

THE RELATIONSHIP BETWEEN PERSONALITY TYPE AND PARENTING STYLE

by

LORI PATRICIA REED

B.A., The University of British Columbia, 1983

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES
DEPARTMENT OF COUNSELLING PSYCHOLOGY

We accept this thesis as conforming
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

JUNE 1988

© Lori Patricia Reed, 1988

In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Counselling Psychology
The University of British Columbia
Vancouver, Canada

Date June 25, 1988

ABSTRACT

This study investigated the relationship of personality type and parenting style. Using a sample of convenience, 102 parents (71 female, 31 male) completed three tests: the Myers Briggs Type Indicator which measures personality types, 64 items from the Block Child Rearing Practices Report which measures parental child rearing attitudes and values, and FACES III which measures family functioning. Forty of the 64 items from the Block Child Rearing Practices Report clustered into two homogeneous groups that served as subtests for parenting style. A canonical correlation between four personality type scores (extraversion-introversion, sensing-intuition, thinking-feeling, judging-perceiving) and two parenting style scores (nurturance, restrictiveness) indicated significant relationships between personality and parenting. Parents who were strong on sensing and moderately introverted tended to employ a parenting style that was highly restrictive and moderately nurturant. Parents who were strong on perceiving and moderately extraverted tended to employ a parenting style that was highly nurturing and much less restrictive.

TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES.....	vi
ACKNOWLEDGEMENT.....	vii
CHAPTER ONE	
INTRODUCTION.....	1
CHAPTER TWO	
REVIEW OF THE LITERATURE.....	3
JUNG'S PERSONALITY TYPOLOGY.....	3
The Extraversion-Introversion Attitude.....	5
The Four Functions: Sensation-Intuition, Thinking-Feeling.....	7
THE MYERS-BRIGGS TYPE INDICATOR.....	15
RESEARCH EMPLOYING THE MYERS-BRIGGS TYPE INDICATOR..	16
RESEARCH ON CHILDREARING.....	22
FACTORS INFLUENCING CHILDREARING PRACTICES.....	25
CHILDREARING PRACTICES AND PERSONALITY OF THE PARENT	26
CHAPTER THREE	
METHOD.....	30
DESIGN OF THE STUDY.....	30
SUBJECTS.....	30
INSTRUMENTS.....	32
The Myers-Briggs Type Indicator.....	32
Type-Category Scores.....	33
Continuous Scores.....	33
Intercorrelations of Type-Category Scores.....	34

Intercorrelations of Continuous Scores.....	35
Reliability of the MBTI.....	35
Validity of the MBTI.....	37
The Child Rearing Practices Report.....	39
Reliability of the CRPR.....	40
Validity of the CRPR.....	42
FACES III.....	42
Reliability of FACES III.....	43
Validity of FACES III.....	44
PROCEDURE.....	44
ANALYSIS.....	45
CHAPTER FOUR	
RESULTS.....	47
EXTRACTION OF CLUSTERS.....	47
RELIABILITY.....	50
CANONICAL CORRELATION ANALYSIS.....	53
Parenting Styles.....	53
Personality Types.....	54
Canonical Correlations.....	56
EXTENDED ANALYSIS.....	57
Personality Types.....	57
Personality Types and Parenting.....	59
CHAPTER FIVE	
DISCUSSION.....	62
CONCLUSIONS.....	62
LIMITATIONS.....	64
THEORETICAL IMPLICATIONS.....	65
PRACTICAL IMPLICATIONS.....	67

IMPLICATIONS FOR FUTURE RESEARCH..... 68

SUMMARY..... 70

REFERENCES..... 71

APPENDIX..... 80

APPENDIX A..... 80

APPENDIX B..... 81

APPENDIX C..... 90

APPENDIX D..... 92

LIST OF TABLES

	Page
TABLE 1 Illustrative Item Similarity for Nurturance.....	49
TABLE 2 Illustrative Item Similarity for Restrictiveness	50
TABLE 3 Reliability of Instruments.....	52
TABLE 4 Canonical Variable Loadings For Parenting Styles.....	54
TABLE 5 Canonical Variable Loadings For Personality Type Patterns.....	56
TABLE 6 Canonical Correlation: Parenting Style Patterns With Personality Type Patterns.....	57
TABLE 7 Mean Parenting And Family Functioning Scores For Each Personality Type Grouping.....	61

ACKNOWLEDGEMENTS

I would like to thank my advisor, Dr. Larry Cochran, for his caring and supportive guidance throughout the writing of this thesis. An acknowledgement also goes to my methodologist, Dr. Robert Conry, for his patience and statistical wisdom.

I would also like to thank my family and friends for their encouragement and loving support. A special thanks goes to Mrs. Gabriel Henville, who was instrumental in helping me access parents for this study. Also, a very special thanks goes to Mr. Steven Stack for his PC and word processing expertise.

CHAPTER ONE

INTRODUCTION

How is personality involved with the style with which one parents? Answers to this question have been scant. Although there is a multitude of research which addresses issues related to personality and issues related to childrearing, few researchers have attempted to explore the relationship between the personality of the parent and his/her childrearing attitudes and practices.

At present, associations reported to exist between personality and parenting style include the following. In Block's (1955) study, fathers who preferred a restrictive style of parenting differed with respect to various personality characteristics when compared to those fathers who preferred a permissive style of parenting. In general, restrictive fathers were more submissive, conforming, over-controlled, and ineffectual whereas permissive fathers were more flexible, self-reliant, persuasive, and sarcastic. Zuckerman and Oltean (1959) found that mothers who tended to be hostile and rejecting in their parental attitudes were more inclined to have a high need for achievement, a low need for nurturance, and a high need for aggression. Lynn's (1961) data revealed that mothers expressing permissive attitudes toward childrearing tended to be extraverted and non-neurotic. Introverted and neurotic mothers were more likely to be punitive when dealing with their aggressive children.

Within the field of personality, Jung's (1921) personality typology has proven extremely useful. The Myers Briggs Type Inventory (Myers, 1962), which is a test designed to implement Jung's theory of personality types has been employed in numerous studies. Using the Myers Briggs Type Inventory (MBTI), relationships between personality type and learning style, teaching style, and occupational choice have been discerned. However, no research to date has ventured to explore the possible relationship between 'personality type' and parenting style. The present study intends to address the ways in which personality type, as conceptualized by Jung (1921) and operationalized by Myers (1962), relates to parenting style.

Personality type is defined as the individual's preferred way of perceiving and making judgements which is based on the various combinations of four interlocking dimensions : extraversion - introversion, sensation - intuition, thinking - feeling, and judging - perceiving (Myers and McCaulley, 1985). Chapter two will address these terms in detail. For the purpose of this study, parenting style will be defined as parental childrearing attitudes and values that tend to cluster into or close to a typical pattern, as measured by a subset of items taken from the Block Childrearing Practices Report (Block, 1965).

CHAPTER TWO

REVIEW OF THE LITERATURE

There have been several research attempts to relate personality with such areas as learning style, teaching style, and parental attitudes. In these studies, personality has been examined from a variety of perspectives such as locus of control (Bender, 1987; Knoop, 1981; Mathis and James, 1972; Parish and Copeland, 1980)), temperament (Buss, Plomin, and Willerman, 1973) and field dependence/independence (Britain and Abad, 1974; Nelson, 1980).

JUNG'S PERSONALITY TYPOLOGY

One of the most promising and influential works in the area of personality is Jung's (1921) personality typology. Rather than focus on confining categories, Jung concentrates on defining an individual according to the kind of conscious mental activity he/she engages in. Although the various conscious mental activities, when taken in combination, are referred to as 'type', Jung treats them as personality dimensions whose development is continuous. Only the direction of the development is considered categorical.

From observations of himself, his patients, and other persons, Jung identified several dimensions that combine variously to create what he called personality types - patterns in the way people prefer to perceive and make judgements. These dimensions involve basic attitudes (extraversion and

introversion) and basic functions (sensation, intuition, thinking, and feeling). The dimensions interlock in the sense that extraversion and introversion denote the focus of cognitive activity and the four functions describe its specific varieties. Jung (1921) argues that these personality dimensions exist in everyone, but we differ in how much and how well we use each of them. Typically, one attitude and one or two functions is dominant ;they indicate the way the person generally interacts with the world.

Jung (1921) focuses on what is conscious in his efforts to divide human beings into recognizable types. When an individual is described as either extraverted or introverted, it signifies that his/her prevailing conscious attitude is either one or the other. Although generally one attitude is developed (and therefore conscious) and the other remains unconscious, both affect the individual's behavior. Periodically, the unconscious attitude will manifest itself, but in an inferior way. According to Jung (1921) the relationship between the conscious and the unconscious is a compensatory one. The conscious mind must be willing to recognize to some degree that which is unconscious or it will become destructive in nature. (Jung, 1921). When this occurs the compensatory relationship ceases. Therefore, the constant flowing of the unconscious material into the conscious mind contributes to psychic equilibrium. For Jung (1921), the superior function is always the expression of the conscious material - its aim, its will, and its achievement. The inferior functions are primarily part of the unconscious, despite possessing a slight degree of consciousness.

According to Jung (1921), the differentiation in attitude begins very early in life. He has even considered the possibility of type having a biological precursor. Evidence to suggest that type may be innate comes from the fact that both extraverted and introverted children are found in the same family. Despite similar environmental conditions, one child assumes one type while another a different type. Jung contends that this difference in type must be ascribed to individual disposition.

THE EXTRAVERSION - INTROVERSION ATTITUDE

In Jung's (1921) theory, the extraverted and introverted attitude describe the direction of a person's interest. Extraversion means outward turning and introversion means inward turning. Jung (1921) believed that people do both regularly. When a person acts in the world, he/she is turning outside him/herself and when a person reflects, he/she turns into him/herself.

People who primarily use their superior function to interact in the world are considered extraverted. The extraverted attitude is characterized by an interest in the outer world of events, people and things. The extraverted person is sociable and optimistic and usually is confident in unfamiliar surroundings. He/she enjoys organizations, groups, and parties and is generally active and on the whole helpful. With respect to relationships with other people they are both easily and quickly made and broken. The extravert may tend to be superficial, dependent on making a good impression, afraid of reflection, ready to accept the conventional morals and standards of the times, and possibly,

disinclined to be alone. The extravert owes his/her normality to his/her ability to fit into existing conditions with relative ease. However, this same quality often contributes to the extravert's tendency to be oblivious to or neglect obvious personal needs. Unfortunately, the extremely extraverted individual often only takes notice of his/her loss of equilibrium when serious personal problems ensue (Jung, 1921).

People who reserve their superior function primarily for their private world of inner ideas, thoughts, and reflections are introverted. The introverted attitude is characterized by an interest in the inner world. For the introvert, the subjective experience is superior to the objective situation. The introverted person is shy and hesitant and is at his/her best when alone, or in a small and familiar group. He/she pursues quiet endeavors and prefers his/her own thoughts to books or conversation. Consequently, this type usually lacks social skills. The introvert tends to be sensitive, afraid of looking ridiculous, critical, pessimistic, over-conscientious, and usually keeps his/her best qualities to him/herself. Since the introvert feels less comfortable showing his valued qualities to the external world, he/she tends to be overlooked. The introvert demonstrates an independence of judgement and lack of conventionality. With respect to relationships, he/she often makes a loyal and sympathetic friend (Jung, 1921).

It is clear that the differences in attitude between the extravert and the introvert can cause misunderstandings. Just as it seems incomprehensible to the extravert how a subjective experience could be superior to the objective situation; it

remains equally as puzzling to the introvert that the object should always be decisive. As Jung (1921) contends "each speaks a different language....the value of one is the negation of value for the other." In addition, the two types tend to see only the other's weakness, so that to the extravert the introvert is egotistical and dull, while the introvert thinks the extravert superficial and insincere (Jung, 1921).

THE FOUR FUNCTIONS: SENSATION - INTUITION, THINKING - FEELING

In realizing that the attitudinal typology did not account for all the differences in personality that could be observed Jung (1921) identified four functions (sensation, intuition, thinking, feeling) which explain the way people prefer to perceive and make judgements. Jung (1921; 1971) defined a function as a "particular form of psychic activity that remains the same in principle under varying conditions." (p.436) He contended that much of an individuals behavior which may appear variable and random is, in actuality, regular and consistent. Each person can be expected to be consistent in ways that are salient or meaningful for him/her. Differences can be attributed to the way individuals prefer to use their perception and judgement. Perception, Jung (1921;1971) believes, incorporates the numerous ways of becoming aware of things, people, events, or ideas. It incorporates the soliciting of sensation, information gathering, and the selection of the stimulus to be attended to. Judgement, on the other hand, incorporates the numerous ways of arriving at conclusions about what has been perceived. It incorporates evaluation, choice, decision making, and the

selection of the response after perceiving the stimulus.

The four functions people use to orientate themselves in the world are sensation, intuition, thinking and feeling. The two perceptive functions are sensation and intuition. In Jung's (1921) theory what comes into consciousness, moment by moment, comes either through the senses or through intuition. To remain in consciousness, perceptions must be used. The judgement functions, thinking and feeling are responsible for the sorting, analyzing, weighing, and evaluating.

When sensation has priority and becomes the habitual reaction one may speak of a sensation type. The sensation type sees the world as it is; no imagination tampers with his/her experiences, and no thought attempts to probe deeper in an effort to uncover the puzzling. Attitudes typically developed as a result of a preference for sensing include a reliance on experience rather than theory, a belief in the conventional and customary way of doing things, a preference for beginning with what is known and real, and then proceeding systematically, step by step, linking each new fact to past experience and testing it for its practical application. The sensing type's insistence on facts coupled with their calm nature give a false sense of reasonableness. In actuality, this type is irrational. Jung (1921) argues that there is little logic in the experience of the senses, and even the same incident may arouse the same sensation at different times. Since the strength and pleasure of the sensation is of utmost importance to the sensing type, he/she may become a restless pleasure-seeker always looking for new thrills.

There is a difference between the extraverted sensing type and the introverted sensing type. The former type is more attracted to the object which is creating the sensation. Whereas the latter type concentrates more on the sensations he/she experiences.

The opposite function to sensation is intuition. However, like sensation it is an irrational function. Intuition, Jung (1921) argues, tells what the possibilities are; it peers behind the scenes and produces hunches. This function provides insight in grasping complexity and demonstrates an ability to see abstract, symbolic and theoretical relationships. As Jung (1971) explained, intuition "presents a content, whole and complete, without our being able to explain or discover how this content came into existence" (CW6, par. 770). This function is responsible for mediating perceptions by way of the unconscious. Attitudes typically developed as a result of a preference for intuition include a reliance on inspiration rather than on past experience, an interest in the new and untried, and a preference for learning new material through an intuitive grasp of meanings and relationships.

The extraverted intuitive type lives primarily through the faculty of intuition. He/she is drawn to possibilities and willing to take chances; everything is sacrificed for the future. When the extraverted intuitive is on to something new, nothing is sacred; his/her morality is based solely on loyalty to his/her intuitive view. The weakness of this type is that he/she may sow, but never reap. For the extraverted intuitive, new and other possibilities are so enticing that it is difficult to carry a

task through to completion, or at least beyond the point where success is confirmed. Consequently, others often enjoy the rewards of his/her pioneering efforts. Typically, his/her relationships are also very weak for the same reasons (Jung, 1921).

The introverted intuitive type is concerned with what Jung (1921) calls the collective unconscious - the dark background of experience, the subjective and unusual. Most important to the introverted intuitive are inner images which include fantasies, visions, and extrasensory perceptions. This type can appear very peculiar, unless he/she is capable of finding a way to relate his/her experiences with life (Jung, 1921)

The two judgement functions are thinking and feeling. Thinking and feeling are two distinct and contrasting means of evaluating phenomenon. Thinking, as conceptualized by Jung (1921), is a logical process capable of being formalized, that results in impersonal judgements of right and wrong. Feeling, on the other hand, is a more subjective process which results in the acceptance or rejection of phenomenon and judgements of like or dislike.

Thinking types use both thinking and feeling, but prefer to use thinking for making judgements. The pure thinking type, Jung (1921) argues is more often found among men than among women. Jung (1921) contends that women's thinking is usually intuitive in nature. The thinking type 'thinks things out' and derives conclusions based on objective facts. Attitudes typically developed from a preference for thinking include; objectivity,

impartiality, a sense of fairness and justice, and skill in applying logical analysis. He/she prefers logic and order, and enjoys devising compact formulas to express his/her views. The danger for this type lies in his/her tendency to believe that his/her formula represents absolute truth, which despite including much that is good may be put into practice in a cold and calice manner. In essence the thinking type may assume the end justifies the means. This type will relinquish friends and family to his/her convictions without the least idea that he/she is doing so (Jung, 1921).

Whether an individual is extraverted or introverted, it will influence the manner and the subject matter of his/her thought. The extraverted thinker channels his/her thoughts towards the outside world. His/her thoughts serve to put order into the external world. The individuals interest is in the result, not in the idea behind it. This type is concerned with facts and materials, and if he/she is interested in ideas they will originate from tradition or from the prevailing climate of the time (Jung, 1921).

In contrast to the extravert, the introverted thinker is interested in inner reality. He/she is concerned with ideas as opposed to facts. The introverted thinking type

formulates questions and creates theories; it opens up prospects and yields insight, but in the presence of facts it exhibits a reserved demeanor....Facts are collected as evidence or examples for a theory, but never for their own sake (Jung, 1921, p. 442).

Since the introverted thinking type is preoccupied with his/her inner realities, he/she pays very little attention to his/her relationships with the world. Consequently, the introverted

thinker experiences difficulty understanding how others think and/or feel. This type's awkwardness is often evident by his/her shyness, silence or inappropriate behavior. The primary weakness for both thinking types is their underdeveloped and neglected feeling function. Jung (1971) makes clear the distinction between the thinking and feeling functions with his statement - " When we think, it is in order to judge or to reach a conclusion, and when we feel it is in order to attach a proper value to something" (p. 105).

Feeling types use thinking and feeling, but prefer to reach judgements through feeling. Feeling is a subjective process which results in the acceptance or rejection of phenomenon and judgement of like or dislike. Feeling sometimes becomes confused with emotion . Jung (1921) argues that any function can lead over into emotion, but the emotion itself is not the function. He differentiates between 'feeling judgements' and 'feeling situations'; the feeling function encompasses the two, but the latter is closer to the emotional end of the scale. Both involve the valuing component.

The feeling type has a well developed sense of history and tradition and an established hierarchy of values to which he/she adheres. As a rational function, this type demonstrates a secure understanding of what is most significant to self and others. The importance placed on human relationships is evident in the feeling types attitudes which reflect a willingness to join with others, a desire for harmony, and a capacity for warmth, compassion, and empathy (Jung, 1971).

The extraverted feeling type is guided by and adjusted to the environment. Jung (1921) argues that this type is found more often among women than men. The extraverted feeling type is equipped with the skills to smooth over awkward situations. These people are responsible for making social and family life more comfortable. This type can be helpful, charming, and sympathetic. The extraverted feeling type's weakness surfaces when his/her feelings are pushed to extremes, and then, he/she becomes superficial and lacks human warmth (Jung, 1971).

The introverted feeling type is guided by subjective components and outwardly appears very different from the friendly, warm extravert. Despite his/her impression of coldness, beneath the surface lies a person with compassion and much understanding for friends and those in need. This types genuine nature permits him/her a position of value in a group as he/she makes a constant and reliable friend (Jung, 1971).

Jung (1971) attributes several structural properties to the elements of his typology. The attitudes and functions are considered to be stable, categorical, interacting, and generating different combinations of surface traits.

Stability stems from Jung's belief that each person has an innate tendency to develop certain attitudes and functions. Although the environment plays a role in an individual's development, Jung (1971) contends that changes in type are not likely to occur.

In Jung's theory, the degree to which an individual's type is actually developed is a continuous variable, but the direction of the development is understood as being categorical. Thus, a

person is an extravert or an introvert; sensing or intuitive; thinking or feeling.

The union of various attitudes and functions results in the modification of each process which produces unique effects. For example, Jung argues that introverted sensing is qualitatively different from extraverted sensing.

The predisposition towards the development of certain attitudes and functions results in more dependence on and increased efficiency with them. This dependency on certain attitudes and functions influences the pattern of personality characteristics, values, interests and other surface traits which develop (Jung, 1971).

Everyone uses all four mental processes - sensing, intuition, thinking, and feeling, but we do not use them equally well. From childhood, each of us has come to rely on one more than the others. Since it is used more it naturally becomes more mature and reliable. Jung refers to the more mature function as the 'superior function - the core of the personality'. A secondary, less differentiated function is believed to supplement the superior function. In Jung's theory, the two kinds of perception - sensing and intuition - are polar opposites of each other. Similarly, the two kinds of judgement - thinking and feeling - are polar opposites of each other. When the primary function is one of perception the secondary function is one of judgement and vice versa. Furthermore, the function that is polar opposite to the superior function is usually the least developed and least trusted of the four mental processes. Jung contends that the most

inferior function is not under ego control and is undifferentiated, awkward, emotionally-charged, and capable of erupting suddenly. At the same time, Jung argues that the most inferior function is rich with vitality and creativity.

THE MYERS BRIGGS TYPE INDICATOR

The Myers Briggs Type Indicator (Myers, 1962) is a test designed to implement Jung's theory of type. The Myers-Briggs formulation essentially parallels Jung's theory in terms of the EI, SN, TF dimensions of personality and contributes a fourth dimension JP (Judgement - Perception) that was implicit in Jung's system (Mattoon, 1981). A person's type is assessed by means of the Myers Briggs Type Indicator which classifies people on the basis of their self reported behavior, preferences, and value judgements, into dichotomous categories along each of the four interlocking dimensions: E-I, S-N, T-F, and J-P.

The E-I index is designed to measure an individual's preferred orientation to life. Extraverted types are regarded as being oriented primarily to the outer world of people, objects and action. Introverted types have a more inward orientation and tend to separate themselves from the world around them.

The S-N index is designed to measure an individual's preferred way of perceiving things. Sensing types rely on perceptions received directly through their sense organs; they attend to the concrete and practical aspects of a situation. Intuitive types look at things more generally in an attempt to identify inferred meanings and hidden possibilities in a situation; they like to deal with abstractions.

The T-F index is designed to measure an individual's preferred way of making decisions. Thinking types focus on logical structures in an attempt to clarify and bring order to a situation; they are masters at objectively organizing material, weighing the facts, and impersonally judging whether something is true or false. Feeling types are masters at understanding other people's feelings and analyzing subjective impressions; they base their judgements on personal values.

The J-P index is designed to measure an individual's preferred way of dealing with the outer world. Judging types are organized and systematic; they live in a planned, orderly way and their goal is to regulate and control life. Perceptive types are more inquisitive and open minded; they proceed through life in a spontaneous, flexible way and their goal is to understand and adapt to life. Although the distinction between judging types and perceptive types is implied in Jungian theory, judgement and perception were never explicitly defined by Jung as independent functions as were the other dimensions of personality measured by the indicator (Myers and McCaulley, 1985).

RESEARCH EMPLOYING THE MYERS BRIGGS TYPE INDICATOR

This section reports representative studies on personality type differences in learning style, teaching style, and occupational choice.

The MBTI is being used widely to understand type differences in student learning and how teachers are intervening to promote learning as a function of personality type. Lawrence (1984)

reviewed developments in this diversifying use of type theory. Findings indicated that extraverts in high school (McCaulley and Natter, 1974) and in adult learning facilities (Haber, 1980; Kilmann and Taylor, 1974) enjoyed learning in groups. Conversely, introverts disliked the group experience and were seen as poor participators by fellow group members.

Sensing types report preferences for television and audiovisual aids (McCaulley and Natter, 1974) and seemed to gain from having them repeated (Golanty-Koel, 1978). Golliday (1975) and Roberts (1982) found laboratory exercises and demonstrations helpful to sensing types. Although memorizing comes easily to the sensing individual (Hoffman, Waters, and Berry, 1981), he/she has difficulty generalizing from examples to concepts (Yokomoto and Ware, 1982). A number of studies (Grant, 1965; McCaulley and Natter, 1974) suggest that sensing types set modest academic goals for themselves and then attempt to meet these goals by organizing their time and working in a systematic way (McCaulley and Natter, 1974). Several studies (Carlson and Levy, 1973; McCaulley and Natter, 1974; Smith, Ivey, and McCaulley, 1973) found that intuitive types enjoy self-paced learning and courses that permit them to study on their own initiative. Intuitive types prefer examinations that include essay questions (Grant, 1965) and teachers see intuitives, as opposed to sensing types, as making more insightful observations in class (Carskadon, 1978).

Consistent with the preference for logical order and objectivity is the thinking type's preference for structured courses and well defined goals (Smith, Ivey, and McCaulley,

1973). Many studies (McCaulley and Natter, 1974; Carlson and Levy, 1973; Smith, Ivey and McCaulley, 1973) have demonstrated the thinking type's preference for demonstrations and teacher lectures.

Feeling types enjoy working on group endeavors (McCaulley and Natter, 1974) and in human relations laboratories (McCaulley, 1978; Haber, 1980; Steele, 1968). McCaulley and Natter (1974) found that feeling types were more likely to report that their social life interfered with their studies.

Judging types prefer to learn from material presented in an orderly way, and through lectures, demonstrations, and workbooks (McCaulley and Natter, 1974; Carlson and Levy, 1973; Smith, Ivey, and McCaulley, 1973). Judging types more often say they work efficiently according to their schedules, hand assignments in on time (McCaulley and Natter, 1974), and benefit from study skills courses (Fretz and Schmidt, 1966). Perceptive types, on the other hand, are more likely to report starting too late on assignments, allowing their work to pile up, and having to cram in order to finish (McCaulley and Natter, 1974). Kilman and Taylor (1974) found that in experiential learning environments, perceptive types are seen as more open and more effective in identifying concerns.

As Myers (1962) predicted, the greatest number of differences are between sensing and intuitive types. Sensing types prefer and excel in laboratory activities that teach specific material in an organized way. Intuitive types prefer human relations laboratories where flexibility and understanding of

subtle meanings of behavior are necessary skills.

Lawrence (1982) has explored the relationships between personality type, learning style, and teaching style. He introduced teachers to type theory and presented practical ways of taking type into account in teaching. Eggins (1979) findings also emphasized the complexity of type differences in learning and provided suggestions to teachers of ways to teach the sensing and perceiving types who are most likely to experience difficulty in school.

As Myers and McCaulley (1985) point out, not only does "type theory indicate that teachers have up to sixteen types to teach, each with individual patterns of attitude, interests, and application," but to further complicate the situation "... a teacher falls into one of the sixteen types, and can be expected to begin with a teaching style natural to his/her own type." (p. 133)

Lawrence (1982) argued that there is clear evidence to suggest that teacher's types influence the level they teach at, how they teach, and what they prefer to teach. For example, Lawrence (1982) found that in elementary and middle school grades there are significantly more sensing and intuitive teachers; in high school there tend to be an equal number of sensing and intuitive types; in college and university more intuitive than sensing types are found. Preferences in subject matter are also predictable. Practical courses draw the sensing types and theory courses are attractive to the intuitive types. Teaching of mathematics, science, and technical skills is preferred by thinking types and feeling types are drawn to humanities,

language arts, and counselling.

In an observational study of seventy-six volunteer elementary and middle school teachers in the classroom, DeNovellis and Lawrence (1983) found that correlations between MBTI continuous scores and observations of teachers and students showed small but significant differences in directions consistent with theory. Specifically, intuitives were rated as moving more freely about the classroom and permitting more individual activity. When disorder in the classroom ensued, intuitive types attempted to gain control with nonverbal, negative behavior. Feeling types were seen as having students central in the activities and as attending to one or more students regularly. Teachers with a feeling type were also rated as providing more positive verbal and nonverbal feedback to pupils. Significantly more nonverbal disapproval was identified among the 'NFP' teachers. Overall, observations of students indicated that productive behavior occurred in classrooms of all types of teachers. However, when nonproductive behavior occurred, it tended to be expressed by withdrawal and passivity under the 'SJ' teachers and by hostile and aggressive acts under the intuitive teachers.

Lawrence (1982) points out that teachers are more likely to understand and get along with students of types similar to their own. For the insecure student, a teacher of similar type with whom he/she can easily relate is needed. For the more secure student a teacher unlike him/her in type can provide him/her with the opportunity to test and strengthen less-used mental processes. Myers and McCaulley (1985) report that type theory also has

important implications for those responsible for the administration of educational systems.

Type provides a framework for looking at motivations of students, attrition, and blocks to academic achievement. Type provides a way to make assignments that capitalize on the strengths and minimize the blind spots of each type, to create teams that can bring more to teaching than any one teacher could do alone, and to create learning environments that increase the creativity of teachers in finding ways to motivate and instruct all sixteen types of students. (p. 136)

The MBTI has proven especially useful in career counselling. In their review of the data on occupations and MBTI types, Myers and McCaulley (1985) have found that all occupations have people from all sixteen types. However, each occupation attracts some types more than others. The basic assumption when using the MBTI in career counselling is that one of the most important motivations for career choice is a desire for work that is intrinsically interesting and satisfying and that will permit the individual to make use of his/her stronger, more developed process while not having to employ his/her less preferred processes. No occupation provides a perfect match between type preferences and work tasks, but good occupational choices can prevent major mismatches (Myers and McCaulley, 1985).

Information regarding occupations empirically attractive to the sixteen types has been found consistent with theory and commonsense understanding of occupations and the MBTI (McCaulley and Morgan, 1982; McCaulley, 1977;1978).

Type theory predicts that former knowledge of type preferences are more important for determining occupational choice than are occupational environments for determining type

preferences. In the early 1950s, Myers conducted a large longitudinal study that addressed this issue. Results showed that students had significantly chosen specialities which in theory would attract their types. In the early 1970s, McCaulley (1978) followed up the sample to investigate specialities, work settings, professional memberships, and faculty appointments. He found that types in specialities not typical of their type changed to specialities which were more typical of their type. The results led McCaulley to contend that people seem more likely to change their work environment to match their type than to change their type to match their environment.

Despite the multitude of research designed to address the relationship between Jungian personality types and learning styles, teaching styles, and occupational choice, little attention has been given to examining the way personality type relates to parenting style.

RESEARCH ON CHILDREARING

Parents view the attitudes and behavior of their children from a variety of perspectives. Variations in the philosophies, needs, and goals of parents, as well as individual differences among parents and children result in an intricate union of parenting views and practices (Carter and Welch, 1981). The practices employed by parents to discipline their children or to elicit their compliance play a significant role in the socialization of their children. For example, the degree to which a parent is controlling, hostile, supportive, democratic, uses reason or punishment in dealing with his/her children has been

found to be important to the way in which the child develops (Baumrind, 1971; Becker, 1964; Champney, 1941; Fu et al, 1983; Gecas, 1971; Hess, 1970; Hoffman, 1960; and Roff, 1949). Although these various components of child rearing have been examined, few researchers (Baumrind, 1967; and Elder, 1962) have explored the ways in which these various components combine to form different styles of parenting.

According to Shoben (1949), a given parent behaves toward a given child, across different situations, with sufficient consistency to differentiate him/herself from other parents. Following a similar train of thought Elder (1962) and Baumrind (1967) identified several styles of parenting.

Elder (1962) has identified seven different styles of parenting based on parent - adolescent role interdependence. Role interdependence was determined by variations in the allocation of power and by different patterns of communications between parents and their adolescent children. The seven parenting styles were called: autocratic, authoritarian, democratic, equalitarian, permissive, laissez-faire, and ignoring. According to Elder, the autocratic parent refuses the child an opportunity to express his/her views, to assert leadership or self discipline. The authoritarian parent allows the child to contribute to the solution of the problem, but the final decision resides with the parent. The democratic parent permits the child to openly discuss the issues relevant to his/her behavior, but the final decision at least meets with parental approval. The equalitarian parent illustrates minimal role differentiation. The

child and the parent are equally involved in decision making concerning the child's behavior. The permissive parent permits the child a more active and influential position than the parent in making decisions pertaining to the child's behavior. The laissez faire parent permits the child the option of either subscribing to or disregarding parental wishes in making his/her decisions. The ignoring parent divorces him/herself completely from directing the child's behavior. It is evident that movement from the autocratic to the ignoring structure results in a gradual increase in the child's involvement and a parallel decrease in the parent's involvement in making decisions pertaining to the child.

Baumrind (1967) has argued that parenting styles differ on four dimensions: (a) parental control, (b) maturity demands, (c) parent-child communication, and (d) nurturance; and tend to cluster into or close to three typical patterns which are termed: authoritarian, authoritative, and permissive. Of course no parent fits a given pattern all of the time. The categories simply reflect dominant trends.

Parents who fit the authoritarian classification are likely to attempt to shape, control, and evaluate the attitudes and behavior of their children in accordance with a set standard of conduct. They value obedience, work, and the preservation of order and traditional structure. They favor punitive, forceful measures to curb their children's beliefs or actions when they are in conflict with what the parent thinks is right. They discourage verbal give and take and are sometimes unresponsive to the point of rejecting their children (Baumrind, 1967;1968).

Parents who fit the authoritative classification are likely to attempt to direct the attitudes and beliefs of their children in a rational manner. They encourage verbal give and take, and share with their children the reasoning behind their parental policy of using firm control. They acknowledge their children's present qualities and interests, but also set standards for future behavior (Baumrind, 1967;1968).

Parents who fit the permissive classification are likely to behave in a non-punitive, acceptant and affirmative manner toward their children's attitudes and behavior. They offer themselves as resources to their children, not as active agents responsible for modifying or shaping their thoughts and actions. They permit their children to regulate their own behavior, avoid the exercise of control or overt power, and do not encourage them to obey externally defined standards (Baumrind, 1967).

Despite the value in identifying and defining styles of parenting, research in this area has been scant. Further attempts must be made to extend our understanding of parenting styles.

FACTORS INFLUENCING CHILD REARING PRACTICES

Child rearing beliefs, values, and practices do not just appear out of the blue (Sears, Maccoby and Levin, 1957). What leads a parent to employ one style of parenting over another? This question has received much attention in the literature. For example, many studies have shown that parental attitudes, values and behaviors vary with socioeconomic status (Chilman, 1965; Hurley and Hohn, 1971; Kohn, 1959;1976; Lesser, Fifer, and Clark,

1965; Pavenstedt, 1965; White, 1957; Wright and Wright, 1976), parental experience, age, and sex (Carter and Welch, 1981), religious affiliation (Elder, 1962), the husband-wife power structure (Dyer and Urban, 1958; Wolfe, 1959), family constellation factors (Brophy, 1970; Campbell, 1970; Ciccerelli, 1975; 1976; 1977; Elder and Bowerman, 1963; Hilton, 1967; and McGillicuddy-Delisi, 1980), and the parent-child authority structure (Stone and Landis, 1953). More recent studies recognize the reciprocal influences between parent and child and external influences on the parent (Bell and Harper, 1977; Lerner and Spanier, 1978; McGillicuddy-Delisi, 1980; and Walters and Stinnette, 1971).

CHILDREARING PRACTICES AND PERSONALITY OF THE PARENT

Although many concepts have been identified as determinants of childrearing practices, the influence of parental personality on parental child rearing practices has hardly been investigated (Block, 1955). Various studies (Fu et al., 1983; Harris, Gough, and Martin, 1950; Roff, 1949; Sears, Maccoby, and Levin, 1957; and Sears, Whiting, Nowlis, and Sears, 1953) have acknowledged the need to explore the relationship between personality patterns of the parents and their style of parenting. However, only a few researchers (Block, 1955; Lynn, 1961; and Zuckerman and Oltean, 1959) have more directly examined how personality characteristics of parents relate to their child rearing beliefs and practices.

In Block's (1955) study, the relationship between fathers' restrictive and permissive attitudes toward child rearing and

their personality characteristics was explored. Findings suggested that fathers expressing restrictive attitudes toward child rearing were perceived by competent observers as more constricted, submissive, repressing, conforming, suggestible, indecisive, ineffectual, over-controlled, and more concerned with feelings of personal inadequacy. The men expressing permissive attitudes towards child rearing were rated as more self-reliant, flexible, stable, ascendant, rebellious toward authority figures, persuasive, and sarcastic.

As Block (1955) points out, the picture which emerges of the fathers expressing restrictive attitudes toward child rearing is nearly a prototype of what has been labelled the authoritarian personality (Adorno et al., 1950). From the standpoint of a definition of psychological health (Maslow, 1943), the restrictive fathers represent a less optimal level of personality integration than the permissive fathers.

Block's (1955) findings must be interpreted with caution for two obvious reasons. As the first qualification, it must be noted that the sample consisted of male military officers who had volunteered for service. Self-selection of a military career is likely related to pre-existing personality structures. Therefore, results within other populations may vary to the extent these populations differ from Block's (1955).

As a second qualification, it should be noted that an extremely permissive viewpoint is not represented in the present sample. There is inferential evidence that supports the notion that excessive permissiveness and inability to set limits for the

child are associated with a less than optimal parental personality, most likely of an under-controlling or other-directed nature (Block, 1955).

Zuckerman and Oltean (1959) attempted to discern whether a relationship exists between personality variables and attitudes toward child rearing using three subject groups: (a) 60 female patients in an acute psychiatric treatment hospital, most of whom were mothers; (b) 24 mothers of college students; and (c) 88 student nurses, none of whom were married or mothers. Results indicated that mothers who tended to be hostile and rejecting in their parental attitudes were inclined to have a high need for achievement, a low need for nurturance, and a high need for aggression. In the student nurse group, relationships between personality and parental attitude measures were not found. Zuckerman and Oltean (1959) contend that perhaps parental attitudes in girls who have had no experience raising children are less a function of personality than in women for whom the attitudes are more than theory. Changes in parental attitudes which likely occur after there is actual experience in raising of children are expected to be in the direction of personality needs (Zuckerman and Oltean, 1959).

In his study of personality characteristics of mothers of aggressive and nonaggressive children, Lynn (1961) indirectly discovered that mothers expressing permissive attitudes toward child rearing tended to be extraverted and non-neurotic. Contrary to expectation, introverted and neurotic mothers were more willing to use greater degrees of physical punishment when dealing with aggressive behavior of their children.

As with all findings, these results should be interpreted with some qualification. Until further verified and extended, the results should be evaluated in terms of the population of women from which the sample was drawn. The subjects were mothers of children attending village schools in Devon. Of course findings within other populations may vary to the extent these populations differ from that of Lynn's (1961).

These various findings are important, but too meager a foundation for an understanding of how the personality of the parent affects his/her style of parenting. The present paper will address the question: In what ways are Jungian personality types related to parenting style?

CHAPTER THREE

METHOD

DESIGN OF THE STUDY

This study was designed to correlate two sets of variables concerned with personality type and parenting style. Variables for personality style were drawn from The Myers Briggs Type Indicator and included four personality measures; extraversion-introversion, thinking - feeling, sensation - intuition, and judging - perception. Variables concerned with parenting style were drawn from a cluster analysis of items taken from The Block Child Rearing Practices Report. In order to determine the patterns of relationship between the four personality measures and styles of parenting, a canonical correlation was computed.

SUBJECTS

The subjects were 31 male and 71 female parents ranging in age from 27 to 49 years (\bar{X} age = 38 years), who met the criteria of having a child between the ages of 6 and 12 years. Eight of the subjects were husband-wife dyads. Ninety-two percent of the subjects were married, 3% were divorced, 3% were living common-law, and 2% were single. With respect to religious affiliation, Catholic (38%), United (23%), and Protestant (13%) were most highly represented. Religious commitment ranged from 'not at all' (28%) to 'highly' committed (4%), with 'somewhat' committed being the favored response (32%). Ninety-three percent of the

respondents were Canadian. The parents came from varying educational backgrounds: 7% had attained fewer than 12 years education, 23% had completed grade 12, 38% had reached 13 to 16 years of education, and 30% had achieved more than 16 years of education. Many different occupations were stated ranging from Janitor to Civil Engineer. The most highly represented occupations included: housewife/mother (25%), clerk in an office (10%), registered nurse (8%), and social worker (6%).

The parents were recruited from various municipalities in the lower mainland through an informal network of contacts. Four people, known personally by the author to be involved with different parent groups either through the school system or local community center, were contacted and the purpose of the study explained. They were given examples of questions from the instruments and were told the approximate length of time required to complete the questionnaire package. They were told that if they agreed to assist the researcher in the data collection phase of the study, their responsibilities would include distributing cover letters to parents in their respective groups, supplying willing participants with questionnaire packages, and collecting completed packages from designated 'drop off' locations. They were instructed that the only verbal exchange that would take place would be when people agreed to participate. At this time, they would ask that questionnaires be completed independently and returned to the specified 'drop off' location within one week.

The questionnaire package was comprised of a cover letter, a demographic section, 64 items from The Block Child Rearing Practices Report, the FACES III inventory, and The Myers Briggs

Type Indicator and its accompanying answer sheet.

All four people expressed interest in the study and agreed to participate. The data collection period spanned four months (May - August, 1987). A return rate of 73% (102/140) was achieved.

INSTRUMENTS

THE MYERS BRIGGS TYPE INDICATOR

The Myers Briggs Type Indicator (MBTI) is a test designed "to implement Jung's theory of type" (Myers, 1962, p.1). Although there are several forms of this instrument, the standard form, Form G, which consists of 126 items was used in this study. Form G has well defined methods of administration, objective scoring, and data concerning norms, reliability, and validity (Myers, 1962; Myers and McCaulley, 1985). Because the four personality scales (E-I, S-N, T-F, J-P) were defined in chapter two, this section will focus on information regarding the scoring, reliability and validity of the MBTI.

Objective Scoring

The questions on the MBTI are arranged in a forced-choice format. As Devito (1985) points out, the MBTI is not as aversive as other forced-choice instruments because any single question deals with only one polarity, so that the responses within an item reflect two opposing rather than competing choices. Since the goal of the MBTI is to determine routine choices between opposites, each scored item has one answer weighted in favor of one of the eight preferences and the other answer weighted in

favor of the opposing preference. A prediction ratio, which gives the 'goodness' of a response as an indicator of preference is used to assign scoring weights to the possible responses. The size of the prediction ratio determines whether a response is not scored, gets one point, or two points. All indices are scored in the same manner except the T-F scale which is scored differently for each sex. Although different weights have been assigned to different answers in an effort to offset social desirability (Myers, 1962), McCaulley (1981) found social desirability influences responses on the E-I and J-P dimensions.

The Indicator furnishes two types of scores for each person. It classifies respondents on four dichotomous type categories, and it also yields eight numerical scores which can be transformed into four continuous scores, as described below.

Type - Category Scores

To define an individual's type, the points for each preference are totalled, which produces eight numerical scores. These eight scores are interpreted as four pairs of scores, with the larger of each pair denoting the preferred pole. For example, an individual with an E score of 25 and an I score of 19 is typed as an extravert. The final result is that an individual is classified as one of 16 possible types: ISTJ, ISFJ, INFJ, INTJ, ISTP, ISFP, INFP, INTP, ESTP, ESFP, ENFP, ENTP, ESTJ, ESFJ, ENFJ, ENTJ.

Continuous Scores

Continuous scores are a linear transformation of preference scores which are useful when conducting correlational research

with the MBTI. The continuous score is determined by first calculating the difference between an individual's two scores for each of the four indexes. For example, the points attained on the extraversion (E) scale and the points attained on the introversion (I) scale are calculated. The scale with the largest number of points indicates the preference (e.g. if $E=19$ and $I=10$, the preference is E). The smaller total is then subtracted from the larger total (e.g. $19-10=9$). The difference between the E and I scales is discerned (e.g. 9) and is assigned a corresponding score as determined by Myers (1977). (e.g., a difference of 9 between the E and the I scales is delegated a corresponding score of 17). Second, for the E, S, T, or J preference scores, the assigned corresponding score is subtracted from 100 (e.g. $100-17=83$). For the I, N, F, or P preference scores, the assigned corresponding score is added to 100. (Myers and McCaulley, 1985). As a result, four continuous scores are calculated for each individual - one for each scale (e.g. E-I continuous score is equal to 83). Continuous scores are all odd numbers, ranging from 33 to 161, with 100 serving as the division point which separates the two opposing preferences.

Intercorrelations of Type - Category Scores

The relative independence of the dichotomous MBTI type categories was examined in studies by Stricker and Ross (1963) and Webb (1964). In both these experiments, phi coefficients were used to estimate the intercorrelations among type categories. A significant correlation between the S-N category and the J-P category was found. Information suggested that Sensing types tend

to be Judging types and Intuitive types tended to be Perceiving types. The E-I, S-N, T-F scales appear to be independent of each other. This lends support to Jung's theory that there are only three typological dimensions: extraversion - introversion, sensation - intuition, and thinking - feeling.

Intercorrelation of Continuous Scores

Many studies have examined the relative independence of continuous scores using Pearson product - moment correlations (Myers, 1962; Richek, 1969; Stricker and Ross, 1963; and Webb, 1964) and factor analysis (Ross, 1966). The results from these studies parallel those examining type-category scores.

The findings with both type category scores and continuous scores indicate that the MBTI measures three dimensions of personality which are independent of each other: extraversion - introversion, sensation - intuition, and thinking - feeling. The Indicator also taps a fourth dimension of personality, judgement - perception, which appears to be related to at least one of the other three indices.

Reliability of the MBTI

Reliability of the MBTI is presented for both the type-category scores and the continuous scores.

Researchers estimating the split-half reliability of the type - categories (Hoffman, 1974; Myers, 1962; and Webb, 1964) have reported phi coefficients ranging from .43 (T-F) to .84 (J-P). Tetrachoric coefficients for split-half reliabilities ranging from .66 to .92 have also been reported. Carlyn (1977) argues

that actual type - category reliabilities likely fall somewhere between estimates derived with phi coefficients and estimates derived with tetrachoric coefficients. In general, estimated reliabilities of type-categories appear to be satisfactory for research purposes (Carlyn, 1977).

Test - retest data for MBTI type-category scores have been reported by Levy, Murphy, and Carlson (1972), Stalcup (1968), and Stricker and Ross (1964a). The proportion of agreement between the original and the retest type classifications was significantly higher than would be expected by chance.

Several methods have been employed to estimate the reliability of continuous scores. Computations based on continuous scores are somewhat higher than estimates of type-category reliability because information is lost when continuous scores are converted to dichotomous categories.

To examine the reliability of continuous scores, Myers (1962) devised a split-half procedure involving Pearson product-moment correlations, Webb (1964) used a split-half procedure similar to Myers' method and Stricker and Ross (1963) used Cronbach's coefficient alpha. The three methods have yielded similar results, with reported coefficients ranging from .76 to .82 (E-I), .75 to .87 (S-N), .69 to .86 (T-F), and .80 to .84 (J-P).

Since Carlyn's (1977) review, several other reliability studies have been conducted. Carskadon (1979c) reported test-retest reliabilities for Form G of the MBTI. Across seven week intervals, the four scales yielded reliability coefficients

ranging from .48 to .84 for continuous scores. Howes and Carskadon (1979) investigated the reliability of Form G as a function of both time and mood changes. Reliabilities of test-retest continuous scores ranged from .78 to .87 and suggested no significant differences as a function of the mood manipulations. They also found that the greater the preference score, the lower the likelihood of type change upon retest. A recent study by McCaulley and Carskadon (1983) reported that across all items for the four subscales of Form G, reliability coefficients for continuous scores ranged from .77 (TF index) to .89 (JP index).

In summary, there are relatively few studies published on the reliability of the MBTI. Nevertheless, of the studies available, reasonable internal consistency of each of the four scales and stability of scores across several months has been demonstrated.

Validity of the MBTI

The validity of the MBTI is dependent on how well it measures what it was intended to measure: the theoretical constructs of Jung's personality typology. Three types of validity are examined: content validity, predictive validity, and construct validity.

Considerable evidence for the Indicator's content validity is found in Myers (1962). Bradway (1964) provided grounds for content validity in a study involving 28 Jungian analysts. The analysts were instructed to classify themselves according to the four type - categories and comparisons were made between self-typing and MBTI typing. Results indicated that there was 100% agreement on the E-I classification, 68% agreement on the S-N

classification, 61% agreement on the T-F classification, and 43% agreement on all three dimensions. Stricker and Ross (1964b) compared continuous scores received on the MBTI with those derived from the Gray-Wheelwright Questionnaire (Gray and Wheelwright, 1946), another instrument designed to identify Jungian types. The two E-I scales showed a .79 correlation, the S-N scales exhibited a .58 correlation, and the T-F scales showed a .60 correlation. All three correlations were significant at the .01 level, and lend support to Myers' contention that "both tests are reflecting the same basic realities, that is, the Jungian opposites which both were designed to reflect" (1962, p. 22).

Several studies have explored the Indicators ability to predict choice of major and success in college (Conary, 1966; Goldschmid, 1967; and Stricker et al., 1965). These studies concluded that the Indicator has moderate predictive validity in certain areas.

Numerous studies of construct validity suggest that individual scales of the MBTI measure important dimensions of personality similar to those postulated by Jung (Myers, 1962; Richek and Brown, 1968; Ross, 1966; Stricker and Ross, 1962; and Webb, 1964). Most impressive is the work of Carskadon (1979), in which those emerging as extraverts on the MBTI were found to exhibit a variety of behaviors indicative of extraversion (e.g., less physical distance, more talkativeness, better recall of other person's names).

Intertest correlational studies have been carried out between

the MBTI and a) The Eysenck's Personality Questionnaire (Wakefield, Sasek, Brubaker, and Friedman, 1976), b) Rotter's (1966) locus of control scale (Elliot and Hardy, 1977), c) Harvey's "This I Believe" test (Carskadon and Knudson, 1978), d) Kelley's Role Construct Repertory Test (Carlson, 1980), and e) the Bem Sex Role Inventory (Padgett, Cook, Nunley, and Carskadon, 1982). The results from these studies are in the direction of theory and thus give credence to the construct validity of the instrument.

THE CHILD - REARING PRACTICES REPORT

Block's (1965) Child - Rearing Practices Report (CRPR) is a self descriptive instrument which consists of 91 items designed to measure parental child-rearing attitudes and values. The items which constitute the CRPR were derived from three sources. First, empirical observations were made of mothers interacting with their children in different structured experimental situations. Items that differentiated groups of mothers with different child-handling techniques according to an inverse principle components factor analysis were identified and rephrased in a form suitable for self administration. Second, items were extracted from the socialization literature. Third, a series of discussions with colleagues from Europe resulted in further items.

In its final form, the CRPR is comprised of "91 socialization relevant statements that are administered in a Q-sort format with a forced-choice, seven step distribution" (Block, 1965, p.3). There are two forms of the instrument: a) a first person form which is completed by mothers and fathers and b) a third person

form that young people use to describe the child-rearing orientations of their mothers and/or fathers. It is significant to note that in an attempt to encourage more precise descriptions of child-rearing attitudes and values, the items are phrased in the active voice (e.g., I do, I ask, I believe) and stress a behavioral orientation (Block, 1965).

Reliability of The CRPR

Reliability of the CRPR, using the Q-sort form of administration, has been examined in two test-retest studies. In one study (Block, 1965), 90 students enrolled in a child psychology course described their child-rearing philosophies using the CRPR at the beginning of the course and again at its completion, eight months later. The average correlation between the two administrations was .71 (range= .38 to .85; σ = .10). In the second study by Block (1970), 66 Peace Corps volunteers used the CRPR to describe the child-rearing attitudes of both their parents on two occasions within a three year interval. The cross time correlations ranged from .04 to .85 (median= .54) for maternal descriptions and .13 to .85 (median= .53) for paternal descriptions. The cross-time correlations in both studies suggest reasonable stability for both forms of the CRPR. However, more research must attempt to discern the reliability of this instrument.

Despite efforts to make directions clear and understandable regarding how to Q-sort items, participants often become confused and frustrated with the process and fail to

complete the study. Furthermore, such a format is time consuming. For these reasons the author chose to use a likert format of the CRPR similar to that devised by Rickel and Biasatti (1982). Rickel and Biasatti (1982) contend that a likert format of the CRPR facilitates administration and interpretation of the scale, without impeding its reliability. In the Rickel and Biasatti study two factors were determined by analysis of the questionnaire using the Likert type format: Restrictiveness and Nurturance. Forty items of the original 91 loaded on the identified two factors. Two of the three samples employed the Likert style format and yielded Cronbach's alphas ranging from .82 to .85 for the Restrictiveness factor and .84 to .85 for the Nurturance factor. The third sample employed the Q-sort format and produced a Cronbach's alpha of .61 for the Restrictiveness factor and .73 for the Nurturance factor. Thus, it seems that reliability is not restricted by a Likert style form of administration.

For the purpose of this study, the author has discarded 27 items from the CRPR (first person form for parents) which were not relevant to this investigation. The 64 items retained from the original 91 items are reported by Block (1965) to sample the following areas; a) openness of expression, b) achievement, c) inconsistency, d) modes and degree of control, e) supervision of the child, f) negative affect toward the child, g) encouragement of independence in the child, h) open expression of affect towards the child, i) rational guiding of the child, j) enjoyment of the parental role, k) over investment in the child, l) punishment, m) protectiveness of the child, and n) parental

maintenance of separate lives. This modified form was administered in a 6-point Likert type scale. Consistent with the Rickel and Biasatti (1982) study, the scale ranged from 1 = not at all descriptive of me to 6 = highly descriptive of me.

Validity of the CRPR

In determining construct validity of the CRPR, Block (1965) was concerned with the degree to which parental self-descriptions of child-rearing behaviors reflect actual parental behaviors vis-a-vis their children. Therefore, Block examined the relationship between self-report as indexed by the CRPR responses and actual maternal behaviors toward the child in three structured situations designed to assess achievement emphasis, modes and degree of control, and independence training. Results from this study exemplified the behavioral relevance of the CRPR (Block, 1965). While the CRPR is a new instrument in need of further validation studies, the existing evidence suggests enough promise for research investigations.

FACES III

FACES III, an acronym for Family Adaptability and Cohesion Evaluation Scales, was developed by Olson, Portner, and Lavee (1985) to measure cohesion and adaptability - the two primary dimensions which constitute the Circumplex Model (Olson, Russell, and Sprenkle (1983). FACES III is a newly developed 20-item scale from items used in the national survey of 1000 "normal families" (Olson et al., 1983). It provides an assessment of how

individuals perceive their family system and also their ideal family descriptions. The scores on cohesion and adaptability can be plotted onto the Circumplex Model to specify the type of system they perceive and would like to experience. The difference between the actual and the ideal scores also provide a family satisfaction score which suggests how satisfied individuals are with their current family system regardless of their family type. For this study, only information concerning how individuals presently perceive their family system was sought.

The Circumplex Model permits the identification of 16 types of family systems by splitting both the dimensions of cohesion and adaptability into four levels. The two dimensions are curvilinear in that families that score very high or very low on both dimensions appear dysfunctional, whereas families that are more balanced (the two central areas) appear to function more effectively (Olson, 1986).

The 16 types can be broken down into three more general types: Balanced, Mid-range, and Extreme. Balanced types are the four central ones that are balanced on both dimensions. Mid-range types are those that score extreme on one dimension, but balanced on the other. Extreme types are those that score extreme on both dimensions (Olson, 1986). FACES III was included in this study with the intention that the cohesion and adaptability subscales might assist in the understanding of different parenting styles.

Reliability of FACES III

With respect to internal consistency, items which constitute

the cohesion dimension showed a .77 correlation, items which comprise the adaptability dimension exhibited a .62 correlation, and all items showed a .68 correlation. Although there is no information on the test retest reliability of FACES III reliabilities of test retest for FACES II (4 - 5 weeks) are reasonable, .83 for cohesion and .80 for adaptability (Olson, 1986).

Validity of FACES III

Olson (1986) claimed there is very good evidence for face and content validity of FACES III. He also argues that there is excellent data to suggest that FACES III discriminates between groups.

According to Olson (1986), FACES III overcomes most of the limitations of FACES II. In FACES II, cohesion and adaptability were highly correlated with each other, with social desirability and with marital and family satisfaction. Cohesion and adaptability in FACES III are orthogonal ($r = .03$). Furthermore, the correlation between adaptability and social desirability has been reduced to zero ($r = .00$) with some correlation between social desirability and cohesion ($r = .39$).

PROCEDURE

The parents who participated in the study were asked to complete a battery of tests that included the Myers Briggs Type Indicator (Form G), several subscales of The Child-Rearing Practices Report, and FACES III. In addition, pertinent

demographic information was solicited. Parents were requested to complete the questionnaire package within one week and leave it at the assigned 'drop off' location.

Parents were instructed to work on the questionnaires independently. They were not directed to complete the instruments in a particular order. Each questionnaire provided a clear and concise set of instructions (see Appendix B).

ANALYSIS

Results were analyzed in two major ways. First, to differentiate styles of parenting, a cluster analysis of the 64 items taken from The Block Child Rearing Practices Report was employed. That is, using a hierarchical grouping analysis items that seemed to be measuring similar childrearing attitudes and behaviors were grouped together. These groups are referred to as clusters. The computer program used is called UBC CGROUP (Lai, 1982) which is a self contained program written in Fortran IV. CGROUP is a clustering technique that

compares a series of score profiles over a series of keys and, progressively, associates them into groups in such a way as to minimize an overall estimate of variation within these groups...

In each of a series of steps CGROUP combines some pair of groups, thus reducing the number of groups by one in each step. The criterion to determine which pair is to be combined is established on a basis of profile similarity where the total within-group variation is the function to be minimally increased at each step in the process (Lai, 1982, p.1).

The clusters were then subjected to an item analysis in an effort to examine the quality of each test item. The computer program used is called LERTAP. LERTAP computes the product moment correlation of each item with its subtest and total test scores.

It also computes a Hoyt analysis of variance to provide an estimate of test reliability.

A canonical correlation was utilized to determine the patterns of relationship between the criterion variables (parenting styles) and the four predictor variables drawn from the MBTI: EI index, SN index, TF index, and the JP index.

Second, to differentiate type of personality, a cluster analysis of the personality type scores based on the combination of all four indices was employed. The CGROUP clustering technique was used for this analysis also.

The clusters were then subjected to an item analysis. Once again, the computer program used was LERTAP. Finally, clusters with reasonable internal consistency were subjected to one way analysis of variance in order to determine the differences between the various personality types and parenting styles.

CHAPTER FOUR

RESULTS

EXTRACTION OF CLUSTERS

To differentiate style of parenting, a cluster analysis of the 64 items retained from the original 91 items of The Block Child Rearing Practices Report was employed. Examination of cluster solutions ranging from 1 to 8 indicated that the three cluster solution was the most interpretable. The three cluster solution was chosen as appropriate for two reasons. First, through the procedure of examining the values of the fusion or amalgamation coefficient (i.e. the numerical value at which various cases merge to form a cluster, Aldenderfer and Blashfield, 1984), a significant jump between the three- and two-cluster solutions was discovered. This jump in the value of the coefficient implies that two relatively dissimilar clusters have been merged; thus the number of clusters prior to the merger (3) is the most probable solution. Second, two raters were asked to independently sort the 64 items into groups. They were instructed to make note of the construct or theme which influenced their decisions to place items into different groups. Each rater sorted the 64 items into three groups which closely resembled the three clusters which emerged through cluster analysis. The raters identified a classification system based on three themes which seemed apparent in the items; nurturance, control, and overprotectiveness.

However, when the three cluster solution was subjected to an item analysis the results indicated that only 2 of the 3 clusters demonstrated high internal consistency. Consequently, only the two adequately reliable clusters were used for the remainder of the study.

The 20 items which constituted cluster 1 were reported by Block (1965) to sample the following areas; a) encouraging openness of expression, b) open expression of affect, c) encouraging independence, d) enjoyment of the parental role, and e) rational guiding of the child. It is important to note that 16 of the 20 items in cluster 1 were represented in the 18 item subscale which constituted Factor 2 in the Rickel and Biasatti (1982) study. Factor 2 in the Rickel and Biasatti (1982) study was labeled nurturance. They argued that the items in Factor 2 represented

an endorsement of flexible childrearing attitudes and practices. The items show the willingness of parents to listen to and share feelings and experiences with their children (1982, p. 132).

Table 1 provides examples of items which illustrate the similarity between cluster 1 in the present study and factor 2 in the Rickel and Biasatti (1982) study.

Table 1 Illustrative Item Similarity for Nurturance

<u>Items</u>	<u>Present Study</u> <u>Item-Scale</u> <u>Correlation</u>	<u>Rickel & Biasatti</u> <u>(1982) Study</u> <u>Factor Loadings</u>
I express my affection by hugging, kissing, and holding my child.	0.57	0.53
I joke and play with my child.	0.58	0.61
I encourage my child to talk about his/her troubles	0.61	0.63

Given the similarity between items which comprised Factor 2 in the Rickel and Biasatti (1982) study and items which comprised cluster 1 in this study, cluster 1 was also labeled nurturance. The fact that a positive relationship ($r = .44$) was discerned between cluster 1 and cohesion from the FACES III inventory lends credence to the label's validity. The higher the score on cluster 1 the more likely the family is to be high in cohesion.

The 20 items which constituted cluster 2 were reported by Block (1965) to sample the following areas; a) emphasis on achievement, b) parental inconsistency, c) authoritarian control, d) negative affect toward the child, e) control by guilt induction, f) over investment in the child, g) parental maintenance of separate lives, h) over protectiveness of the child. Nine of the 20 items which comprised cluster 2 were present in Factor 1 of the Rickel and Biasatti study. Many of the different items which comprised Factor 1 in the Rickel and Biasatti study were items not chosen to be part of the 64 item pool chosen for this study. The items that comprised Factor 1 in the Rickel and Biasatti (1982) study represented control related

aspects of childrearing attitudes and practices. Similarly, items which comprised cluster 2 showed a need for parents to control the way their child behaves and feels. The items showed a general disregard for the feelings of the child. Consequently, cluster 2 was labeled restrictiveness like Factor 1 in the Rickel and Biasatti (1982) study. Table 2 provides examples of items which illustrate the similarity between cluster 2 in the present study and factor 1, restrictiveness in the Rickel and Biasatti (1982) study.

Table 2 Illustrative Item Similarity for Restrictiveness

<u>Items</u>	<u>Present Study Item-Scale Correlation</u>	<u>Rickel & Biasatti (1982) Study Factor Loadings</u>
I do not allow my child to question my decisions.	0.58	0.41
I do not allow my child to get angry with me.	0.40	0.40
I believe a child should be seen and not heard.	0.48	0.40

The relationship between cluster 2 and cohesion suggested that the more restrictive the parent in his/her style of parenting the more likely the family is to be low in cohesion.

RELIABILITY

For the purpose of this study items taken from The Child Rearing Practices Report were adequately discriminant (see Table 1). High internal consistency was demonstrated for parenting style #1 and moderate internal consistency was demonstrated for parenting style #2. For parenting style #1, mean

scores ranged from 4.20 to 5.44 with standard deviation scores ranging from 0.86 to 2.00. Individual item scale correlations ranged from 0.13 to 0.61 (median= 0.46). For parenting style #2, mean scores ranged from 2.59 to 5.68 with standard deviation scores ranging from 0.83 to 1.96. Individual item scale correlations ranged from .07 to .58 (median=0.30). As shown in Table 1, the item total reliability analysis, when both parenting styles were collapsed into one scale indicated moderately high internal consistency, with a Hoyt Estimate of 0.74. (see Appendix C)

As indicated in Table 3, moderately high internal consistency was demonstrated for all indices of The Myers Briggs Type Indicator except the feeling index that is scored for females only. Moderate internal consistency was demonstrated for both subscales of the FACES III instrument. The relative independence of the cohesion and adaptability subscales was reflected in a Pearson correlation coefficient of 0.12.

As noted in the Methods chapter, a) middle scores on both cohesion and adaptability represent balanced family functioning; b) middle scores on one dimension and extreme scores on the other represent mid-range family functioning; and c) extreme scores on both dimensions represent extreme (unhealthy) family functioning (Olson, 1986). Consequently, all scores were inspected to determine if extreme cases were present in this sample. Only two of 102 subjects fell into the extreme category. Therefore the scores on each subscale have been interpreted according to Olson's (1986) balanced and mid-range descriptions which reflect healthy to moderately healthy family functioning.

TABLE 3 RELIABILITY OF INSTRUMENTS

<u>Instrument</u>	<u>N</u>	<u>No. of Items</u>	<u>Reliability (Hoyt Estimate)</u>
The Child Rearing Practices Report			
(1) Cluster #1 (Nurturance)	102	20	0.84
(2) Cluster #2 (Restictiveness)	102	20	0.71
(3) Total Scale	102	40	0.74
			<u>Reliability (Cronbach Alpha)</u>
The Myers Briggs Type Indicator			
(1) Extraversion	102	19	0.78
(2) Introversion	102	19	0.77
(3) Sensing	102	24	0.84
(4) Intuition	102	16	0.79
(5) Thinking (males)	31	20	0.67
(6) Feeling (males)	31	14	0.71
(7) Thinking (females)	71	20	0.69
(8) Feeling (females)	71	14	0.50
(9) Judgment	102	20	0.77
(10) Perception	102	22	0.77
ACES III			
(1) Cohesion	102	10	0.66
(2) Adaptability	102	10	0.69

CANONICAL CORRELATION ANALYSIS

Prior to conducting the canonical correlation, the correlations among the parenting and personality scales were examined (see Appendix D). As can be seen in Appendix D, the correlations between the parenting clusters were very low making them suitable for canonical correlation analysis. Similarly, correlations among the four interlocking dimensions of personality were low, except for the sensing - intuition index and the judging - perceiving index which is consistent with previous investigations. However, since this correlation was not high ($r=.45$), it did not warrant special procedures before conducting the canonical correlation.

Parenting styles. From the canonical variable loadings reported in Table 4, canonical variate #1 combines high restrictiveness and moderate nurturance. The opposite canonical variate is a combination of low restrictiveness (i.e. permissiveness) and moderate aloofness or emotional/physical distance. Parents manifesting high restrictiveness are those that support statements like 'I do not allow my child to get angry with me', 'I teach my child to keep control of his/her feelings at all times', and 'I prefer that my child not try things if there is a chance he/she will fail'. Parents moderate on nurturance are those that support statements like, 'I respect my child's opinions and encourage him/her to express them', 'I feel a child should be given comfort and understanding when he/she is scared or hurt', and 'My child and I have warm, intimate times together'.

Canonical variate #2 combines high nurturance and moderate permissiveness. The converse of this canonical variate is a combination of low nurturance and moderate restrictiveness. Parents manifesting high nurturance are those that are respectful, supportive, openly express their feelings and encourage their children to do the same. Statements they feel are completely descriptive of them include; 'I express my affection by hugging, kissing, and holding my child', 'I usually take into account my child's preferences in making plans for the family', and 'I encourage my child to talk about his/her troubles'. Parents moderate on permissiveness support statements like 'I often feel angry with my child', 'I do not allow my child to question my decisions', and 'I believe it is unwise to let children play alot by themselves without supervision from grown-ups'.

Table 4 Canonical Variable Loadings for Parenting Styles

<u>Clusters</u>	<u>Canonical Variate</u> <u>#1</u>	<u>Canonical Variate</u> <u>#2</u>
<u>Nurturance</u>	0.553	0.833
<u>Restrictiveness</u>	0.857	-0.515

Personality types. From the canonical variable loadings reported in Table 5, canonical variate #1 is defined primarily as a combination of high sensing (low intuition) and moderate introversion. The converse canonical variate is primarily a combination of high intuition and moderate extraversion. An individual manifesting high sensing would rather be considered a

'practical person' than an 'ingenious person', 'teach fact courses' as opposed to 'courses involving theory', and would rather 'support the established methods of doing good' than 'analyze what is still wrong and attack unsolved problems'.

An individual manifesting moderate introversion tends to be rather 'quiet and reserved' as opposed to 'a good mixer' and 'gets introduced' more often than 'introduces others' when in a large group. When the moderately introverted person is with a group of people, he/she would usually rather 'talk with one person at a time' than 'join in the talk of the group'.

Canonical variate #2 is defined primarily as a combination of high perception and moderate extraversion. The converse canonical variate is primarily a combination of high judgement and moderate introversion. An individual manifesting high perception, when going somewhere for the day, would rather 'just go' than 'plan what he/she will do and when', finds following a schedule 'cramps' rather than 'appeals' to him/her, and when he/she has a special job to do prefers to 'find out what is necessary as he/she goes along' as opposed to 'organizing it carefully before he/she starts'.

An individual manifesting moderate extraversion, when among his/her friends tends to be 'full of news about everybody' rather than 'one of the last to hear', tends to 'talk easily to almost anyone for as long as he/she has to' as opposed to finding 'a lot to say only to certain people or under certain circumstances', and at parties usually 'always has fun' as opposed to 'sometimes getting bored'.

Table 5 Canonical Variable Loadings for Personality Type Patterns

	<u>Canonical Variate #1</u>	<u>Canonical Variate #2</u>
<u>Extraversion/</u> <u>Introversion</u>	-0.441	0.523
<u>Sensing/</u> <u>Intuition</u>	0.882	-0.102
<u>Thinking/</u> <u>Feeling</u>	0.292	0.352
<u>Judging/</u> <u>Perception</u>	0.214	-0.739

Canonical correlations. As is indicated in Table 6, linear combinations of personality variables correlated significantly with linear combinations of parenting variables. The strong correlation in Table 6, ($r=0.398$) indicates that canonical variate #1 for parenting correlates significantly with canonical variate #1 for personality. Rather than refer to these as canonical variates, for the purpose of clarity they will be referred to as parenting style and personality type. This correlation indicates that parents who are strong on sensing and moderately introverted tend to employ a parenting style that is highly restrictive and moderately nurturant. For exploratory reasons, the researcher employed a 0.10 criterion for the second canonical correlation to be certain that a real finding is not dismissed. Future studies can be aimed at confirming this relationship. The weaker correlation ($r=0.251$) suggests that canonical variate #2 for parenting correlates with canonical variate #2 for personality. This correlation indicates that parents who are strong on perceiving and moderately extraverted

tend to employ a parenting style that is highly nurturing and much less restrictive.

Table 6 Canonical Correlation: Parenting Style Patterns With Personality Type Patterns

<u>Eigenvalue</u>	<u>Canonical Correlation</u>	<u>Number of Eigenvalues</u>	<u>Bartlett's Test For Remaining Eigenvalues</u>		
			<u>Chi-Square</u>	<u>D.F.</u>	<u>Tail Prob.</u>
0.15805	0.39756		23.10	8	0.003
0.06278	0.25056		6.32	3	0.097

EXTENDED ANALYSIS

Personality types. A cluster analysis was performed for the 102 subjects. As input for the cluster analysis the four index scores for each person from The Myers Briggs Type Indicator were recorded. The cluster analysis was intended to uncover patterns among these scores. Cluster solutions ranging from 1 to 10 were examined indicating the 6 cluster solution to be most interpretable. The 6 group solution was chosen as the most appropriate because a significant jump in the amalgamation coefficient occurred between the six- and five- cluster solution which indicated that two relatively dissimilar clusters had been merged. Therefore, the number of clusters prior to the merger (6) is the most probable solution. To portray these personality types, the percentage of people within each group who scored in a given direction was examined.

Personality type #1 (N=15) was defined primarily by

feeling (100%) rather than thinking, judging (100%) rather than perception, and introversion (87%) rather than extraversion (13%). The sensing-intuition (73%/27%) index was less discriminant. For the most part, this personality type includes people who generally engage with the world through feeling, judgment, and introversion.

Personality type #2 (N=19) was defined primarily by intuition (90%) rather than sensing (10%), and thinking (90%) rather than feeling (10%). The extraversion-introversion (42%/58%) index and the judgment-perception (42%/58%) index were not discriminant. This group seems to include people who prefer to interact with the world using their intuition and thinking.

Personality type #3 (N=9) was defined primarily by extraversion (100%) rather than introversion, judgement (100%) rather than perception, and feeling (89%) rather than thinking (11%). The sensing-intuition (22%/78%) index was moderately discriminant. For the most part, this group seems to include people who choose to engage with the world through extraversion, judging, and feeling.

Personality type #4 (N=27) was defined primarily by sensing (100%) rather than intuition. The judging-perception index (78%/22%) and the extraversion-introversion (74%/26%) index were moderately discriminant. The thinking-feeling (56%/44%) index was not discriminant. Thus, this group seems to include people who prefer to interact with the world using their sensing preference.

Personality type #5 (N=16) was defined primarily by introversion (94%) rather than extraversion (6%) and judging (94%)

rather than perception (6%). The sensing-intuition (75%/25%) index and the thinking-feeling (75%/25%) index were moderately discriminant. For the most part, this group seems to include people who choose to engage with the world using introversion and judgment. Unlike personality type #1, this type tends to prefer sensing and thinking rather than sensing and feeling.

Personality type #6 (N=15) was defined primarily by feeling (100%) rather than thinking, perception (93%) rather than judging (7%), and intuition (87%) rather than sensing (13%). The extraversion-introversion (73%/27%) index was moderately discriminant. Thus, this group seems to include people who prefer to interact with the world using their feeling, perception, and intuition.

Personality types and parenting. Given that six different personality types emerged their implications for parenting style and family functioning were examined. As indicated in Table 7, the six personality types established the basis for six cells in a one way analysis of variance on parenting and family functioning scores. The scores used for parenting style were the mean sum total scores for nurturance and restrictiveness discerned from The Block Child Rearing Practices Report. The scores used for family functioning were the mean sum total scores for cohesion and adaptability taken from the FACES III inventory.

In the first one-way analysis of variance concerned with nurturance there was a significant main effect. A Duncan's Multiple Range Test showed that the significant difference was attributable mainly to the differences between personality #4 and personality #1, and between personality #4 and personality #6, F

(5)= 2.56, $p < .05$. Parents who seem to be characterized by personality type #4 perceive themselves as employing a parenting style which is less nurturing than do parents who seem to be characterized by personality type #1 or #6.

In the second one-way analysis of variance concerned with restrictiveness there was no main effect. There were no significant differences between personality types.

In the third one-way analysis of variance concerned with cohesion there was a significant main effect. A Duncan's Multiple Range Test showed that the significant difference was attributable mainly to the differences between personality type #4 and personality type #1, between personality type #4 and personality type #6, between personality type #2 and personality type #1, and between personality type #2 and personality type #6, $F(5) = 3.19$, $p < .05$. Parents who seem to be characterized by personality type #2, #4, and #5 perceive themselves as belonging to less cohesive families (separated) than do parents who seem to be characterized by personality type #1, #3, or #6.

In the fourth one-way analysis of variance concerned with adaptability there was a significant main effect. A Duncan's Multiple Range Test showed that the significant difference was attributable mainly to the differences between personality type #4 and personality type #5, and between personality type #4 and personality type #6, $F(5) = 2.48$, $p < .05$. Parents who seem to be characterized by personality type #4 perceive themselves as belonging to more adaptable families. They are considered 'structured' in their adaptability (Olson, 1986). Parents who

seem to be characterized by the other five personality types perceive themselves as less adaptable. They are considered 'flexible' in their adaptability (Olson, 1986).

Table 7 Mean Parenting and Family Functioning Scores For Each Personality Type Grouping

<u>Groups</u>	<u>Parenting and Family Functioning Variables</u>			
	<u>Nurturance</u>	<u>Restrictiveness</u>	<u>Cohesion</u>	<u>Adaptability</u>
<u>1</u>	101.529	42.812	41.823	24.823
<u>2</u>	95.353	40.263	38.833	24.632
<u>3</u>	99.125	39.000	41.125	26.000
<u>4</u>	91.720	41.296	38.269	23.630
<u>5</u>	96.875	46.600	39.500	27.875
<u>6</u>	102.600	38.769	42.267	27.667

CHAPTER FIVE

DISCUSSION

The results of this study indicate that a relationship exists between a parent's personality type and his/her parenting style. Two personality types were linked with two styles of parenting. The stronger association was found for parents whose personality type is characterized primarily by a combination of introversion and sensing. This personality type tends to employ a style of parenting marked by high restrictiveness and moderate nurturance. Typically, parents of this personality type may be slow to try something without understanding it first, like to set their own standards, dislike new problems unless there are standard ways to solve them, and enjoy using skills already learned rather than learning new ones. With respect to their style of parenting, they are likely to be highly controlling toward their children's attitudes and behaviors, believe physical punishment to be the best way of disciplining, and argue that scolding and criticism make their child improve. At the same time, these parents, on occasion, are prepared to listen to and share feelings and experiences with their children in a relatively nurturing way.

The second relationship was not as strong, but there was a tendency for parents whose personality type is characterized primarily by a combination of extraversion and perceiving to employ a style of parenting marked by high nurturance and moderate permissiveness. Typically, parents of this personality type like action and variety, act quickly sometimes without much

reflection, like to stay flexible and avoid fixed plans, deal easily with unplanned and unexpected happenings, and live by making changes to deal with problems as they come along. With respect to their style of parenting, they are likely to be relatively non-punitive, open in receiving and giving affection, allow their children time to loaf and daydream, and encourage their children to explore and question things.

There was no association found between total personality type, which would have included a combination of one of each of the four interlocking dimensions, and parenting style. However, when parents were grouped according to their entire personality type, differences did emerge with respect to nurturance, cohesion, and adaptability. Specifically, parents who manifested personality types characterized by a combination of feeling, perceiving, and intuition, or judging and introversion perceived themselves as significantly more nurturing towards their children than did parents who manifested a personality type characterized primarily by sensing.

Parents who manifested personality types characterized by a combination of intuition and thinking, or introversion and judging, or sensing perceive themselves as belonging to less cohesive families than do parents who manifest personality types characterized by a combination of feeling, judging, and introversion, or extraversion, judging, and feeling, or feeling, perceiving and intuition. The one personality dimension that parents who perceive themselves as belonging to more cohesive or connected families have in common is the feeling dimension.

LIMITATIONS

Until further verified and extended, the findings should be evaluated in terms of the population of men and women from which the sample was drawn. The subjects were parents who to a large extent were actively involved with their children through the school system or community. Mothers were more highly represented (N=71) than were fathers (N=31). Also, the average age of the parents (38 years) prevented an exploration of the relationship between personality type and parenting style for the younger and more mature parent. This is of particular significance because Jung believes that the personality dimensions are continually developing. Furthermore, the small sample size (N=102) made it impossible to attain an adequate representation of each of the sixteen personality types. Therefore, clear differences in parenting style between personality types were clouded or lost.

As a second qualification, it is important to note that although the strategy of cluster analysis is 'structure seeking' its application is 'structure imposing'. Aldenderfer and Blashfield (1984) argue that different clustering methods may put the same objects into very different groups. Therefore, when using cluster analysis it is important to know when these groups are genuine and not simply forced upon the data by the method.

The two clusters discerned in this study demonstrated face validity and were similar to Rickel and Biasatti's (1982) results with factor analysis. Nevertheless, future studies must duplicate these findings to improve confidence.

As a third qualification, it should be noted that because only 40 of the 91 items of the Block Child Rearing Practices Report were retained for this study, the instrument, in its modified form, is essentially new and requires further confirmation of its validity and reliability. It is also important to recognize that the 40 items do not measure extremely permissive or extremely punitive parenting attitudes and practices. Refinement of this inventory to make it sensitive to these areas would be important if researchers are to capture a complete picture of the different styles of parenting.

Finally, people do not always act in ways that are congruent with the attitudes and beliefs they espouse. It is difficult to determine to what extent the childrearing attitudes endorsed by parents, in fact, reflect the way they truly interact with their children. Direct observation of parent-child involvement over time in addition to the attitude inventory would likely shed some light on this issue.

THEORETICAL IMPLICATIONS

The major theoretical contribution from this study is that parenting style and family functioning can be regarded as extensions of parental personality. In part, this study also suggests that parents who manifest personality types that emphasize feeling tend to be more nurturing, and belong to families that are more cohesive and adaptable than do other personality types defined less by feeling.

Of the two parenting styles discerned in this study, the one

characterized by high restrictiveness and moderate nurturance seems to fall somewhere between Baumrind's (1967) authoritarian and authoritative classifications. The high restrictiveness parallels the authoritarian style, but the moderate nurturance resembles the authoritative style. This finding suggests that high restrictiveness does not imply a parenting style void of nurturance.

It is important to note that previous studies (Block, 1955; Lynn, 1961; and Zuckerman and Oltean, 1959) aimed at examining the relationship between the parent's personality and his/her child rearing attitudes and practices have focused on independent dimensions of personality and independent dimensions of parenting. This study is a unique attempt to explore how the parents complete personality type affects and interacts with his/her general style of parenting, which is ultimately a combination of many child rearing dimensions.

The results of this study lend support to Block's (1955) findings. The introverted, sensing personality type who employs a parenting style characterized, in part, by high restrictiveness is similar to the constricted, over-controlled, conforming father in Block's study who also expresses restrictive attitudes towards child rearing. The extraverted, perceiving personality type who employs a parenting style characterized, in part, by moderate permissiveness is similar to the flexible, stable, persuasive father in Block's study who expresses permissive attitudes toward child rearing.

Lynn's (1961) findings were supported and extended by the present study. Introverted and neurotic mothers, in the Lynn

study, were more willing to use greater degrees of physical punishment when dealing with the aggressive behavior of their children. Introverted parents, in this study, also employed a parenting style marked, in part, by high restrictiveness which includes a belief that physical punishment is the best way of disciplining. Both studies also found that extraverted parents tend to express permissive attitudes towards child rearing. The results from both studies are in direct opposition to Eysenck's theory linking aggressiveness with extraversion. In these two studies, there was an exception to the general non-aggressiveness of the introvert and the general aggressiveness of the extravert.

The results of the present study also lend support to Rickel and Biasatti's (1982) findings. Although the items in this study which comprised the two clusters were not identical to the items which comprised the respective factors in the Rickel and Biasatti study, there was considerable overlap. Additional similarities may have emerged had the present study made use of all 91 items of the Block Child Rearing Practices Report instead of only 64 items. Despite the differences between the two studies, the results from both favor a modified version of the Block CRPR which embraces a two-cluster (factor) solution. This shortened form with a Likert response format enhances the administration and interpretation of this instrument.

PRACTICAL IMPLICATIONS

These results have a number of practical implications for family planning counsellors, family therapists and for group- and

home-based education programs that are becoming increasingly popular for middle and lower social status families. The Myers Briggs Type Indicator and the modified form of the Block Child Rearing Practices Report provide information about the match between personality type and parenting style. Knowledge of the different matches would permit the helper/educator the opportunity to engage and connect with clients in different ways and deal more effectively with resistance. This same information would assist in foster placement.

If parenting style and family functioning are at least partly extensions of parental personality, helpers may be able to alter family functioning by balancing aspects of personality.

From a more preventative viewpoint, once the Block Child Rearing Practices Report is revised further to include the measurement of excessive permissiveness and excessive punitiveness; it in combination with the MBTI might provide helping professionals with information regarding which personality types may be predisposed to employing abusive child rearing practices. Early detection and intervention may increase the quality of family lives.

IMPLICATIONS FOR FUTURE RESEARCH

Based on this work, further research appears warranted to replicate the present study with different populations in an effort to confirm findings and enhance generalizability.

A valuable study would be one concerned with the development of a more comprehensive instrument which measures child rearing

attitudes and practices. Perhaps a questionnaire comprised of scenarios reflecting different parent-child interactions with closed and open ended response categories would elicit more information about various styles of parenting.

Once a more extensive instrument of child rearing beliefs and practices is developed it would be important to study an abusive population in an attempt to determine whether certain personality types are predisposed to adopting abusive styles of parenting. This kind of information would allow for early detection and intervention and hopefully a reduction in the number of parents who resort to abusive means of intervening with their children.

Direct observation of parent-child interactions would be a useful adjunct to information obtained from the typical attitude inventory. This method of data collection would permit the identification of alternate child rearing practices, perhaps not measured in the attitude inventory, and provide information pertaining to the congruence of parents' attitudes about raising children and their actual behavior towards their children.

If the family is considered a mutually influencing system, it would be worthwhile expanding the present study to include measures of the child's personality type and his/her perception of his/her parent's style of parenting. This kind of study has the potential to provide families with valuable information about why parents with different personality types are received well or less well by their children of similar or different personality types. The potential for increased understanding and functioning of one's family is clear.

SUMMARY

A battery of instruments which included The Myers Briggs Type Indicator, a subset of items from the Block Child Rearing Practices Report, and FACES III, was administered to a sample of 102 parents with children between the ages of 6 and 12 years. Two styles of parenting were defined on the basis of their scores on the modified form of the Block CRPR. When these two parenting styles were compared to the personality type of the parent, it was found that parents who are introverted in their orientation to life and prefer to perceive things through their senses (sensing type) tend to employ a parenting style characterized by a combination of high restrictiveness and moderate nurturance. Parents who are extraverted in their orientation to life and prefer to deal with the outer world in a perceptive (perceiving type) way tend to employ a parenting style characterized by high nurturance and moderate permissiveness. Certain limitations on generalizability from these findings were discussed. Implications for future research were outlined.

References

- Adorno, T.W., Frenkel-Brunswick, Else., Levinson, D.J., and Sanford, R.N. (1950). The authoritarian personality. New York: Harper.
- Aldenderfer, M.S., and Blashfield, R.K. (1984). Cluster analysis. Beverly Hills, CA: Sage Publications, Inc.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. Genetic Psychology Monographs, 75, 43-88.
- Baumrind, D. (1968). Authoritarian versus authoritative parental control. Adolescence, 3, 255-272.
- Baumrind, D. (1971). Current patterns of parental authority. Developmental Psychology Monographs, 4 (1, Pt. 2).
- Becker, W.C. (1964). "Consequences of different kinds of parental discipline." In J.L. Hoffman and L.W. Hoffman (eds.), Review of Child Development Research, vol. 1. New York: Russel Sage.
- Bell, R. Q., and Harper, L.V. (1977). Child effects. Hillsdale, NJ: Erlbaum.
- Bender, W.N. (1987). Behavioral indicators of temperament and personality in the inactive learner. Journal of Learning Disabilities, 20, 301-305.
- Block, Jack. (1955). Personality characteristics associated with fathers' attitudes toward child rearing. Child Development, 26, 1, 41-48.
- Block, J.H. (1965). The Child-rearing Practices Report (CRPR): A set of Q items for the description of parental socialization attitudes and values. Berkeley, California: Institute of Human Development, University of California. In mimeo.
- Bradway, K. (1964). Jung's psychological types: Classification by test versus classification by self. Journal of Analytical Psychology, 9, 129-135.
- Britain, S.D., and Abad, M. (1974). Field-independence: A function of sex and socialization in Cuban and American adolescents. Paper presented at the American Psychological Association Convention (82nd, New Orleans, Louisiana).
- Brophy, J.E. (1970). Mothers as teachers of their own preschool children: The influence of socioeconomic status and task structure on teaching specificity. Child Development, 41, 79-84.

- Buss, A.H., Plomin, R., and Willerman, L. (1973). The inheritance of temperaments. Journal of Personality, 41, 513-524.
- Campbell, F.L. (1970). Family growth and variation in family role structure. Journal of Marriage and the Family, 32, 45-53.
- Carlson, R., and Levy, N. (1973). Studies in Jungian typology: I. Memory, social perception and social action. Journal of Personality, 41(4), 559-576.
- Carlson, R. (1980). Studies of Jungian typology: II. Representations of the personal world. Journal of Personality and Social Psychology, 38(5), 801-810.
- Carlyn, M. (1977). An assessment of the Myers-Briggs Type Indicator. Journal of Personality Assessment, 415, 461-473.
- Carskadon, T.G. (1978). Uses of the Myers Briggs Type Indicator in psychology courses and discussion groups. Teaching of Psychology, 5(3), 140-142.
- Carskadon, T.G., and Knudson, M.L. (1978). Relationship between conceptual systems and psychological types. Psychological Reports, 42, 483-486.
- Carskadon, T.G. (1979). Clinical and counselling aspects of the Myers-Briggs Type Indicator: A research review. Research in Psychological Type, 2, 2-31.
- Carskadon, T.G. (1979c). Test-retest reliabilities of continuous scores on Form G of the Myers-Briggs Type Indicator. Research in Psychological Type, 2, 83-84.
- Carter, D., and Welch, D. (1981). Parenting styles and children's behavior. Family Relations, 30, 191-195.
- Champney, H. (1941). The measurement of parent behavior. Child Development, 12, No. 2, 131-166.
- Chilman, C.S. (1965). Child-rearing and family relationship patterns of the very poor. Welfare in Review, 3, 9-19.
- Cicirelli, V.G. (1975). Effects of mother and older sibling on the problem solving behavior of the older child. Developmental Psychology, 11, 749-756.
- Cicirelli, V.G. (1976). Mother-child and sibling-sibling interactions on a problem solving task. Child Development, 47, 588-596.
- Cicirelli, V.G. (1977). Effects of mother and older sibling on child's conceptual style. Journal of Genetic Psychology, 131, 309-318.

- Conary, F.M. (1966). An investigation of the variability of behavioral response of Jungian psychological types to select educational variables (Doctoral dissertation, Auburn University). Dissertation Abstracts, 26, 5222-5223. (University Microfilms No. 65-13, #898).
- DeNovellis, R., and Lawrence, G. (1983). Correlates of teacher personality variables (Myers-Briggs) and classroom observation data. Research in Psychological Type, 6, 37-46.
- Devito, A.J. (1985). Review of the Myers-Briggs Type Indicator. In J.V. Mitchell (Ed.), The ninth mental measurement yearbook, volume 2 (pp. 1030-1032), Lincoln Nebraska: University of Nebraska Press, Buros Institute of Mental Measurement.
- Dyer, W.G., and Urban, R. (1958). The institutionalization of equalitarian family norms. Marriage and Family Living, 20, 53-58.
- Eggs, J.A. (1979). The interaction between structure in learning materials and the personality of learners. Unpublished doctoral dissertation, Indiana University.
- Elder, G.H. (1962). Structural variations in the child rearing relationship. Sociometry, 25, 241-262.
- Elder, G.H. Jr., and Bowerman, C.E. (1963). Family structure and child rearing patterns: the effect of family size and sex composition. American Sociological Review, 28, 891-905.
- Eliot, J., and Hardy, R.C. (1977). Internality and extraversion-introversion. Perceptual and Motor Skills, 45, 430.
- Fretz, B.R., and Schmidt, L.D. (1966). Effects of teacher-student similarity in an educational skills program (Abstract). Proceedings of the 74th Annual Convention of the American Psychological Association, 1, 271-272.
- Fu, V.R., Moran, J.D. III, Sawyers, J.K., and Milgram, R.M. (1983). Parental influence on creativity in preschool children. The Journal of Genetic Psychology, 143, 289-291.
- Gecas, V. (1971). Parental behavior and dimensions of adolescent self-evaluation. Sociometry, 34, 466-482.
- Golanty-Koel, R. (1978). The relationship of psychological types and mass media preferences to the values of non-academic high school students. (Doctoral dissertation, University of California, Berkeley). Dissertation Abstracts International, 38, 4683A. (University Microfilms No. 73-29, 395).

- Golliday, J.M. (1975). An investigation of the relative effectiveness of three methods of utilizing laboratory activities in selected topics of junior college mathematics (Doctoral dissertation, University of Florida, 1974). Dissertation Abstracts International, 36 (02), 611A. (University Microfilms No. 75-16, 383)
- Goldschmid, M.L. (1967). Prediction of college majors by personality type. Journal of Counselling Psychology, 14, 302-308.
- Grant, W.H. (1965). Behavior of MBTI types (research report). Auburn, AL: Auburn University, Student Counselling Service. [Available from the Center for Applications of Psychological Type, Gainesville FL]
- Gray, H., and Wheelwright, J.B. (1946). Jung's psychological types, their frequency of occurrence. Journal of General Psychology, 34, 3-17.
- Haber, R.A. (1980). Different strokes for different folks: Jung's typology and structured experiences. Group and Organizational Studies, 5, 113-119.
- Harris, O.B., Gough, H.G., and Martin, W.E. (1950). Children's ethnic attitudes: II. Relationship to parental beliefs concerning child rearing. Child Development, 21, 169-181.
- Hess, R.D. (1970). Social class and ethnic influences on socialization. In P.H. Mussen (Ed.), Carmichael's manual of child psychology, 3rd Ed. Vol. 2 New York: John Wiley and Sons.
- Hilton, I. (1967). Differences in the behavior of mothers toward first- and later-born children. Journal of Personality and Social Psychology, 7, 282-290.
- Hoffman, J.L. (1975). Personality relationships between supervising teachers and student teachers as determined by the Myers-Briggs Type Indicator (Doctoral dissertation, University of Florida). Dissertation Abstracts International, 36, 830A-831A. (University Microfilms No. 75-16, #393).
- Hoffman, J.L., Waters, K., and Berry, M. (1981). Personality types and computer assisted instruction in a self-paced technical training environment. Research in Psychological Type, 3, 81-85.
- Hoffman, M.L. (1960). Power assertion by the parent and its impact on the child. Child Development, 31, 129-143.
- Howes, R.J., and Carskadon, T.G. (1979). Test-retest reliabilities of the scales and subscales of the Myers-

- Briggs Type Indicator as a function of mood changes. Research in Psychological Type, 2, 67-72.
- Hurley, J.R., and Hohn, R.L. (1971). Shifts in childrearing attitudes linked with parenthood and occupation. Developmental Psychology, 4, 324-328.
- Jung, C.G. (1921). Psychological types (H.G. Baynes, trans.). New York: Harcourt, Brace.
- Jung, C.G. (1971). Psychological types. Princeton, N.J.: Princeton University Press.
- Kilman, R.H., and Taylor, V. (1974). A contingency approach to laboratory learning: psychological types versus experimental norms. Human Relations, 27(9), 891-909.
- Knoop, R. (1981). Age and correlates of locus of control. Journal of Psychology, 108, 1, 103-106.
- Kohn, M.L. (1959). Social class and parental values. American Journal of Sociology, 66, 337-351.
- Kohn, M.L. (1976). Social class and parental values: Another confirmation of the relationship. American Sociological Review, 41, 538-545.
- Lai, C. (1982). Hierarchal grouping analysis with optional contiguity constraint. Handout: Computing Center, The University of British Columbia.
- Lawrence, G.D. (1982). People types and tiger stripes (2nd ed.). Gainesville, FL: Center for Applications of Psychological Type.
- Lawrence, G.D. (1984). A synthesis of learning style research involving the MBTI. Journal of Psychological Type, 8, 2-15.
- Lerner, R.M., and Spanier, G.B. (1978). Child Influences on Marital and Family Interaction. New York: Academic Press.
- Lesser, G.S., Fifer, G., and Clark, C. (1965). Mental abilities of children from different social class and cultural groups. Monographs of the Society for Research in Child Development, 30, 1-115.
- Levy, N., Murphy, C., Jr., and Carlson, R. (1972). Personality types among Negro college students. Educational and Psychological Measurement, 32, 641-653.
- Lynn, R. (1961). Personality characteristics of the mothers of aggressive and unaggressive children. The Journal of Genetic Psychology, 99, 159-164.

- Maslow, A.H. (1943). The authoritarian character structure. The Journal of Social Psychology, 18, 401-411.
- Mathis, R.W., and James, W. H. (1972). Internal-external control as an environmental variable in listening. Journal of Experimental Education, 40, 60-63.
- Mattoon, M. (1981). Jungian psychology in perspective. New York: The Free Press.
- McCaulley, M.H. (1978). Application of the Myers-Briggs Type Indicator to medicine and other health professions. Gainesville, FL: Center for Applications of Psychological Type Inc.
- McCaulley, M.H. (1981). Jung's theory of psychological types and the Myers-Briggs Type Indicator. In P. McReynolds (Ed.), Advances in psychological assessment, v, (pp. 294-352). San Francisco: Jossey Bass, Inc.
- McCaulley, M.H. (1977). The Myers longitudinal medical study. Gainesville, FL: Center for Applications of Psychological Type.
- McCaulley, M.H., and Carskadon, T.G. (1983). Test-retest reliabilities of scales and subscales of the MBTI and of criteria for clinical interpretive hypotheses involving them. Research in Psychological Type, 6, 24-36.
- McCaulley, M.H., and Morgan, M.K. (1982). Health professionals: Characteristics and student self-assessment. In M.V. Boyles, M.K. Morgan, and M.H. McCaulley, (Eds.), The health professions, (pp. 57-78). Philadelphia: W.B. Saunders.
- McCaulley, M.H., and Natter, F.L. (1974). Psychological (Myers-Briggs) type differences in education. In F.L. Natter, and S.A. Rollin, (Eds.), The governor's task force on disruptive youth: Phase II report. Tallahassee, FL: Office of the Governor. [This chapter available from Center for Applications of Psychological Type, Gainesville, FL.]
- McGillicuddy-DeLisi, A.V. (1980). The role of parental beliefs in the family as a system of mutual influences. Family Relations, 29, 317-323.
- Myers, I.B. (1962). Manual: The Myers-Briggs Type Indicator. Princeton, NJ: Educational Testing Service. [Distributed by Consulting Psychologist Press, Palo Alto, CA.]
- Myers, I.B. (1977). Supplementary manual: the MBTI. Palo Alto, California: Consulting Psychologist Press.

- Myers, I.B., and McCaulley, M.H. (1985). Manual: A guide to the development and use of the Myers-Briggs Type Indicator. Palo Alto, CA: Consulting Psychologist Press.
- Nelson, D. (1980). Locus of control, self-esteem, and field independence as predictors of school achievement among Anglo American and Mexican American children. Hispanic Journal of Behavioral Sciences, 2, 323-335.
- Norusis, M.J. (1983). Introductory Statistics Guide SPSS:X. McGraw-Hill, Chicago, Ill.
- Olson, D.H., McCubbin, H.I., Barnes, H., Larsen, A., Muxen, M., and Wilson, M. (1983). Families: What makes them work. Los Angeles: Sage Publishing.
- Olson, D.H., Russell, C.S., and Sprenkle, D.H. (1983). Circumplex Model VI: Theoretical update. Family Process, 22, 69-83.
- Olson, D.H., Portner, J., and Lavee, Y. (1985). FACES III. St. Paul MN: Family Social Science, University of Minnesota.
- Olson, D.H. (1986). Circumplex model VII: validation studies and FACES III. Family Relations, 25, 337-351.
- Padgett, V., Cook, D., Nunley, M., and Carskadon, T. (1982). Psychological type, androgeny, and sex-typed roles. Research in Psychological Type, 5, 69-88.
- Parish, T.S., and Copeland, T. F. (1980). Locus of control and father loss. Journal of Genetic Psychology, 136, 147-148.
- Pavenstedt, E. (1965). A comparison of the childrearing environment of upper-lower and very low-lower class families. Journal of Orthopsychiatry, 35, 89-98.
- Richek, H.G., and Brown, D.H. (1968). Phenomenological correlates of Jung's typology. Journal of Analytical Psychology, 13, 57-65.
- Richek, H.G. (1969). Note on intercorrelations of scales of the Myers-Briggs Type Indicator. Psychological Reports, 25, 28-30.
- Rickel, A.U., and Biasatti, L.L. (1982). Modification of the Block Child Rearing Practices Report. Journal of Clinical Psychology, 38, No. 1, 129-134.
- Roberts, D.Y. (1982). Personality and media preferences of community college students. Research in Psychological Type, 5, 84-86.
- Roff, M. (1949). A factorial study of the Fels Parent Behavior scales. Child Development, 20, No.1, 29-45.

- Ross, J. (1966). The relationship between a Jungian personality inventory and tests of ability, personality, and interest. Australian Journal of Psychology, 18, 1-17.
- Rotter, J.B. (1966). Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 80, (1, Whole 609).
- Sears, R., Maccoby, E., and Levin, H. (1957). Patterns of Child Rearing. Evanston, Ill.: Row, Peterson.
- Sears, R., Whiting, J., Nowlis, V., and Sears, P. (1953). Some child-rearing antecedents of aggression and dependency in young children. Genetic Psychology Monographs, 47, 135-234.
- Shoben, E.J. Jr. (1949). The assessment of parental attitudes in relation to child adjustment. Genetic Psychological Monographs, 39, 101-148.
- Smith, A., Ivey, R., and McCaulley, M.H. (1973). Self-paced instruction and college student's personality. Engineering Education, 63(6), 435-440.
- Stalcup, D.L. (1968). An investigation of personality characteristics of college students who do participate and those who do not participate in campus activities (Doctoral dissertation, Auburn University, 1967). Dissertation Abstracts, 28, 4452A-4453A. (University Microfilms No. 68-5897).
- Steele, F.I. (1968). Personality and the laboratory style. Journal of Applied Behavioral Science, 4, 25-45.
- Stone, C., and Landis, P.H. (1953). An approach to authority patterns in parent-teen age relationships. Rural Sociology, 18, 233-242.
- Stricker, L.J., and Ross, J. (1962). A description and evaluation of the Myers-Briggs Type Indicator. Research Bulletin, 62-6. Princeton, N.J.: Educational Testing Service.
- Stricker, L.J., and Ross, J. (1963). Intercorrelations and reliability of the Myers-Briggs Type Indicator scales. Psychological Reports, 12, 287-293.
- Stricker, L.J., and Ross, J. (1964a). An assessment of some structural properties of the Jungian personality typology. Journal of Abnormal and Social Psychology, 68, 62-71.
- Stricker, L.J., and Ross, J. (1964b). Some correlates of a Jungian personality inventory. Psychological Reports, 14, 623-643.

- Stricker, L.J., Schiffman, H., and Ross, J. (1965). Predictions of college performance with the Myers-Briggs Type Indicator. Educational and Psychological Measurement, 25, 1081-1095.
- Wakefield, J.A., Sasek, J., Brubaker, M. L., and Friedman, A.F. (1976). Validity of Eysenck's Personality Questionnaire. Psychological Reports, 39, 115-120.
- Walters, J., and Stinnett, N. (1971). Parent-child relationships: A decade review of research. Journal of Marriage and the Family, 33, 70-111.
- Webb, S.C. (1964). An analysis of the scoring system of the Myers-Briggs Type Indicator. Educational and Psychological Measurement, 24, 765-781.
- White, M.S. (1957). Social class, childrearing practices, and child behavior. American Sociological Review, 22, 704-712.
- Wolfe, D.M. (1959). Power and authority in the family. In Dorwin Cartwright and Ann Arbor (Eds.), Studies in social power, (99-117). Michigan: Research Center for Group Dynamics and Institute for Social Research.
- Wright, J.C., and Wright, S.R. (1976). Social class and parental values for children: A partial replication and extension of the Kohn thesis. American Sociological Review, 41, 527-537.
- Yokomoto, C.F., and Ware, J.R. (1982). Improving problem solving performance using the MBTI. Proceedings of the 1982 American Society of Engineering Education Annual Conference, 163-167.
- Zuckerman, M., and Oltean, M. (1959). Some relationships between maternal attitude factors and authoritarianism, personality needs, psychopathology, and self-acceptance. Child Development, 30, 27-36.

APPENDIX B

THE RELATIONSHIP BETWEEN PERSONALITY AND PARENTING STYLE

The purpose of this research is to determine whether parents with different personality characteristics choose different methods of childrearing with their elementary age child. If you agree to participate in this study:

1. You will be asked to complete three brief questionnaires in your home or place of convenience. It will take approximately 40 minutes of your time.
2. The study is anonymous and all information will be held in confidence. Your answers will be used as part of group results.
3. The researcher will be pleased to answer any questions you may have about the study to be sure you are fully aware of the procedure involved. Completion of the questionnaires will indicate your consent to participate in the study.
4. You are free to refuse to participate or to withdraw from the study at any time.

PLEASE TRY TO RESPOND TO ALL STATEMENTS.

Lori Reed, B.A.
Principal Investigator
Department of Counselling Psychology
The University of British Columbia

THE RELATIONSHIP BETWEEN PERSONALITY AND PARENTING STYLE

Please check the most appropriate response. Where necessary write in the correct response. Please try to respond to all statements.

1. Ageyears

2. Gender.....FM

3. Marital Status

.....Married
.....Divorced
.....Common law
.....Single

4. Highest level of education

.....less than 12 years
.....12 years
.....13 - 16 years
.....more than 16 years

5. How many siblings do you have?

6. Please indicate the age and gender of each of your siblings below

SIBLING	AGE	GENDER
#1
#2
#3
#4
#5
#6

7. How many children are there in your family?

8. Please indicate the number of children, their age and gender below

CHILD	AGE	GENDER
#1
#2
#3
#4
#5
#6

9. What is your occupation?

10. Please describe your job in brief detail.

11. What religion are you most affiliated with now or in the past?

12. Please indicate how committed you are to your religion.
Please circle the appropriate number.

not at all	somewhat	quite	very	highly
1	2	3	4	5

13. What is your nationality?

.....Canadian
.....Other, please specify.....

14. If you answered Other to the previous question, please
indicate how long you have been a resident of this country
.....years.

THE RELATIONSHIP BETWEEN PERSONALITY AND PARENTING STYLE

In trying to gain more understanding of the parent-child relationship, I would like to know what is important to you as a parent and what kinds of methods you use in raising your child...in particular, your child who is now in elementary school. It is important that you answer the following statements in relation to one child only. Please choose one of your children between the ages of 6 and 12 years.

Age of child chosen years

Gender of child chosen.....FM

You are asked to indicate your opinions by marking the number which best describes your behavior in relation to the child you have chosen. Mark your response next to each item. The response category is indicated below.

1	2	3	4	5	6
not at all	somewhat	fairly	quite	very	highly
descrip-	descrip-	descrip-	descrip-	descrip-	descrip-
tive of	tive of	tive of	tive of	tive of	tive of
me.	me.	me.	me.	me.	me.

- 1. I respect my child's opinions and encourage him/her to express them.
- 2. I encourage my child always to do his/her best.
- 3. I put the wishes of my mate before the wishes of my child.
- 4. I often feel angry with my child.
- 5. If my child gets into trouble, I expect him/her to handle the problem mostly by himself/herself.
- 6. I punish my child by putting him/her off somewhere by himself/herself for a while.
- 7. I feel a child should be given comfort and understanding when he/she is scared or upset.
- 8. I try to keep my child away from children or families who have different ideas or values from their own.
- 9. I try to stop my child from playing rough games or doing things where he/she might get hurt.
- 10. I believe physical punishment to be the best way of disciplining.
- 11. I believe that a child should be seen and not heard.

- 12. I sometimes forget the promises I have made to my child.
- 13. I think it is good practice for a child to perform in front of others.
- 14. I express affection by hugging, kissing, and holding my child.
- 15. I find some of my greatest satisfactions in my child.
- 16. I prefer that my child not try things if there is a chance he/she will fail.
- 17. I encourage my child to wonder and think about life.
- 18. I usually take into account my child's preferences in making plans for the family.
- 19. I wish my child did not have to grow so fast.
- 20. I feel my child should have time to think, daydream, and even loaf sometimes.
- 21. I find it difficult to punish my child.
- 22. I let my child make many decisions for himself/herself.
- 23. I do not allow my child to say bad things about his/her teachers.
- 24. I teach my child that in one way or another punishment will find him/her when he/she is bad.
- 25. I do not allow my child to get angry with me.
- 26. I feel my child is a bit of a disappointment to me.
- 27. I expect a great deal of my child.
- 28. I am easy going and relaxed with my child.
- 29. I tend to spoil my child.
- 30. I talk it over and reason with my child when he/she misbehaves.
- 31. I joke and play with my child.
- 32. I give my child a good many duties and family responsibilities.
- 33. My child and I have warm, intimate times together.
- 34. I have strict, well-established rules for my child.

- 35. I think one has to let a child take many chances as he/she grows up and tries new things.
- 36. I encourage my child to be curious, to explore and question things.
- 37. I expect my child to be grateful and appreciate all the advantages he/she has.
- 38. I sometimes feel that I am too involved with my child.
- 39. I threaten punishment more often than I actually give it.
- 40. I believe in praising a child when he/she is good and think it gets better results than punishing him/her when he/she is bad.
- 41. I make sure my child knows that I appreciate what he/she tries or accomplishes.
- 42. I encourage my child to talk about his/her troubles.
- 43. I believe children should not have secrets from their parents.
- 44. I teach my child to keep control of his/her feelings at all times.
- 45. When I am angry with my child, I let him/her know it.
- 46. I think a child should be encouraged to do things better than others.
- 47. I punish my child by taking away a privilege he/she otherwise would have had.
- 48. I enjoy having the house full of children.
- 49. I believe that too much affection and tenderness can harm or weaken a child.
- 50. I believe that scolding and criticism makes my child improve.
- 51. I believe my child should be aware of how much I sacrifice for him/her.
- 52. I teach my child that he/she is responsible for what happens to him/her.
- 53. There is a good deal of conflict between my child and me.
- 54. I do not allow my child to question my decisions.

- 55. I feel that it is good for a child to play competitive games.
- 56. I like to have some time for myself, away from my child.
- 57. I let my child know how ashamed and disappointed I am when he/she misbehaves.
- 58. I want my child to make a good impression on others.
- 59. I encourage my child to be independent of me.
- 60. I make sure I know where my child is and what he/she is doing.
- 61. I find it interesting and educational to be with my child for long periods.
- 62. I don't go out if I have to leave my child with a stranger.
- 63. I control my child by warning him/her about the bad things that can happen to him/her.
- 64. I believe it is unwise to let children play a lot by themselves without supervision from grow-ups.

FACES III

Please mark your response next to each item. The response category is indicated below.

1	2	3	4	5
almost never	once in a while	sometimes	frequently	almost always

DESCRIBE YOUR FAMILY NOW:

- ___ 1. Family members ask each other for help.
- ___ 2. In solving problems, the children's suggestions are followed
- ___ 3. We approve of each other's friends.
- ___ 4. Children have a say in their discipline.
- ___ 5. We like to do things with just our immediate family.
- ___ 6. Different persons act as leaders in our family.
- ___ 7. Family members feel closer to other family members than to people outside the family.
- ___ 8. Our family changes its way of handling tasks.
- ___ 9. Family members like to spend free time with each other.
- ___ 10. Parent(s) and children discuss punishment together.
- ___ 11. Family members feel very close to each other.
- ___ 12. The children make the decisions in our family.
- ___ 13. When our family gets together for activities, everybody is present.
- ___ 14. Rules change in our family.
- ___ 15. We can easily think of things to do together as a family.
- ___ 16. We shift household responsibilities from person to person
- ___ 17. Family members consult other family members on their decisions.
- ___ 18. It is hard to identify the leader(s) in our family.
- ___ 19. Family togetherness is very important.
- ___ 20. It is hard to tell who does which household chores

An illustrative sample of items from The Myers - Briggs Type Indicator.

EXTRAVERSION At parties do you always have fun or sometimes get bored?

INTROVERSION In a large group do you more often introduce others or get introduced?

SENSING If you were a teacher would you rather teach fact courses or courses involving theory?

INTUITION Which word appeals to you more: BUILD or INVENT?

THINKING Which word appeals to you more: COMPASSION or FORE-SIGHT?

FEELING Do you usually value sentiment more than logic or value logic more than sentiment?

JUDGING When you go somewhere for the day would you rather plan what you will do and when or just go?

PERCEIVING Does following a schedule appeal to you or cramp you?

"Reproduced by special permission of the Publisher, Consulting Psychologist Press, Inc., Palo Alto, CA 94306."

APPENDIX C

The Child-Rearing Practices Report

Cluster One - Nurturance

	Mean	SD	Item Scale Correlations
1. I respect my child's opinions and encourage him/her to express them.	4.48	1.04	0.44
2. I encourage my child always to do his/her best.	5.23	0.86	0.35
3. I feel a child should be given comfort and understanding when he/she is scared or upset.	5.44	0.93	0.48
4. I express affection by hugging, kissing, and holding my child.	5.39	1.02	0.57
5. I find some of my greatest satisfactions in my child.	4.82	1.23	0.51
6. I encourage my child to wonder and think about life.	4.85	1.22	0.63
7. I usually take into account my child's preferences in making plans for the family.	4.24	1.25	0.45
8. I feel my child should have time to think, daydream, and even loaf sometimes.	4.86	1.15	0.56
9. I talk it over with my child and reason with my child when he/she misbehaves.	4.28	1.29	0.43
10. I joke and play with my child.	4.66	1.19	0.58
11. My child and I have warm, intimate times together.	3.86	1.39	0.36
12. I encourage my child to be curious, to explore and question things.	5.07	0.99	0.59
13. I believe in praising my child when he/she is good and think it gets better results than punishing him/her when he/she is bad.	4.87	1.13	0.49
14. I make sure my child knows that I appreciate what he/she tries or accomplishes.	5.25	0.99	0.44
15. I encourage my child to talk about his/her troubles.	5.14	0.99	0.61
16. When I am angry with my child, I let him/her know it.	5.00	1.14	0.22
17. I like to have some time for myself, away from my child.	4.62	1.46	0.21
18. I make sure I know where my child is and what he/she is doing.	5.31	0.94	0.43
19. I find it interesting and educational to be with my child for long periods.	4.20	1.34	0.46
20. I don't go out if I have to leave my child with a stranger.	4.33	2.00	0.13

Cluster Two - Restrictiveness

	Mean	SD	Item Scale Correlation
1. I put the wishes of my mate before the wishes of my child.	3.16	1.36	-0.23
2. I often feel angry with my child.	4.66	1.12	0.28
3. If my child gets into trouble, I expect him/her to handle the problem mostly by him/herself.	2.59	1.27	0.07
4. I try to keep my children away from children who have different ideas or values from their own.	4.66	1.48	0.36
5. I try to stop my child from playing rough games or doing things where he/she might get hurt.	4.30	1.41	0.54
6. I believe physical punishment to be the best way of disciplining.	5.50	0.83	0.28
7. I believe a child should be seen and not heard.	5.53	0.92	0.48
8. I sometimes forget the promises I have made to my child.	5.08	0.93	0.36
9. I prefer that my child not try things if there is a chance that he/she will fail.	5.45	1.11	0.28
10. I do not allow my child to get angry with me.	4.95	1.32	0.40
11. I feel that my child is a disappointment to me.	5.60	1.05	0.39
12. I sometimes feel that I am too involved with my child.	5.13	1.15	0.07
13. I teach my child to keep control of his/her feelings at all times.	4.96	1.30	0.39
14. I think a child should be encouraged to do things better than others.	4.49	1.60	0.31
15. I believe that too much affection and tenderness can harm or weaken a child.	5.68	0.86	0.13
16. I believe that scolding and criticism makes my child improve.	5.50	0.87	0.10
17. I believe my child should be aware of how much I sacrifice for him/her.	4.98	1.13	0.25
18. There is a good deal of conflict between my child and me.	5.07	1.96	0.39
19. I do not allow my child to question my decisions.	4.61	1.42	0.58
20. I believe it is unwise to let children play alot by themselves without supervision from grown-ups.	4.21	1.67	0.22

APPENDIX D

Correlations Among Personality and Parenting Scales

	<u>E/I</u>	<u>S/N</u>	<u>T/F</u>	<u>J/P</u>	<u>Cluster #1</u>	<u>Cluster #2</u>
Extraversion/ Introversion	1.000	-.109	-.104	-.139	.010	.241
Sensing/ Intuition	-.109	1.000	.074	.455	.215	-.280
Thinking/ Feeling	-.104	.074	1.000	.076	.179	-.082
Judging/ Perceiving	-.139	.454	.076	1.000	-.045	-.164
Cluster #1	.010	.215	.179	-.045	1.000	-.110
Cluster #2	.241	-.280	-.082	-.164	-.110	1.000