Intervention Research. Young Children, April 1972, 227-239.

Sears, R. R., Maccoby, E. E. & Levin, H. Patterns of Child Rearing. Evanston, Illinois: Row, Peterson and Company, 1957.

Seegmiller, B. R. & King, W. L. Relationship Between Behavioral Characteristics of Infants, Their Mother's Behaviors, and Performance on the Bayley Mental and Motor Scales. Journal of Psychology. 1975, 90, 99-111.

Spock, Benjamin. Baby and Child Care. New York: Pocket Books, 1970.

Spock, B. Raising Children in a Difficult Time. New York: W. W. Norton & Company, 1974.

Stone L. & Curch, J. Childhood and Adolescence: A Psychology of the Growing Person (3rd ed.). New York: Random House, 1973.

Sussman, M. B. The Help Pattern in the Middle Class Family. American Sociological Review, 1953, 18, 22-28.

Sussman, M. B. & Burchinal, L. Kin Family Network: Unheralded Structure in Current Conceptualizations of Family Functioning. Marriage and Family Living, 1962, 24(3), 231-240.

Swerdloff, Peter, Human Behavior-Men and Women. New York: Time-Life Books, 1975.

Tiger, L., & Shepher, J. Women in the Kibbutz. New York: Harcount, Brace, & Jovanovich, 1975.

Tuchkman, B. W. Conducting Educational Research. New York. Harcourt, Brace, Jovanovich, Inc. 1972.

Uzigirs, I. C., & Hunt, J. M. Assessment in Infancy: Ordinal Scales of Psychological Development. Urbana: University of Illinois, 1975.

Wagner, J. Toward Strengthening the Family. American Education, 1976, 12(1), 29-33.

White, B. L. The First Three Years of Life. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975.

White, B. L. Human Infants: Experience and Psychological Development. New York: Prentice-Hall, 1971.

Zigler, E. On Growing Up, Learning and Loving. Annual Editions Reading in Human Development 75/75. Guilford, Conn.: The Duskin Publishing Co., 1975, 41-44.

APPENDICES

APPENDIX A

LETTER OF INVITATION TO PARTICIPARE IN STUDY

Dear Parents:

Parents today are faced with many responsibilities in raising their children. There are many 'experts' on child rearing and many opinions on the way children should be raised. There is also an abundant amount of information concerning the development of children.

As a graduate student at Montana State University I am preparing a study to look at aspects of parenting. I have prepared a short questionnaire to be filled out separately by the mother and the father. The questionnaire will take only about ten minutes to complete. It will be asking sources of information on child-rearing and awareness parents have of child development.

If you and your spouse are willing to take part in this survey, please complete the information below and return to the Center or Nursery where you picked up this letter by Wednesday, December 8. I will contact you by phone before I send you the questionnaire.

Thank you for your time and support. Maybe in some way we can help make the job of parenting somewhat easier.

Billie Warford
Graduate Teaching Assistant
Montana State University
Telephone 587-7431

_____ Yes, I would like to take part in the survey.

_____ No, I do not wish to take part in the survey.

_____
Name

_____
Address

_____
Phone

APPENDIX B - COVER LETTER AND QUESTIONNAIRE

Dear Parents:

Thank you for your willingness to participate in this study to look at various aspects of parenting. One important aspect of the study is to look at mothers and fathers. Please complete the questionnaires separately.

It is very important that the questionnaires be completed and returned as quickly as possible. In case the enclosed envelope is misplaced, please call me at 994-3241, or mail the questionnaire to:

Billie Warford
School of Home Economics
Montana State University
Bozeman, Montana 59715

Thank you for your support and cooperation. I will send you the results of the study in the spring.

Sincerely,

Billie Warford
Graduate Teaching Assistant

QUESTIONNAIRE

PLEASE CHECK ALL THE BLANKS NECESSARY FOR YOU TO ANSWER THE QUESTION

1. To which group do you belong?
   _____ Mother
   _____ Father

2. What is your present age?
   _____

3. Check the highest level of education you have attained.
   _____ High School
   _____ Attended or attending college
   _____ College Degree
   _____ Master's Degree
   _____ Above Master's Degree

4. If you have a college degree, in what area is it?
   _____

5. If you have had a course in Child Growth and Development, what type of course was it?
   _____ High school class
   _____ College class in Child Development
   _____ College class in Parenting
   _____ Special classes in the community, specify _____
   _____ Professional training, specify _____
   _____ Other, specify _____
   _____ None of these

6. How many children do you have?
   _____

7. What age and sex are your children
   _____ Age _____ Sex
   _____ Age _____ Sex
   _____ Age _____ Sex
   _____ Age _____ Sex
   _____ Age _____ Sex

8. From the box at the right, when you need help or information about raising your children, which do you go to <u>first</u>?
   _____

Your mother
Your father
Other relatives, list
_____
_____
Neighbors
Friends
Instincts
Your doctor
Other health agencies
Books on Child Rearing
Other, specify
_____

If the first choice is not available, or you need more information, which one do you go to second?

_____

Please list in order any other resources from the list that you use.

_____

_____

_____

9. If you read books on child rearing, check any of the books you used. Please rank them, with 1 being the one used most.

_____ Dr. Spock, Baby and Child Care
_____ Ilg & Ames, Child Behavior
_____ Better Homes & Gardens Baby Book
_____ Ginott, Between Parent & Child
_____ Salk, How to Raise a Human Being
_____ White, The First Three Yeras of Life
Other references that were important to you:

_____ _____
_____ _____
_____ _____

10. As a parent, how confident do you feel in raising your children?
_____ Very confident
_____ Usually confident
_____ Sometimes unsure of myself
_____ Usually unsure of myself
_____ Never sure of myself

11. What age do you consider the most crucial in the intellectual development of the child?

_____

Read each item carefully and then circle the A, D, or U to indicate whether you agree, disagree, or are undecided as to how you feel about the statement. There are no right or wrong answers, please answer according to your own feelings.

A D U 1. Around the age of 4 months an infant can turn sideways and roll over.

A D U 2. Around 2 months of age infants begin to smile.

A D U 3. Newborn infants are not deaf, they have an impressive range of sounds they can hear.

A D U 4. Early walking is a sign of intelligence.

A D U 5. A 6 month old infant will grasp a rattle when offered and will then gum it or feel it with the other hand.

A D U 6. By 4 to 5 months of age an infant can distinguish the mothers voice from other voices.

A D U 7. Around 1 year of age most infants are able to walk holding onto furniture.

A D U 8. About 7 months of age most infants are able to sit unaided.

A D U 9. A newborn infant is already very aware of the world around him and explores his world by gumming objects he brings to his mouth.

A D U 10. Around 5 months of age many infants are beginning to discriminate strangers and respond with anxiety when picked up by someone other than a family member.

A D U 11. Children under 1½ years of age do not require that you talk with them frequently. This becomes more important when they are capable of understanding language.

A D U 12. Around 3½ months of age infants eyes come into near-mature focus.

A D U 13. By 8 months of age infants begin to discriminate sounds and respond to a few select words, usually dada, mama, or bye-bye.

A D U 14. Parents are the most important teacher a child will ever have.

A D U 15. A newborn infant will often be interested in a rattle.

A D U 16. A 2 month old infant will normally respond with anxiety when picked up by a stranger.

A D U 17. Children develop at individual rate, often so different that one may walk five months earlier than another, and yet both may be considered normal.

A D U 18. An infant does not have a true social smile until about 6 months.

A D U 19. An infant around 10 months of age knows the difference between right and wrong and is just irritating mother when he repeatedly turns the light switch off and on.

A D U 20. During the first months of life, infants learn very little.

A D U 21. It is not until around 6 months of age that an infant's eyes come into near-mature focus.

A D U 22. By 3½ months an infant is just beginning to recognize his mother.

A D U 23. A 4 month old infant can usually sit unaided.

A D U 24. Infants usually say their first words somewhere around 10 months.

A D U 25. An infant will develop according to his own growth rate even if he is not provided with affectionate care and handling.

A D U 26. Intelligence tests of infants can predict adult intelligence.

A D U 27. Early walking is a sign of intelligence.

A D U 28. Infants develop better in a moderately enriched environment than in a massively enriched environment.

A D U 30. A parent with high self-esteem will tend to have children with high self-esteem.

A D U 31. It is not necessary to provide an enriched environment for infants under 1 year of age.

A D U 32. Mothers should talk to their infants whenever they handle them.

A D U 33. A newborn infant can distinguish its mother from anyone else.

A D U 34. A 5 month old infant will laugh when tickled or played with.

A D U 35. In order to provide proper attention to the infant it is necessary for the mother to spend long periods of time each day devoted to the infant.

MASTER DATA SHEET

Group	N	Mean Score	Variance
All Mothers	45	28.07	7.47
All Fathers	45	25.18	31.56
Area of Education			
Mothers with degree in Nursing	8	28.05	6.85
Mothers in Education	15	26.73	5.78
Mothers in Social Science	2	32.00	8.00
Mothers in Business	2	28.00	18.00
Fathers in Medicine	4	27.25	6.25
Fathers in Business	8	24.87	10.41
Fathers in Engineering Science	7	26.71	6.24
Fathers in Education	4	24.75	110.25
Fathers in Agriculture	4	28.25	12.25
Fathers in Social Science	4	18.50	93.67
Level of Education			
Mothers without College Degree	17	28.00	8.12
Mothers with Bachelors	22	27.68	7.37
Mothers with Masters	5	29.60	6.08
Fathers without College Degree	8	27.05	4.28
Fathers with Bachelors	12	22.42	72.26
Fathers with Masters	23	26.17	10.24
Fathers with Masters	19	26.26	12.43
Preparation in Child Development			
Mothers with Special Training	16	28.38	6.12
Mothers with Child	23	28.09	7.90
Mothers with no Preparation	8	26.00	8.57
Fathers with Child Development	12	25.82	9.16
Fathers with no Preparation	28	24.13	20.15
Fathers with Special Training	5	27.20	4.07
Resources Utilized			
Mothers who use instincts	18	28.61	9.43
Mothers who use books	7	28.57	1.95
Mothers who use spouse	6	27.17	12.17
Mothers who use family	10	26.73	6.42

MASTER DATA SHEET (continued)

Group	N	Mean Score	Variance
Resources Utilized (continued)			
Mothers who use friends	3	27.00	4.00
Fathers who use instincts	19	25.84	30.14
Fathers who use books	4	25.75	20.25
Fathers who use spouse	13	24.93	47.08
Fathers who use family	5	23.74	35.17
Fathers who use friends	6	24.06	28.72
Number of Children			
Mothers with 1 child	12	26.08	10.81
Mothers with 2 children	20	28.20	3.43
Mothers with 3 children	9	29.33	11.00
Fathers with 1 child	12	26.00	8.91
Fathers with 2 children	20	24.10	7.03
Fathers with 3 children	9	27.33	10.00
Degree of Parental Confidence			
Mothers very confident	10	28.05	9.61
Mothers usually confident	20	27.60	6.04
Mothers sometimes unsure	13	28.38	8.42
Fathers very confident	16	27.19	9.76
Fathers usually confident	18	23.83	51.06
Fathers sometimes unsure	6	25.17	17.37
Age Considered Crucial for Intellectual Development			
Mothers who favor 0-3	31	28.19	7.49
Mothers who favor 3-5	4	27.05	2.64
Mothers who favor over 6	2	26.00	4.00
Mothers who favor every year	8	28.05	13.14
Fathers who favor 0-3	13	26.23	9.06
Fathers who favor 3-5	21	26.05	15.04
Fathers who favor over 5	3	20.00	115.00
Fathers who favor every year	6	22.00	82.00

Warford, Billie L
Resources utilized by parent in child rearing and knowledge in infant development