# EFFECTIVE EARLY CHILDHOOD STUDENT TEACHERS: PERSONAL AND FAMILY CHARACTERISTICS

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1988

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE December, 1990 JAIRSI-' Mino D262e Cof J

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TEACHERS: PERSONAL AND

FAMILY CHARACTERISTICS

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#### ACKNOWLEDGMENTS

The student teachers who participated in this study are to be applauded for their time, effort, and patience. Without their help this study would not have been completed.

I want to thank my committee members for their help and patience throughout this study. Dr. Patti Self provided guidance and helpful suggestions. I want to thank Dr. Carolyn Henry for her time, support, and valuable insights and suggestions. To Dr. Donna Couchenour, my advisor, I want to extend my greatest appreciation for her guidance and encouragement throughout my graduate program. Her confidence in my capabilities and her friendship have kept me focused on my goals.

Thanks go to Coeta for her chocolate chip cookies and warm hugs, to Mary for her cheerleading, and Jane for her computer expertise and her positive attitude. Without your help I could never have made it through.

I would also like to thank Stephanie Bayles who made my job of scoring and analyzing data much easier and a whole lot more fun and to Tammye Sullivan and Pam Ramming for being there to listen to my gripes and celebrate my

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accomplishments. I especially want to thank Heidi Welch who has been a better friend than I could have ever wished for. Her support and help, both emotional and physical, in meeting deadlines has made my graduate school experience not only bearable but even enjoyable. Thank you! Thank you!

Finally, I want to thank my entire family for always loving me and supporting my decisions. Special thanks go to my parents Glenn and Jerry Davis for their love, their confidence in my abilities, and their continued support of my educational pursuits. I also want to give special thanks to my sister Lisa for her friendship and for always believing in me and to my brother-in-law Mark and my grandparents for always being there for me and for the encouragement they have so generously given.

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#### Introduction

Available research indicates that there is a relationship between teacher style and the effective teaching of young children. Feeney and Chun (1985), in a literature review on effective teachers of young children, mention four areas of importance: personal and family characteristics, demographics, situational factors, and teacher behavior. In the current study, situational factors, gender, and education of students are naturally controlled in the university laboratory setting. Thus, this review is limited to personal and family characteristics that predict effective teaching behaviors. The purpose of this research was to examine personal and family factors related to effective teaching behaviors of early childhood student teachers.

Personal and family background are important to the development of effective teaching behaviors because much of what the early childhood teacher does in the classroom is related to the caregiving role as well as the teaching role (Katz, 1981). These factors may be especially important in examining teaching behaviors of student teachers because much of what they do in the classroom is a direct reflection of the ties they continue to have with their families of origin. The family serves as an important socialization unit for the individual by providing patterns of interaction which are learned and may carry over into other social environments such as the classroom (Peterson & Rollins, 1987). Many studies have also indicated the importance of personal characteristics (McCaulley & Natter, 1980; Kiersey & Bates, 1978; Saracho & Spodek, 1986). These studies have suggested that personal characteristics of teachers influence their interactions with children which determines effective or ineffective teaching behaviors.

Effective teaching is defined by Yawkey (1974), Bacmeister (n.d.) and Harvey (1966) as the teacher who possesses most of the following personal characteristics: a positive attitude, a willingness to learn, ability to motivate, ability to maintain relaxed relationships, and one who provides a child oriented atmosphere. Other behaviors that effective teachers exhibit include warmth, perceptiveness, flexibility, diversity, a sense of humor, creativity, and a respect for children. They must also be in good physical and mental condition and have skill in recognizing problems and growth needs.

Briggs (1987) notes that one of the important indicators of quality in early childhood programs is the teaching staff (National Academy of Early Childhood Programs, 1984; Peters, 1984; Phyfe-Perkins, 1981). Results of several studies suggest that teacher behavior

impacts children's behavior, development and performance as well as classroom management and discipline (Beller, 1969; Brophy & Evertson, 1976; Kounin, 1977; Phyfe-Perkins, 1981; Roupp, Travers, Gantz, & Coelen, 1979; Stallings, 1975).

Vedel-Peterson (1970) found that students of teachers who are interested and friendly are more constructive, more likely to be independent, and demonstrate leadership qualities. Similarly, Fein and Clarke-Stewart (1973) determined that teachers and caregivers who demonstrate understanding, sensitivity, and responsiveness support productive behavior, task involvement, cognitive achievement and cooperation in preschool children.

Although similar characteristics were frequently noted in various studies, there has been no definite combination of traits which have emerged to predict the most effective teacher. Early childhood professionals seem to know intuitively that such qualities are important, but a concrete demonstration of their impact on the quality of children's experience is more difficult. Despite the difficulties inherent in this task, attempts have been made to clearly and systematically determine the qualities of effective early childhood teachers (Feeney & Chun, 1985).

Briggs (1987) notes several specific groups of teaching behaviors that are essential in effective

teaching of young children. The effective teacher of young children maintains a safe, healthy, learning environment; advances physical and intellectual competence; supports social competence and emotional development through positive guidance and discipline; and, establishes positive and productive relationships with families. The effective teacher also ensures a well-managed, purposeful program with a commitment to professionalism.

One approach to studying teacher effectiveness has been through the study of personal characteristics of effective teachers. For example, a series of studies on teacher personality have used the Myers-Briggs Type Indicator (MBTI), an instrument designed to assess individual styles in judgment and perception based on Jung's theory of psychological types. Feeney and Chun (1985) note that data from studies using the MBTI (McCaulley & Natter, 1980; Kiersey & Bates, 1978) suggest that the majority of students entering early childhood education are oriented more to the outer world of people and things than to the inner world of ideas, who would rather work with known facts and rely on experience than look for possibilities and meanings, who base judgment more on personal values than on impersonal logic, who have a keen interest in and sensitivity toward interpersonal relationships, and who like a planned and orderly way of life.

According to Feeney and Chun (1985), researchers suggest that this personality type may not be as effective in meeting the needs of young children as individuals who are more interested in ideas and possibilities (intuitive vs. sensing) and who are more creative and more flexible (perceiving vs. judging). Yet, the research shows that while many individuals of this second type are trained to be teachers, they do not stay in the classroom, but move into teacher training and/or research positions. Although the published research on personality types is not extensive and it is not uniform in the methods used, there seems to be some common personality characteristics of effective teachers.

Another measure of personal style which has been investigated in relation to teaching effectiveness is a cognitive style approach used to categorize teachers as field dependent or field independent (Saracho and Spodek, 1986). This theoretical framework was initiated by Witkin and associates (Witkin, 1974; Witkin, Hertzman, Machover, Meissner, & Wapner 1954/1972) who used the field dependent/indendent constructs to distinguish the ways in which people cope with various circumstances as well as the manner in which they provide cognitive responses to different situations.

Based on research findings, Saracho and Spodek (1986) conclude that field dependent and field independent teachers vary in their academic interactions,

in the context of their interactions with pupils, in the conceptual level of instructional activity, and in the type of feedback they give to students. For example, field dependent teachers favor greater interaction and student involvement in warm, personal learning settings while field independent teachers minimize interpersonal relationships and strive to express the cognitive aspects of teaching, preferring to organize and direct learning. These results clearly demonstrate the importance of this line of research.

Rosen's (1968) research focused on autobiographical essays which the subjects of the study had submitted as part of their program. The study suggested that residues of the adults' childhood have important implications for relationships with children, influencing potential for empathetic identification with their differing needs and coping styles and a capacity for relating positively to children in general. In brief, the study revealed that the workers felt most positive towards and most competent in working with children whom they described in ways that were very similar to those in which they described themselves as children. They felt least positive toward and least competent in working with children whom they viewed as having characteristics diametrically opposed to those they recalled in themselves. The students who wrote about their childhood selves with a sense of selfesteem and who used strong positive affect words in

describing at least some aspect of their early lives were much more likely to display good teacher-child relations than were the students who wrote negatively of their childhood selves and who either omitted or used only mildly positive affect words in recalling childhood events.

Rosen's (1968, 1972) studies highlight the need for the inclusion of information about family background when examining factors that influence teacher effectiveness. Other scholars (Hill, 1970; Minuchin, 1985) have discussed the importance of studying the family for understanding human behavior. Hill (1970) reports that as early as the seventies, researchers began to examine the individual family member within the entire family system. However, there is little research which includes family variables in examining effective teaching behavior. Given the fact that Rosen's (1968, 1972) studies show the importance of the family in understanding teaching behavior and Hill (1970) and Minuchin (1985) emphasize the importance of using the family for understanding human behavior, it is imperative for further studies to include family characteristics as they relate to teacher behavior.

The importance of personal and family characteristics when examining effective teaching behaviors has been noted throughout the literature. However, there is still a lack of conclusive evidence of

specific characteristics that influence teaching behavior. Based on this lack of information, the following hypotheses were examined.

1. Student teacher scores on the Myers-Briggs Type Indicator (MBTI) will predict teaching effectiveness as measured by the total score on the Early Childhood Teacher Observation Checklist (ECTOC).

a. Intuitive scores on the MBTI will be predictive of total scores on the ECTOC.

b. Perceptive scores on the MBTI will be predictive of total scores on the ECTOC.

2. Scores on satisfaction with career choice according to the Background Information Form will be predictive of scores for enhancing social competence as measured by the appropriate section of the ECTOC.

3. Scores on the FACES III will be predictive of scores on the ECTOC.

4. Student teachers who have the specified personal and family background will be predictive of scores on the ECTOC:

a. Maternal employment ratings will be predictive of scores on the ECTOC.

b. Parental support for career choice scores will be predictive of scores on the ECTOC.

c. Satisfaction with career choice scores will be predictive of scores on the ECTOC.

d. Maternal employment as a teacher scores will be predictive of scores on the ECTOC.

e. Paternal employment as a teacher scores will be predictive of scores on the ECTOC.

5. Intuitive scores on the MBTI will be predictive of career satisfaction.

6. FACES III scores will be predictive of perceived parental support as rated on the Background Information Form.

#### Method

#### Subjects

The sample for this study is a subsample from an original group of fifty students from a comprehensive university majoring in Early Childhood Education. All fifty were requested to complete the measures used in the study. The final sample consisted of thirty-nine female students who completed all of the measures. These were senior level students completing preschool student teaching experiences in the university's laboratory school between Fall 1989 and Fall 1990. Each participated in one of five classroom situations: (1) part-day infant/toddler; (2) part-day two-year-olds; (3) part-day three-year-olds; (4) part-day four-year-olds; or (5) full-day three through five-year-olds.

#### Instruments

Early Childhood Teacher Observation Checklist (Briggs, 1987). The ECTOC was developed for research purposes to record observations of teaching behaviors in group settings for children from approximately 18 months to 6 years of age. The checklist is composed of 63 teaching behaviors that are related to child development and learning and effective classroom management and communication (See Appendix C). The teaching behaviors are grouped into the following five sections: social, emotional, physical, cognitive and language, and management and communication. Items on the ECTOC were selected from the Child Development Associations' Credentialing Checklist with key behaviors from relevant research added. The instrument was field tested by Briggs (1987) using the "known group method" of testing validity (Kerlinger, 1979), by observing teachers with master's degrees in early childhood education in several early childhood laboratory settings. Through this process, items were scrutinized for behaviors that did not occur and for behaviors that did occur frequently but were not listed. The instrument was tested and revised to its present form in this manner.

In the present study, the instrument was used by trained observers who focused on one teacher for 30 minutes during a scheduled time of free play. The observer recorded both the occurrence and nonoccurrence of specific behaviors. For behaviors contingent on the context of the situation the observer recorded both opportunity for the behavior and its occurrence. When the observation ended, the observer calculated the proportion of behaviors to opportunities. Agreement percents between observers for eight student teacher observations were as follows: social 96.0%, emotional 93.3%, physical 92.9%, cognitive and language 91.7%, and management and communication 86.7%. When the instrument was field tested by Briggs (1987) agreement percents between 19 observer pairs ranged from 85.6% on social to 95.6% on both emotional and management. Briggs (1987) notes that as more data are gathered by the use of the ECTOC, more tests of its validity and reliability can be made and that the test-retest stability of the scores must be examined.

Myers-Briggs Type Indicator (1976). The MBTI is based on C. G. Jung's (1971) concept of perception and judgment and the ways these are used by people of different personality types (See Appendix C). The aim of the MBTI is to identify, by self-report of easily recognized reactions, the basic preferences of people in regard to perception and judgment, so that the effects of each preference can be established by research and put into practical use.

The MBTI contains four separate indices, reflecting each of four basic preferences that, under Jung's theory, direct the use of perception and judgment. The preferences effect not only what people attend to in any given situation, but also how they draw conclusions about what they perceive. The four indices are: (1) Extroversion-Introversion, (2) Sensing-Intuition, (3) Thinking-Feeling, and (4) Judgment-Perception.

For the purpose of this study, the dichotomous preference scores were treated as continuous scales. Continuous scores are a linear transformation of preference scores using the following convention: For E, S, T, or J preference scores, the continuous score is 100 minus the numerical portion of the preference score and for I, N, F, or P preference scores, the continuous score is 100 plus the numerical portion of the preference score.

Because the MBTI was designed to implement Jung's (1971) theory of psychological types, its validity is determined by its ability to demonstrate relationships and outcomes predicted by theory. According to Myers-Briggs (1976), continuous scores correlate in the expected directions with instruments created by Spielberger (1983), Campbell and Hansen (1981) and, Kuder (1968). Type distributions are the common method for presenting data on groups and provide evidence for construct validity. When theory predicts one type to be more interested in a particular occupation and the MBTI has significantly more of the types predicted by theory

in this occupation, this contributes to construct validity. For example, Isabel Myers conducted a longitudinal study on 5,355 individuals who were followed from admission to medical school until over a decade later and found their specialty choices were significant in the directions predicted by type theory (Myers-Briggs Type Indicator Manual, 1985).

Background Information Form. This form consists of nine items which identify personal and family characteristics (See Appendix C). It includes information about age, family constellation, level of parent education, parent occupation, and religiosity. The Background Information Form was used to determine whether or not the student teachers mother worked outside the home, had parental support for career choice, was satisfied with career choice, and had a parent who was a teacher.

Family Adaptability and Cohesion Evaluation Scales III (1985). FACES III is a 20 item scale that measures dimensions of family cohesion and adaptability (See Appendix C). Family cohesion is defined as the emotional bonding between family members while family adaptability refers to the extent to which family systems are able to change in response to situational and developmental stress. The scale measures how the individual perceives his or her family functioning and places the individual within the Circumplex Model of Family Systems. This

rating scale determines the level of family adaptability and cohesion ranging from low to high. Families are placed within the model based on their level of adaptability and cohesion and are rated as Extreme, Mid-Range, or Balanced.

Reliability for the measure, using Cronbach Alpha, is reported by Olson, Portner, and Lavee (1985) as .68 for the total scale. Validity was established for the instrument with almost zero correlation (r=.03) between the cohesion and adaptability dimension and with a high correlation between items within each scale (adaptability and cohesion) and the total scale. Items on the scale were selected from FACES II if they were clearly loaded on only one factor. Based on the initial factor analysis and the original subscales, items were eliminated and revised. Factor analysis was conducted after each step to maintain the scales' validity and independence of factors (Olson, Portner, & Lavee, 1985).

#### Procedures

The subjects were requested to complete the Myers-Briggs Type Indicator during the semester in which they were enrolled in preschool student teaching. Next, theywere observed using the Early Childhood Teacher Observation Checklist by one of two trained observers during the second half of the student teaching experience. After completing preschool student teaching, subjects were requested by mail (See Appendix B) to

complete the Family Adaptability and Cohesion Evaluation Scales III and the Background Information Form.

#### Results

The results are presented in the following sequence: personal style predicting effective teaching behavior, personal and family background predicting effective teaching behavior, Myers-Briggs Type Indicator predicting satisfaction with career choice, and FACES III predicting perceived parental support. All data were analyzed using the Systematic Statistics (SYSTAT) computer program (Wilkenson, 1987). Information on each of the measures, raw data, and statistical analyses are presented in Appendices C, D, and, E respectively. Mean scores and standard deviations were computed for the sample of 39 student teachers on all measures and are presented in Table 1. Simple linear regression analyses were computed for the measures.

Insert Table 1 about here

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Personal Style Predicting Effective Teaching Behavior

The proportion of behaviors to opportunities were calculated with a possible range of 0 to 500 for the total of all sections (M=375.488, SD=73.036) on the ECTOC. When the regression analyses were computed with Myers-Briggs Type Indicator scores as the independent variables, no significant results were indicated for intuition (F=.093; p=.762;  $R^2$ =.003) or for perception (F=.675; p=.417;  $R^2$ =.018).

Insert Table 2 about here

<u>Personal and Family Background Predicting Effective</u> <u>Teaching Behavior</u>

Each subject was requested to rate their level of satisfaction with career choice from 1 to 5 with 1 representing not at all satisfied and 5 representing extremely satisfied (M=4.487, SD=.756). Career satisfaction did not predict teaching effectiveness (F=1.756; p=.193;  $R^2$ =.045).

The proportion of behaviors to opportunities were calculated for the enhancement of social competence with a possible range of 0 to 100 (M=59.369, SD=24.027). This proportion was used in a simple linear regression analysis; the level of satisfaction with career choice predicted the enhancement of social competence as measured by the ECTOC (F=4.751; p=.036;  $R^2$ =.114).

Analyses were run with total scores on FACES III as the independent variable and ECTOC total as the dependent variable. No significant findings were noted (F=.033; p=.856;  $R^2$ =.001).

Simple linear regression analyses indicated that maternal employment did not predict teaching effectiveness (F=.347; p=.559;  $R^2$ =.009). Parental support for career choice also did not predict teaching effectiveness (F=2.9; p=.097;  $R^2$ =.073).

Regression analyses indicated that maternal and paternal employment as a teacher did not predict teaching effectiveness (F=.208; p=.651;  $R^2$ =.006; F=3.674; p=.063;  $R^2$ =.090). Further, correlation analysis revealed that such employment was negatively related to teaching effectiveness.

## <u>Myers-Briggs Type Indicator Predicting Satisfaction with</u> <u>Career Choice</u>

When regression analyses were conducted with intuition on the Myers-Briggs Type Indicator as the independent variable, findings confirmed a statistically significant result with scores on intuition predicting satisfaction with career choice (F=4.294; p=.045;  $R^2$ =.104).

#### FACES III Predicting Perceived Parental Support

Subjects rated their perceptions of parental support from 1 to 5 with 1 representing no support and 5 representing very supportive (M=4.41, SD=.88). Simple regression analyses were computed with FACES III scores as the independent variable. FACES III scores were predictive of the amount of perceived parental support for career choice (F=3.974; p=.054;  $R^2$ =.097).

#### Discussion

Feeney and Chun (1985) note that data from studies using the MBTI (McCaulley & Natter, 1980; Kiersey & Bates, 1978) suggest that the majority of students entering early childhood education are the type of people who are oriented more to the outer world of people and things (extraverted), who would rather work with known facts and rely on experience (sensing), who base judgment more on personal values (feeling), and who like a planned and orderly way of life (judging). However, they suggest that this personality type may not be as effective in meeting the needs of young children as individuals who are more interested in ideas and possibilities (intuitive), and who are more creative and flexible (perceptive). The results of the current study did not support the existing literature. Personality type as measured by the MBTI did not predict effective or ineffective teaching behaviors as measured by the Early Childhood Teacher Observation Checklist.

Career satisfaction also did not predict teaching effectiveness as measured by the Early Childhood Teacher Observation Checklist. However, career satisfaction did predict the enhancement of social competence.

A lot of variability was accounted for on the teaching effectiveness scores for this group of subjects. The lack of significant findings when examining effective teaching behaviors could be attributed to the following factors. First, student teachers at a particular university receive very similar if not identical teacher training. Second, the results might be a reflection of the environment since all observations were conducted in the same setting with approximately the same amount of supervision. Additionally, the student teachers typically do not perceive themselves as the teacher in charge of the classroom; many of their decisions may have been based on their interpretation of training and/or supervision rather than on personal style. The same behavior may not be implemented by the student teacher in an environment where she is the lead teacher. The inclusion of other measures of both effective teaching behaviors, such as planning and evaluation techniques and personality variables like field dependent/field independent as discussed by Saracho and Spodek (1986) might be helpful for future studies.

Satisfaction with career choice, on the other hand, could be predicted; those rated as more intuitive according to the MBTI reported more satisfaction than those of other types. Results indicated that satisfaction with career choice was not significantly related to effective teaching behavior. Further research

in this particular area may reveal interaction effects among personality, satisfaction and teaching effectiveness.

Students who came from less balanced families perceived greater parental support for career choice than did those from more balanced families but no significant differences were found in their teaching effectiveness. Further, perceived parental support did not predict teacher effectiveness. Based on Family Systems Theory, this might be attributed to the fact that members of more balanced family systems tend to be more autonomous than members of less balanced families. The autonomous offspring would not need as much parental approval for actions and would not be as sensitive toward support or lack of support from the family (Olson & McCubbin, 1983). These findings point to the need for more research in the area of the individual in the context of the family and how the family background effects teaching behaviors.

One limitation of this study is the use of the Early Childhood Teacher Observation Checklist. The instrument is somewhat intrusive since teacher effectiveness is measured by having the researcher in the room with the teacher. However, this may not be a major limitation in laboratory settings because teachers and student teachers are probably less affected by the presence of observers. Another limitation of the instrument is that is has not been used for the purpose of analyzing differences in

scores by variability in teachers' levels of education and experience, teaching situations, or personal teaching style.

Surprisingly, few individual or family variables were found to predict teaching effectiveness. Although limitations in the location of the study and instruments were noted, it may be that personality characteristics and family demographics are not significant determinants of teaching effectiveness. Career satisfaction, by contrast, was significantly predicted by several family and personality variables, notably by the intuition scale of the MBTI. Further research into the relationship of these variables is suggested.

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TABLE 1

| Means and Standard Deviations                                                                                                                                    |                                                                 |                                                           |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------|--|--|--|--|--|--|
| VARIABLE (possible range of scores                                                                                                                               | ) M                                                             | SD                                                        |  |  |  |  |  |  |
| Myers-Briggs Type Indicator<br>Sensing vs. Intuitive (33-167)<br>Judging vs. Perceptive (33-167)                                                                 | 91.82<br>89.46                                                  | 23.24<br>25.77                                            |  |  |  |  |  |  |
| Early Childhood Teacher Observation<br>Total Score (0-500)<br>Cognitive (0-100)<br>Emotional (0-100)<br>Social (0-100)<br>Physical (0-100)<br>Management (0-100) | n Checkl<br>375.49<br>76.56<br>83.07<br>59.37<br>69.16<br>87.33 | ist<br>73.04<br>18.08<br>12.89<br>24.03<br>20.45<br>13.69 |  |  |  |  |  |  |
| Family Adaptability and Cohesion<br>Evaluation Scale III (1-3)                                                                                                   | 2.15                                                            | .81                                                       |  |  |  |  |  |  |
| Background Information Form<br>Mother Working Outside                                                                                                            | L.                                                              |                                                           |  |  |  |  |  |  |
| Home (0-5)                                                                                                                                                       | 2.97                                                            | 1.22                                                      |  |  |  |  |  |  |
| Parental Support (1-5)                                                                                                                                           | 4.41                                                            | .88                                                       |  |  |  |  |  |  |
| Mother is a Teacher (0-1)                                                                                                                                        | 4.49                                                            | • 66                                                      |  |  |  |  |  |  |
| Father is a Teacher (0-1)                                                                                                                                        | .10                                                             | .31                                                       |  |  |  |  |  |  |

TABLE 2

| Simple linear regression of predictors of effective teaching behaviors                                                                              |                                      |                                    |                                         |                                      |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|-----------------------------------------|--------------------------------------|--|--|--|--|
| Independent Variables                                                                                                                               | R <sup>2</sup>                       | beta                               | F                                       | p                                    |  |  |  |  |
| (total observation scores)                                                                                                                          |                                      |                                    |                                         |                                      |  |  |  |  |
| Myers-Briggs Type Indicator<br>Sensing vs. Intuitive<br>Judging vs. Perceptive                                                                      | .003<br>.018                         | .050<br>.134                       | .093<br>.675                            | .762<br>.417                         |  |  |  |  |
| Family Adaptability and<br>Cohesion Evaluation<br>Scale III                                                                                         | .001                                 | 030                                | .033                                    | .856                                 |  |  |  |  |
| Background Information Form<br>Mother Working Outside Home<br>Parental Support<br>Career Satisfaction<br>Mother is a Teacher<br>Father is a Teacher | .009<br>.073<br>.045<br>.006<br>.090 | .096<br>.270<br>.213<br>075<br>301 | .347<br>2.900<br>1.756<br>.208<br>3.674 | .559<br>.097<br>.193<br>.651<br>.063 |  |  |  |  |
| (enhancement of social compete<br>Background Information Form<br>Career Satisfaction                                                                | ence)<br>.097                        | .337                               | 4.751                                   | .036                                 |  |  |  |  |

n=39; df=1

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## ÀPPENDIX A

## LITERATURE REVIEW

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#### Literature Review

What are the distinguishing characteristics of effective early childhood teachers? Is there a relationship among the personal characteristics and the behavior of teachers and does this have an impact on teacher effectiveness? Available research indicates that there is a relationship between teacher style and skills as they relate to effective teaching of young children. Feeney and Chun (1985), in a review on effective teachers, mention several areas of importance including personal and family characteristics, demographics, situational factors and teacher behavior. The first part of this review will focus on effective teachers; the second part will consist of the four categories discussed by Feeney and Chun.

#### Effective Teaching

Effective teaching is defined by Yawkey (1974), Bacmeister (n.d.) and Harvey (1966) as the teacher who possesses most of the following personal characteristics: a positive attitude, a willingness to learn, ability to motivate, ability to maintain relaxed relationships, and one who provides a child oriented atmosphere. Other behaviors that effective teachers exhibit include warmth,
perceptiveness, flexibility, diversity, a sense of humor, creativity, and a respect for children. They must also be in good physical and mental condition and have skill in recognizing problems and growth needs. Although the characteristics were frequently noted in various studies, there was no definite combination of traits which emerged to predict the most effective teacher.

We know intuitively that these are important qualities, but to concretely demonstrate their impact on the quality of children's experience is more difficult. Despite the difficulties inherent in this task, attempts have been made to clearly and systematically determine the qualities of effective teachers (Feeney & Chun, 1985).

The effectiveness of teachers in early childhood programs is dependent on both the roles and the styles of teachers. Katz (1970) defines role as that aspect of the teacher's behavior that concerns the duties, responsibilities, and functions expected of the teacher by her clients and herself. The term style, she says, refers to that aspect of the teacher's behavior that might be called the individual rendering with which the teacher's role is performed. For example, the role of the teacher including her functions, duties, and responsibilities-might be to instruct, but her style of instructing might be humorous, warm, authoritarian or cold.

In interviews regarding early childhood teachers, Seifert (1976) found most administrators expressed pride or contentment with the particular early childhood teachers at their schools. They seemed, however, not so concerned with the teachers' specific skills or training, as much as with their general personal qualities--warmth, kindness, love of children--and with their ability to create a certain atmosphere in class--a happy creative place to be. Often these descriptions sounded suspiciously like stereotyped descriptions of traditional "motherhood". Few comments were made about specific activities or goals of the early childhood teacher, even after Seifert probed for them. Nor were comments made about specific frustrations that the teacher might have felt in carrying out her job. The latter omission, of course, may have shown a concern for the privacy of the staff, and the desire to "put the best foot forward" in the interviews. But in conjunction with the rest of their descriptions, Seifert states that ignorance of the early childhood teacher's role may also be part of the cause since very few principals in the study had significant teaching experience in kindergarten or the primary grades.

This lack of knowledge by the principals is unfortunate as shown by Johnston's (1983) study which found that the most consistent problem reported by early childhood educators was relations with their supervisors. Teachers reported problems with getting their supervisor to treat them fairly, respect their professional judgment, and in getting their supervisor to include them in the decision-making process for their classrooms. They also reported problems getting their supervisors to give them program guidelines or job expectations, and then to give them feedback about their job performance.

The characteristics administrators deem important should be placed in the total context of personality and academics. Perhaps the lack of research on the relationships among style and skills as they relate to effective teaching of young children is largely responsible for the misunderstanding between early childhood teachers and their supervisors.

For a teacher of young children to be successful, Bacmeister (n.d.) states several ideas which must become genuine functioning convictions and a real part of the teacher's personality. They include realizing that significant learning and mental growth, as well as physical and emotional growth, begin long before first grade. They must understand that children are striving to grow and it is more important that they are moving forward than where they are in the growing process. Finally, the teacher must accept the role of co-worker with both children and parents.

Ryans (1960), in his Teacher Characteristics Study, concluded that a person's concept of a good teacher seems

to depend on (a) his or her past experience and the attitudes he or she has come to accept, (b) the aspects of teaching which may be foremost in the consideration at a given time, and (c) characteristics of the pupils taught. According to Ryans, describing effective teachers involves the social or cultural group in which the teacher operates, the grade level and discipline taught, and the intellectual and personal characteristics of the pupils taught by the teacher. In this study, Ryans identified three distinct teacher characteristic patterns: (a) Pattern X referring to warm, understanding, friendly versus aloof, egocentric, restricted teaching behavior; (b) Pattern Y referring to responsible, businesslike, systematic versus evading, unplanned teacher behavior; and (c) Pattern Z which refers to stimulating, imaginative, surgent versus dull, routine, unimaginative teacher behavior.

It is difficult to generalize about the important qualities of early childhood educators from available research because each study varies greatly in both focus and methodology. Also, there has been little research based specifically on early childhood educators and related programs. Feeney and Chun (1985) suggest that an important issue in applying research findings to early childhood education is that effectiveness has not been seen as varying with age and other characteristics of the children being taught. Yet, we know that the roles and

tasks of teachers of young children are quite different than those of teachers of older children.

Feeney and Chun (1985) also say it is difficult to interpret data because different outcome measures have been used in different studies. Effectiveness has been determined by supervisor ratings, by measures of classroom atmosphere, by observations of children, and by measures of children's performance on achievement and intelligence tests. Even within these categories, the same observation techniques, rating scales, and tests are rarely used.

Two general approaches have been use in research on teacher effectiveness: (1) experimental design that focuses on particular teacher variables in controlled situations and (2) more naturalistic observations of children's behavior in school settings. A number of studies on the personal characteristics of teachers may be valuable to counsel students entering the field. Another group of studies deals with the relationship between teacher values and beliefs and effective teaching. Others focus more directly on the effects of teacher behavior and on the impact of the teacher's sex, education, and experience (Feeney & Chun, 1985).

From all past research, it does appear important that future early childhood education research endeavors take into account the attitudes and behaviors of those persons employed in the centers under study. Only

through the formative analysis of teacher behaviors can practitioners be aware of what it is that makes a "successful" program successful.

#### Teacher's Personal and Family Characteristics

A series of studies on teacher personality has used the Myers-Briggs Type Indicator (MBTI), an instrument designed to assess individual styles in judgment and perception based on Jung's theory of psychological types. Feeney and Chun (1985) note that data from studies using the MBTI (McCaulley & Natter, 1980; Kiersey & Bates, 1978) suggest that the majority of students entering early childhood education are oriented more to the outer world of people and things than to the inner world of ideas, who would rather work with known facts and rely on experience than look for possibilities and meanings, who base judgment more on personal values than on impersonal logic, who have a keen interest in and sensitivity toward interpersonal relationships, and who like a planned and orderly way of life.

According to Feeney and Chun (1985), the researchers suggest that this personality type may not be as effective in meeting the needs of young children as individuals who are more interested in ideas and possibilities and who are more creative and more flexible. Yet the research shows that while many individuals of this second type are trained to be teachers, they do not tend to stay in the classroom, but move into teacher training and research positions. Although the published research on personality types is not extensive and it is not uniform in the methods used, there seems to be a few common personality characteristics of effective teachers.

Saracho and Spodek (1986) have used a cognitive style approach to categorize teachers as field dependent or field independent. This theoretical framework was initiated by Witkin and associates (Witkin, 1974; Witkin, Hertzman, Machover, Meissner, & Wapner 1954/1972) who used these terms to distinguish the ways in which people cope with various circumstances as well as the manner in which they provide cognitive responses to different situations.

In the field dependent mode, individuals respond to the context as a whole. They tend to be sociable, exhibit a high reliance on the environment, and are global learners. In the field independent mode, individuals separate the various components of the situation from one another. They tend to be analytic, autonomous, socially detached, and self-aware. Obviously, these descriptions represent extremes. In reality, everyone possesses some elements of both cognitive styles.

Based on research findings, Saracho and Spodek (1986) conclude that field dependent and field independent teachers vary in their academic interactions,

in the context of their interactions with pupils, in the conceptual level of instructional activity, and in the type of feedback they give to students. For example, field dependent teachers favor greater interaction and student involvement in warm personal learning settings while field independent teachers minimize interpersonal relationships and strive to express the cognitive aspects of teaching, preferring to organize and direct learning. These results clearly demonstrate the importance of this line of research.

Saracho and Spodek (1986) suggest that we should consider the cognitive style of both the teacher and the student. By responding more broadly to individual differences, educators can provide greater equality of educational experiences to all.

Although there is a widespread assumption that good teacher-class relations promote positive attitudes toward learning in young children, teacher personality studies have not focused attention on the psychological processes that underlie the teacher's ability to relate to children. Rosen (1968), made a preliminary effort to identify and generate concepts concerning such processes. The study was based on data derived from an investigation in which a group of senior student teachers was assessed through a battery of personality tests and questionnaires, and a year later evaluated on their classroom performance as full-fledged teachers. The

evaluation of classroom performance included annotated ratings by observers on the extent to which the teachers were liked or disliked by the children. A number of characteristic differences emerged between the betterliked and the less-liked teachers as follows.

First, the better-liked teachers were characteristically described by the classroom observers as outgoing toward the children, sensitive to and supportive of their needs, able to have fun with them and enter into their fantasies without losing their own identity as adults. In contrast among the less-liked teachers, many appeared emotionally aloof in the classroom, restricted the children's spontaneity, sometimes severely, and spoke to them sarcastically; others competed with the children or played favorites. In their interviews, the betterliked teachers expressed an enjoyment of children, a pleasure in watching them learn new things and grow as individuals. Such teachers were judged by the interviewers as intuitively able to understand children and help them with their problems. In contrast, the less liked teachers indicated either that they could not understand how children think and feel, could not warm up to them and felt uneasy when their class was not engaged in strictly academic matters, or that they liked all children and had no problems in their teaching, but, at the same time, spoke disparagingly of the children and

blamed them for failing to meet the teacher's academic standards (Rosen, 1968).

To gain a psychological understanding of these contrasting relations with children, two separate parts of the personality assessment data were analyzed: the teachers' written descriptions of their childhood and their responses to questions bearing on their motivations to teach children, including their long-range career goals (Rosen, 1968).

In an effort to explore the psychological processes in the adult that influence potential for relating to children and to determine what kinds of children he/she is likely to work with most effectively, Rosen (1972) conducted another study. In the group studied, some students displayed a natural spontaneity with preschoolers, but became stiff and awkward when confronted with children in the primary grades; others readily captured and built upon the interests of a group of upper elementary children but in a classroom of preschoolers could find no avenues for effective communication. Rosen's (1968) research focused on autobiographical essays which the subjects of the study had submitted as part of their program. The study suggested that residues of the adults' childhood have important implications for relationships with children, influencing potential for empathetic identification with their differing needs and coping styles and a capacity

for relating positively to children in general. In brief, the study revealed that the workers felt most positive towards and most competent in working with children whom they described in ways that were very similar to the ways in which they described themselves as children. They felt least positive toward and least competent in working with children whom they viewed as having characteristics diametrically opposed to those they recalled in themselves. The students who wrote about their childhood selves with a sense of self-esteem and who used strong positive affect words in describing at least some aspect of their early lives were much more likely to display good teacher-child relations than were the students who wrote negatively of their childhood selves and who either omitted or used only mildly positive affect words in recalling childhood events.

Rosen's (1968, 1972) studies highlight the need for the inclusion of information about family background when examining factors that influence teacher behavior. Other researchers (Hill, 1970; Minuchin, 1985) have discussed the importance of using the family for understanding human behavior but there is little research which includes the family variable in examining teacher effectiveness. Given the lack of information, it is imperative for further studies to include family characteristics as they relate to teacher behavior.

Both developmental psychology and family studies have long regarded the family as a focus for understanding human behavior (Minuchin, 1985). As early as the seventies, researchers began to examine the individual family member within the entire family system (Hill, 1970). Although general systems theory has been employed by other disciplines in their research endeavors, comparatively, the use of this theory in understanding human behavior and development is relatively recent.

The basic tenets of systems theory are that within each system there are a variety of subsystems. The examination of individuals within these various subsystems allow for much diversity. For instance, one can examine the subsystem of the extended family in relation to the individual as well as the individual in the context of the immediate family who is cohabitating (Minuchin, 1974).

Although the study of families from a systems perspective has a relatively short history, it is becoming an increasingly useful approach for examining family interaction (Holman & Burr, 1980, Thomas & Wilcox, 1987). Based upon systems theory, Olson, Russell, & Sprenkle (1979) created the Circumplex Model of Family Systems to examine variations in types of family systems. The circumplex model provides a determination of each

family's level of cohesion, adaptability, and family communication.

Olson, Sprenkle, and Russell (1979) have defined family cohesion as consisting of two major components. They are (a) the level of emotional bonding among family members and (b) the degree of individual autonomy a person experiences in the family system. The Circumplex Model determines which of four levels of cohesion in which the family participates, ranging from high to low cohesion. At the extreme high level, enmeshment, there is an overidentification with the family resulting in extreme bonding and limited individual autonomy. Disengagement, the low extreme, is characterized by low bonding and high autonomy from the family. The two moderate or balanced levels of cohesion have been labeled separated and connected. It is hypothesized that a balanced degree of family cohesion is the most conducive to optimum individual development and effective family functioning, while the extremes, disengaged and enmeshed are primarily seen as problematic (Olson, Portner, and Lavee, 1985; Olson, Sprenkle, and Russell, 1979). Within the Circumplex Model, some of the specific variables used to assess the degree of the cohesion dimension include: decision-making, coalitions, time, space, friends, recreation, interests, bonding, and independence.

Throughout the literature, theorists and therapists have independently concluded that the level of family cohesion is critical in understanding family functioning and individual development within the family context. Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1983) state that the significance of the cohesion dimension, which subsumes approximately forty concepts, is attested by several different disciplines including: psychiatry, family therapy, family sociology, small-group theory, group therapy, social psychology, and anthropology.

After reviewing the literature from various fields, the value of the cohesion dimension as related to families becomes apparent. For this reason, Olson, Russell, and Sprenkle (1983) have included cohesion as one of the two central dimensions for developing the Circumplex Model of Marital and Family Systems.

Olson, Sprenkle, and Russell (1979) have defined family adaptability as the extent to which the family system is flexible and able to change. This includes the ability of a marital or family system to change its power structure, role relationships and relationship rules in response to situational and developmental stress. Within the Circumplex Model, there are four levels of family adaptability ranging from extreme low adaptability to extreme high adaptability. The four levels are: rigid, structured, flexible, and chaotic. The two balanced or moderate levels of adaptability are identified as structured and flexible. It is hypothesized that when there is more balance, there will be a mutually assertive

type of communication, egalitarian leadership, successful negotiation, positive and negative feedback loops, role sharing and role making, and rule making, with few implicit rules and more explicit rules. The extreme area are seen as problematic for couples and families over time (Olson et al., 1983). Within the circumplex Model, some specific concepts used to diagnose and measure the adaptability dimension are: family power structure (assertiveness and control), negotiation styles, role relationships, relationship rules, and positive and negative feedback (Olson, Portner, and Lavee, 1985).

Family adaptability has also been identified by other theorists as important to consider. Clark Vincent (1966) maintains that this aspect of the family is vital to highly changing societies since it serves as the mediating function between individuals and other social structures. Kieren and Tallman (cited in Olson et al., 1983) define this dimension as an individual property: "a spouse's ability to deal effectively with a problematic situation by changing roles and strategies in terms of new or modified assessments of the situation to which he/she is confronted".

Olson, Sprenkle, and Russell (1983) have identified the family adaptability dimension as the second central dimension of the Circumplex Model of Marital and Family Systems because of the considerable interest to family theorists and therapists.

Communication is viewed as the third critical dimension in the Circumplex Model. The authors of the Circumplex Model maintain that communication is the mechanism families utilize to share their changing needs, preferences, and feelings. Communication is viewed as the facilitating dimension of the Circumplex Model, the dynamic component considered critical in aiding the movement of families on the cohesion and adaptability dimensions. While positive communication facilitates movement to different levels of family organization; a lack of communication skills or negative communication is believed to inhibit the family system's ability to change levels of cohesion and adaptability (Barnes and Olson, 1985).

There are two specific hypotheses linking communication to balanced types and change on cohesion and adaptability. It is hypothesized that balanced couples/families will tend to have more positive communication skills than Extreme families. It is also hypothesized that positive communication skills will enable Balanced couples/families to change their levels of cohesion and adaptability more easily that those at Extremes (Olson et al., 1983).

Olson et al. (1983) maintains that communication is generally accepted as one of the most crucial facets of interpersonal relationships. It is recognized as the key element in the functioning of families.

The four levels of cohesion: disengaged, separated, connected, and enmeshed combined with the four levels of adaptability: rigid, structured, flexible, and chaotic make it possible to identify 16 types of marital and family systems (Barnes and Olson, 1985). According to Olson, Portner, and Lavee (1985), four of these 16 types are moderate on both the cohesion and adaptability dimensions (Balanced). Eight types are extreme on one dimension and moderate on the other (Mid-Range) and four types are extreme on both dimensions (Extreme).

Of the three more general types, Balanced families fall in the central area of both dimensions representing the optimal family type. These families are viewed as being more free to change levels of cohesion and adaptability to meet their needs. While these families are typically located at the central region of the model, they are able to experience the extremes for short periods of time. They may temporarily reorganize to extreme levels on cohesion and/or adaptability for short periods of time (Anderson, 1986).

Extreme families are those exhibiting high or low levels on both cohesion and adaptability. These families are viewed as more limited in their potential range of family organization and resources with which to cope with the challenges of family life (Barnes and Olson, 1985).

One of the major goals in developing the Circumplex Model was to provide a framework that could be used by

clinicians to make a more systematic diagnosis and to establish more specific treatment goals for families. Another goal was to integrate the diversity of concepts in the fields of family theory and family therapy into a model that could be used by researchers (Olson et al., 1979).

Several studies have been conducted which specifically tested the hypotheses derived from the model. In a study by Sprenkle and Olson (cited in Olson et al., 1983), results supported the curvilinear hypothesis that shared leadership (balanced adaptability) was related to better marital functioning. In studies conducted by Russell (cited in Olson et al., 1983), results indicated that high-functioning families were more balanced on both family adaptability and cohesion, while low functioning families had extreme scores on these two dimensions. These findings supported the hypothesis regarding family functioning. Russell also demonstrated and validated independence of the adaptability and cohesion dimensions.

Results from a study by Barnes and Olson (1985), clearly supported the hypothesis that Balanced families would have more positive communication than Extreme

families. Anderson (1986) also found this to be true. However, the results were more consistent for the cohesion dimension than for the adaptability dimension. The Circumplex Model of Family and Marital Systems has become a useful tool for studying the family and the individual within the family context. Previous studies seem to indicate general support for the model.

#### **Demographics**

Feeney and Chun (1985) report that research has been conducted to examine the effects of sex, educational background, and years of teaching experience in early childhood education. Two studies indicate that a positive effect exists on classroom atmosphere and achievement when male teachers are present. In a study by Lee and Wolinsky (1973), results suggested that male teachers evaluated boys and girls more equally, were more likely to assign leadership positions to boys, and formed affectional ties with boys and girls more often than did female teachers.

Gold, Reis, and Berger (1977) found that boys' mathematical achievement scores improve more and their behavior was evaluated more favorably when they were taught by a teaching team with a male member. However, the boys' gender identification, self confidence and enjoyment of school were unaffected.

A study by Seefeldt (1973) on the relationship between formal education and experience on teacher effectiveness revealed that the more formal education, prior teaching experience, and training completed by the teacher, the greater the pupil achievement. The older

teachers who had completed the most training and education and had the most experience, were found to be the most effective. The fact that a female teacher had produced children of her own did not appear to effect her ability to teach another's child.

In a review of research by Oyemade and Chargois (1977) it was reported that ethnic, personality, and social characteristics of teachers and caregivers are related to developmental and performance outcomes of children. The evidence from research suggests that in the case of minority group children more favorable attitudes and interactions occur with teachers or caregivers who are also members of the same minority group.

#### Situational Factors

Teacher effectiveness is influenced not only by personal characteristics and demographics but also by situational factors. Whitebook and Howes (1980) report that their study on working conditions, demonstrated job structure and job satisfaction having situational factors which teachers cannot control, contribute to physical and psychological stress and teacher burnout. These factors include long hours, low pay, and lack of benefits.

In a similar study on effective early childhood teachers, Maslach and Pines (1977) cited staff-child ratio, hours of work, amount of direct contact with children, number of staff meetings and the program

structure as contributing factors in teacher effectiveness. Prescott and Jones (1969) found teacher behavior within a center to be associated with quality of the physical space, size of center, characteristics of staff, and responses of children.

In the Edmonton study (Alberta Department of Education, 1976) it was observed that the following factors inhibit or facilitate teachers' performance: (1) the number of children, (2) availability of resources in the community, (3) parent involvement, (4) the existence of support systems, and (5) the presence and skills of other professionals in the program.

#### Teacher Behavior

Briggs (1987) notes that one of the important indicators of quality in early childhood programs is the teaching staff (National Academy of Early Childhood Programs, 1984; Peters, 1984; Phyfe-Perkins, 1981). Results of several studies suggest that teacher behavior impacts children's behavior and development and performance as well as classroom management and discipline (Beller, 1969; Brophy & Evertson, 1976; Kounin, 1977; Phyfe-Perkins, 1981; Roupp, Travers, Gantz, & Coelen, 1979; Stallings, 1975)

Vedel-Peterson (1970) in a review of the characteristics of kindergarten teachers and the effects on children noted several relationships. First, the attitudes of the teacher in charge affects the institution's emotional tone and methodology. Second, trained teachers have more positive contacts with children than do untrained teachers. Finally, teacher styles which manifest leadership independent of personality affect the behavior of children.

Vedel-Peterson (1970) also found that students of teachers who are interested and friendly are more constructive, more likely to be independent, and demonstrate leadership qualities. Similarly, Fein and Clarke-Stewart (1973) determined that teachers and caregivers who demonstrate understanding, sensitivity, and responsiveness support productive behavior, task involvement, cognitive achievement and cooperation in preschool children.

Prescott and Jones (1969) obtained data for their study of patterns of teacher behavior in preschool programs by observation of teacher-child interaction and supplemented by interviews with directors and teachers. The group of variables examined were: teacher performance, structural factors, and staff characteristics. They disclosed four patterns of teacher behavior: (1) activity level, (2) emphasis on working with children individually or in groups, (3) frequent use of either encouragement, with accompanying lessons in consideration and creativity, or restriction, and (4) lessons in control and restraint. Few teachers made extensive use of both encouragement and restriction;

rather, they utilized one in the absence of the other. Teachers who used a lot of encouragement and emphasized individuality fostered children's attentiveness, interest, involvement, and spontaneity.

Phyfe-Perkins (1981) conducted an extensive review of the research on the relationship between teacher behavior and children's behavior. Conclusions based on her interpretation of the studies support the widely held contention that the behavior of adults in early childhood settings does have an important impact on children.

Although some findings are contradictory, research on the direct effects of teachers' behavior "presents a picture of a successful teacher as one who encourages independent activity, plans a variety of activities, and is involved with the children but does not need to direct their behavior. He or she uses criticism and negative commands sparingly, is aware of several activities at once, can maintain two activities simultaneously and effects smooth transitions". In addition, such a teacher tends to arrange classroom space well and maintains a relatively high level of teacher-child verbal interaction. Children taught by adults exhibiting these behaviors have been shown to be high on measures of task involvement, language comprehension, social participation, constructive use of materials, spontaneity, creativity, sympathy, and independence, and low on dominative and hostile behaviors.

The nature of competence is integrative rather than additive--competence is a synthesis of knowledge, attitudes and skills, rather than a collection of these. They are formed, and interact with each other, to promote facilitative behavior according to the Edmonton, Alberta Early Childhood Services Task Force (1976). This task force constructed a set of guidelines for observing teachers behavior in supporting families and in the care and education of young children. The areas studied were (1) design and implementation of the program, (2) personal competence, (3) interpersonal competence. The most significant dimension that emerged was the teachers ability to observe and interact with children individually (Feeney & Chun, 1985).

#### Summary

It would seem reasonable to assume that research on teacher effectiveness could give us helpful guidelines for teacher education and selection (Feeney & Chun, 1985). Getzels and Jackson (1963) conclude in their review of numerous studies bearing on the subject, "Very little is known for certain about the nature and measurement of teacher personality, or about the relation between teacher personality and teaching effectiveness". More than twenty-five years later, this statement still holds true. While educational researchers and early childhood practitioners grapple with these questions and often provide speculative responses to these provocative

and crucial queries, in fact, there continues to be a definite lag in the development of empirical data for evaluating teacher influence and effectiveness in classroom and learning environments.

Teaching young children is incredibly complex and multifaceted. This makes the design of research difficult. If future studies are to help improve teacher effectiveness they must not overlook the nuances of effective teaching or prescribe formulas to improve children's specific skills or behaviors. Instead they must look to what has traditionally been the concern of early childhood educators-the development of the whole child (Feeney & Chun, 1985). After reviewing the literature, there is an obvious need for more comprehensive studies and standardization of instruments so studies can be replicated.

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### APPENDIX B

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4. 1.

## LETTERS TO SUBJECTS

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# Oklahoma State University

DEPARTMENT OF FAMILY RELATIONS AND CHILD DEVELOPMENT COLLEGE OF HOME ECONOMICS STILLWATER, OKLAHOMA "40"8-033" 241 HOME ECONOMICS WEST (405) 624-5057

Dear Early Childhood Education Major,

I am a master's student in FRCD and am currently doing my thesis on the effects of personal style and family background on student teacher behavior. I am requesting all student teachers who completed their 4 credit student teaching experience in the Child Development Laboratory between Fall 1988 and Fall 1989 to participate in this study.

Existing information which will be used in this study and was collected while you were student teaching in the Child Development Laboratory includes:

Myers-Briggs Type Indicator Early Childhood Teacher Observation Checklist

Would you please take a few minutes to furthur help me with my research by completing and returning the following two questionnaires by January 5, 1990?

> Background Information Form Family Adaptibility and Cohesion Scales III

All surveys will be kept confidential. Each participant in the study has been assigned a code number which will not be used for identification purposes. Your participation is voluntary. By completing and returning the enclosed questionnaires, you are agreeing to participate in the study.

If you have any questions please contact me at (405) 744-5730. Thank you for your help.

Sincerely,

Paige Davis

CENTENNIAL 1890 • 1990

Delebration he Past - Flebaring or he Fligle

"I \_\_\_\_, hereby authorize Paige Davis to use the following existing information which was collected while I was student teaching in the Child Development Laboratories:

Myers-Briggs Type Indicator

Early Childhood Teacher Observation Checklist I furthur authorize her to use the following two questionnaires which I will complete and return to be used in a Master's Thesis." These are:

Background Information Form

Family Adaptibility and Cohesion Scales III The questionnaires which will take approximately twenty minutes to complete will be kept confidential. Each participant in the study has been assigned a code number which will not be used for identification purposes. Findings will be reported for the group and not for the individual.

This information is being collected as part of an investigation entitled "Effective Early Childhood Student Teachers: Personal and Family Characteristics." The purpose of this study is to examine personal and family factors related to effective teaching behaviors of early childhood student teachers.

"I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying the project director. I may contact Paige Davis at telephone number (405) 744-5730 should I wish futher information about the research. I may also contact Terry Maciula, University Research Services, 001 Life Sciences East, Oklahoma State University, Stillwater, OK 74078: Telephone: (405) 744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily."

Date\_\_\_\_\_\_(a.m./p.m.)

Signed\_\_\_\_\_

(signature of subject)



## Oklahoma State University

STILLWATER, OKLAHOMA 740-8-033-241 HOME ECONOMICS WEST (405) 624-5057

DEPARTMENT OF FAMILY RELATIONS AND CHILD DEVELOPMENT COLLEGE OF HOME ECONOMICS

March 13, 1990

Dear Early Childhood Education Major,

I am pleased to report that I have received many responses to my request for former CDL student teachers to complete the Background Information Form and Family Adaptability and Cohesion Scales III. In order to increase the quality of my research, it is important for me to get even more responses. Would you please take a few minutes to complete the enclosed questionnaires? I will be able to include your information if you can have it postmarked by March 24, 1990.

If you have any questions, I will be glad to talk with you. Please call me or Dr. Donna Couchenour at (405) 744-5730. If we are not available, please leave a message and your phone number and we'll call back.

Thank you for your help!

Sincerely,

Paige Davis



Celebrating the Past Preparing for the Future
APPENDIX C

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INSTRUMENTS

-

| Rev. 4/10/84        | EARLY CHILDHOOD TEACHER OBSERVATION | Subj. I.D<br>Obs. I.D<br>ISDate |
|---------------------|-------------------------------------|---------------------------------|
| Name of Observer    |                                     |                                 |
| Place of Observatio | n                                   |                                 |
| Program: full day _ | ; half day comb Time                | Span of Observation to          |
| Total number of tea | chers present at beginning          | ; at end                        |
| Total number of chi | ldren present at beginning          | ; at end                        |
| General description | of activities of observed teacher d | uring observation:              |

Unusual conditions or circumstances that may have affected or altered this teacher's usual performance during the observation:

In the observer's opinion, do the scores reflect the competence of this teacher? If not, explain.

-

1 1

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## Rev. 4/10/84

#### "anegement and Communication Skills

- Looked at written plans or records. and/or consulted with other staff about children, schedule, procedure... and/or activites.
- Appeared to be sware of the schedule and plans by scentizes taking initiative and/or showing leadership in activities and transitions.
- Ves usually positioned so that she/he could see nost of the children at one time.
- 4. Often visually scanned the entire area.
- 5. Attended to two (or more) activities simultaneously without losing the flow of either (tied one child's shee while discussing the artwork of another child; gave directions to a staff sember while assisting a child with dressing).
- Was "suthoritative" with the children when accessary (make directive statemats; gave instructions; set limits).
- 7. Gave directions or set limits clearly.
- 8. Gave directions or set limits positively.
- 9. Spoke to and listened to children at their eye level.
- 10. Made eye contact with children and staff when speaking and listening.
- Showed pleasure/enjoyment/humor/playfulness by laughing or seiling while interacting with children and staff.
- Spoke with a pleasant, distinct, well-modulated voice (varied in tone; neither too soft nor too loud; expressive).

| Opportunity | Observed | : Code   |
|-------------|----------|----------|
| •           |          |          |
|             |          |          |
|             |          |          |
|             | -        |          |
| •           |          | ]        |
|             | -        |          |
|             | <u></u>  |          |
|             |          |          |
|             |          | <b>↓</b> |
|             | L        | ⊥        |
|             |          |          |

Comments .

Subj. I.J.

Subj. I.D.

| | 1 | I 1 I 1 Prevented a problem free occurring (redit rected a child doug to allow bury: acred a pitcher free the edge of the table; added a miterial when an additional child entered an ectivity). Responded juickly whan aisbehavior or problems occurred that required teacher action. 16. Disciplined the correct child(res) (the one who zisbehaved) when alabe-hartor occurred. 18. Lefteined free using corporal or buddincing putabases. 17. Remited cals and reasonable vies secting limits of disciplining misbe-having childres. L1. "atched har/his nonaverbal benavior vich the intent of her/his verbal behvior (fecial expression reflected verbal sessenge. ม่ z.

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# Rev. 4/10/84

# Subj. I.D.

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Comments

| Enher | ncing Emotional dealth and Self-concept                                                                                                                                          | <u>Doportunity</u> | Observed | <u> </u> |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|----------|
| 1.    | Used children's makes when talking to them.                                                                                                                                      |                    |          |          |
| 2.    | Greeted or acknowledged the presence<br>of children upon arrival to school or<br>to the teacher's area.                                                                          |                    |          |          |
| 3.    | Showed friendliness and affection to<br>children through physical contact and<br>pleasant facial expressions.                                                                    |                    |          |          |
| 4.    | Engaged in one-to-one conversations with children.                                                                                                                               |                    |          | ****     |
| 3.    | Allowed and encouraged children to<br>make their ove decisions and choices<br>when appropriate.                                                                                  | -                  |          |          |
| 6.    | Praised/ecknowledges children for<br>independence in saking decisions<br>and/or salf-nelp.                                                                                       |                    |          |          |
| 7.    | Acknowledged and showed positive<br>attitude coverd individual differ-<br>ences is children's physical appear-<br>ance, cultural haritage, abilities,<br>and interests.          |                    |          |          |
| 8.    | Listened attentively to children's<br>conversations (38de eye contact; re-<br>sponded approximately).                                                                            |                    |          |          |
| 9.    | Listened ectively/showed empathy to<br>children as they expressed emotions<br>("Tou are upset with him"; "Tou sust<br>be excited about your new boots";<br>"You miss your dad"). |                    |          |          |
| 10.   | Fostered children's sense of pride in<br>their accomplishments/products ("Tom<br>finished it". "Tou must be proud of<br>that good job").                                         |                    |          |          |
| u.    | Refrained from comparing children<br>unfavorably ('ot"fou didn't do it<br>as well as she did"; "She was the<br>only good one"; "Try to make yours as<br>nice as hers").          | <b>L</b>           |          |          |
| 12.   | Refrained from discussing children<br>infavorably with staff or other -<br>adults ones the children were present<br>and could hear.                                              |                    |          |          |
|       |                                                                                                                                                                                  |                    |          |          |

Rev. 4/10/84

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# Subj. I.D.\_\_\_\_

| Inhancing Provided Competence, Realth and<br>Safety                                                                                                                                                                                                                                   | Opportunt ty | Observed | : Code | Comments |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|--------|----------|
| <ol> <li>Challenged children to try, prectice<br/>or isprove large motor skills ("Try<br/>it again": "See if you can do it<br/>faster": "You try to skip instead of<br/>hop").</li> </ol>                                                                                             |              |          |        |          |
| Z. Challenged children to try, practice<br>or isprove small sotor skills ("Yold<br>the stissors this way instead; "Fut<br>the string through the small hole<br>this time"; "Draw another one just<br>like it": "Do it again").                                                        |              |          |        |          |
| <ol> <li>Gave the children time to accomplish<br/>motor tasks. Zefrained from saying,<br/>"Hurry up" or from stepping in too<br/>soon).</li> </ol>                                                                                                                                    |              |          |        |          |
| <ol> <li>Showed understanding of children's<br/>limited physical capabilities (but-<br/>coaed the small buttoms for the<br/>child; huld a 'newy doer; helped with<br/>pouring from a large pitcher).</li> </ol>                                                                       |              |          |        |          |
| <ol> <li>Yamed and/or discussed body parts<br/>and/or body functions with children.</li> </ol>                                                                                                                                                                                        | -            |          | -      | x<br>c   |
| 6. Encouraged the children to use good health and smaitation practices (using tissues: covering souths for coughing or smessing; cashing hands at appropriate tises; using the toilet; flushing the toilet; brushing teech: dressing for the veather; keeping objects out of mouths). |              |          |        | -<br>- , |
| <ol> <li>Yodeled good Yealth practices (washed<br/>hands at appropriate times; used<br/>tissues; dressed for the weather).</li> </ol>                                                                                                                                                 |              |          |        | ,        |
| 8. Showed awareness of and acted to<br>remove health hazards in the environ-<br>ment (removed or cleaned items that<br>had been in mosths; disposed of tis-<br>sues; disposed of dispers properly;<br>flughed toilets; cleaned tables).                                               | <u></u>      | -        |        |          |
| 9. Showed concern for children's physical confort and vell-being (tied snows; adjusted clothing; adjusted room temperature; arranged confortable secting; checked in juries; attended to illnesses).                                                                                  |              |          |        |          |
| <br>10. Enforced selecty rules (encouraged<br>velking instead of running in con-<br>fined areas; limited numbers using<br>large solor equipment; discouraged<br>recklessness).                                                                                                        |              |          |        |          |

Subj. I.D.\_\_\_\_\_

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| Wes aware of and resoved safety ha-<br>rards in the environment (resoved or<br>closely supervised the use of sharp<br>objects; removed or cautioned chil-<br>dres about broken objects; kept exits<br>clear; pointed out dangers of elec-<br>trical outlets and appliances). |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Perticipated in snacks or seels by<br>sitting with the children and esting.                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                |
| Attempted to meintain a pleasant and<br>unstreasful attosphere during snaks<br>or meals (introduced and encouraged<br>conversation; allowed children to<br>take their time; minimized the impor-<br>tance of spills; kept children cals;<br>appeared cals and unstressed).   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                |
| Discussed the healthful or<br>mutritional aspects of the food                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                              | Wes aware of and removed safety ha-<br>rards in the environment (removed or<br>closely supervised the use of sharp<br>objects; removed or cautioned chil-<br>dres about broken objects; kept exits<br>clear; pointed out dangers of elec-<br>trical outlets and appliances).<br>Perticipated in smacks or seels by<br>sitting with the children and esting.<br>Attempted to meintain a pleasant and<br>unstreasful atmosphere during snake<br>or meals (introduced and encouraged<br>conversation; allowed children to<br>take their time; minimized the impor-<br>tance of spills; kept children calm;<br>appeared calm and instressed).<br>Discussed the hemithful or<br>matritional aspects of the food | Was avare of and removed safety ha-<br>rards in the savironesst (removed or<br>closely supervised the use of sharp<br>objects; removed or cautioned chil-<br>drem about broken objects; kept exits<br>clear; pointed out dangers of elec-<br>trical outlets and appliances).<br>Perticipated in smacks or seels by<br>sitting with the children and esting.<br>Attempted to maintain a pleasant and<br>unatreesful attoephere during marks<br>or meals (introduced and encouraged<br>conversation; allowed children to<br>tance of spills; rept children colar;<br>appeared cals and anstressed).<br>Discussed the healthful or<br>matritional aspects of the food<br>served during marks or mains. | <pre>West avere of and removed safety ha-<br/>rards in the environment (removed or<br/>closely supervised the use of sharp<br/>objects; removed or Cautioned chil-<br/>drem about broken objects; kept write<br/>clear: pointed out dangers of elec-<br/>trical outlets and appliances).</pre> |

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Subj. I.D.\_\_\_\_\_

| Trinar | cing Social Competence                                                                                                                                                                                                                                             | Opportunity                     | Observed | : Code |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------|--------|
| 1.     | Allowed or encouraged children to<br>halp yeers or to help with routine<br>group tasks (cleaning up the room,<br>making snacks, passing out mapkins,<br>holding toors, wasning taoles,<br>turning on lights, dressing).                                            |                                 |          |        |
| 2.     | Thanked children for helping and/or for being thoughtful.                                                                                                                                                                                                          | ,<br>                           |          | -      |
| 3.     | Encouraged children to take turns with and/or share equipment or materials.                                                                                                                                                                                        |                                 |          |        |
| 4.     | Praised/acknowledged children for taking turns and/or sharing.                                                                                                                                                                                                     |                                 |          | 1      |
| 3.     | Gave children time to work out a<br>problem among chemselves (refrained<br>from stepping in too soon when the<br>children were capable.                                                                                                                            |                                 |          |        |
| 6.     | Modeled socially appropriate ways to<br>solve interpersonal problems (talked<br>rather yealed, grabbed, or hit; focused<br>behavior rather than character).                                                                                                        | d on                            |          | ]      |
| 7.     | Encouraged children to verbally ex-<br>press their meeds and/or feelings to<br>others ("isk his to pass it to you"/<br>"Teil his you want a turn mart";<br>"Teil her you can't see"; Teil his<br>you are angry"; "Teil her you like<br>her and want her to play"). |                                 |          |        |
| 3.     | Encouraged children to listen to one<br>another ("He's trying to tell you<br>what he wants": "Listen to her talk<br>now.").                                                                                                                                        |                                 |          |        |
| 9.     | Attempted to help <u>yeets</u> understand<br>each other's intentions, feelings,<br>and meeds ("fe's and because you took<br>the glue he was using").                                                                                                               |                                 |          |        |
| 10.    | Joined children es a participent in<br>their activities as a facilitator,<br>not a dominator).                                                                                                                                                                     | 600,000,000,000,000,000,000,000 |          |        |

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Comments





Subj. I.D. <u>Comments</u>

#### Which answer comes closest to telling how you usually feel or het?

- Does following a schedule
   (A) appeal to you, or
   (B) cramp you<sup>2</sup>
- 2 Do you usually get along better with
   (A) imaginative people, or
   (B) realistic people<sup>2</sup>
- 3 If strangers are staring at you in a crowd, do you
  - (A) often become aware of it, or
  - (B) seldom notice it?
- 4 Are you more careful about
- (A) people's feelings, or
- (B) their rights?
- 5 Are you
  - (A) inclined to enjoy deciding things, or
  - (B) just as glad to have circumstances decide a matter for you?
- 6 When you are with a group of people, would you usually rather
  - (A) join in the talk of the group, or
  - (B) talk individually with people
  - you know well?
- 7 When you have more knowledge or skill in something than the people around you, is it more satisfying
  - (A) to guard your superior knowledge, or(B) to share it with those who want
  - to learn?
- 8 When you have done all you can to remedy a troublesome situation, are you
  (A) able to stop worrying about it, or
  (B) still more or less haunted by it<sup>2</sup>
- 9 If you were asked on a Saturday morning what you were going to do that day, would you
  - (A) be able to tell pretty well, or
  - (B) list twice too many things, or
  - (C) have to wait and sce?

- 10 Do you think on the whole that
  (A) children have the best of it, or
  (B) life is more interesting for grown-ups?
- 11. In doing something that many other people do, does it appeal to you more to
  - (A) do it in the accepted way, or(B) invent a way of your own<sup>2</sup>
  - ..., ..., ..., ...,
- 12 When you were small, did you
  - (A) feel sure of your parents' love and devotion to you, or
  - (B) feel that they admired and approved of some other child more than they did of you?
- 13. Do you(A) rather prefer to do things at the last minute, or
  - (E) find that hard on the nerves?
- 14 If a breakdown or mix-up halted a job on which you and a lot of others were working would your impulse be to
  (A) enjoy the breathing spell, or
  - (B) look for some part of the work where you could still make progress, or
  - (C) join the 'trouble-shooters' who were wrestling with the difficulty?
- 15 Do you usually
  - (A) show your feelings freely, or
  - (B) keep your feelings to vourself?
- 16 When you have decided upon a course of action, do you
  - (A) reconsider it if unforeseen disadvantages are pointed out, to you, or
  - (B) usually put it through to a finish however it may inconvenience yourself and others?
- 17 In reading tor pleasure, do you
  - (A) enjoy odd or original ways of saying things, or
  - (B) like writers to say exactly what they mean?

- In any of the ordinary emergencies of 18 everyday life, do you prefer to (A) take orders and be helpful or (B) give orders and be responsible?
- 19 At parties do vou (A) sometimes get bored, or
  - (B) always have fun?
- 20 Is it harder for you to adapt to
  - (A) routine, or, (B) constant change?
- 21 Would vou be more willing to take on a heavy load of extra work for the sake of
  - (A) extra comforts and luxuries, or
  - (B) a chance to achieve-something important?
- 22 Are the things you plan or undertake
  - (A) almost always things you can finish, or often things that prove too difficult to (B)
- Are you more attracted to 23 (A) a person with a quick and brilliant mind, or

carry through?

- (B) a practical person with a lot of common sense?
- 24 Do you find people in general (A) slow to appreciate and accept ideas not their own, or
  - (B) reasonably open minded?
- 25 When you have to meet strangers, do you find it
  - (A) pleasant, or at least easy, or
  - something that takes a good deal (B) of effort?
- Are you inclined to 26
  - (A) value sentiment more than logic, or
  - (B) value logic more than sentiment?
- 27 Do you prefer to
  - (A) arrange dates, parties, etc well in advance, or
  - (B) be free to do whatever looks like fun when the time comes?
- 28 In making plans which concern other people, do you prefer to
  - (A) take them into your confidence, or
  - keep them in the dark until the last (B) possible moment?

- 29 Is it a nigher compliment to be called (A) a person of real teeling or (B) a consistently reasonable person<sup>5</sup>
- 30. When you have a decision to make, do you usually
  - (A) make it right away, or
  - wait as long as you reasonably can (B) before deciding?
- 31 When you run into an unexpected difficulty in something you are doing, do you feel it to be
  - (A) a piece of bad luck, or
  - (B) a nuisance, or
  - all in the day's work? (C)
- 32 Do you almost always (A) \_ enjoy the present moment and make
  - the most of it or feel that something just ahead is '(B) more important?
- 33 Are you (A) casy to get to know, or
  - (B) hard to get to know?
- 34 With most of the people you know, do you (A) feel that they mean what they say, or (B) feel you must watch for a hidden meaning
- 35° When you start a big project that is due in a week, do you
  - (A) take time to list the separate things to be done and the order of doing them, or
  - (B) plunge in?
- 36 In solving a personal problem, do vou (A) feel more confident about it if you
  - have asked other people's advice, or (B) feel that nobody else is in as good a
  - position to judge as you are?
- 37 Do you admire more the people who are (A) conventional enough never to make themselves conspicuous, or
  - (B) too original and individual to care whether they are conspicuous or not?
- 38 Which mistake would be more natural for you
  - (A) to drift from one thing to another all your life, or
  - (R) to stay in a rut that didn't suit you?
    - Go on to the next page

- 39 When you run across people who are mistaken in their beliefs, do you feel that (A) it is your duty to set them right, or
  - (B) it is their privilege to be wrong?
- 40 When an attractive chance for leadership comes to you, do you
  - (A) accept it if it is something you can really swing, or
  - (B) sometimes let it slip because you are too modest about your own abilities.
  - (C) or doesn't leadership ever attract you?
- 41 Among your friends, are you (A) one of the last to hear what is going on, or
  - (B) full of news about everybody?
- 42 Are you at your best
  - (A) when dealing with the unexpected, or
     (B) when following a carefully workedout plan<sup>2</sup>
- 43 Does the importance of doing well on a test make it generally
  - (A) easier for you to concentrate and do your best, or
  - (B) harder for you to concentrate and do yourself justice?
- 44 In your free hours, do you
  - (A) very much enjoy stopping somewhere for refreshments, or
  - (B) usually want to use the time and money another way<sup>2</sup>
- 45 At the time in your life when things piled up on you the worst, did you find
  - (Å) that you had gotten into an impossible situation, or
  - (B) that by doing only the necessary things you could work your way out?
- 46 Do most of the people you know
  - (A) take their fair share of praise and blame, or
     (B) grab all the credit they can but shift
  - (B) grab all the credit they can but shift any blame on to someone else?
- 47 When you are in an embarrassing spot, do you usually
  - (A) change the subject, or
  - (B) turn it into a joke, or
  - (C) days later, think of what you should have said?

- 48 Are such emotional "ups and downs" as you may feel
  - (A) very mirked, or
  - (B) rather moderate?
- 49 Do you think that having a daily routine is
   (A) a comfortable way to get things done, or
  - (B) painful even when necessary?
- 50 Are you usually
  - (A) a "good mixer", or
  - (B) rather quiet and reserved?
- 51 In your early childhood (at six or eight), did you
  - (A) feel your parents were very wise people who should be obeyed, or
  - (B) find their authority irksome and escape it when possible?
- 52. When you have a suggestion that ought to be made at a meeting, do you
  - (A) stand up and make it as a matter of course, or
  - (B) hesitate to do so?
- 53 Do you get more annoyed at
  - (A) fancy theories, or
  - (B) people who don't like theories?
- 54 When you are helping in a group undertak ing, are you more often struck by
  - (A) the cooperation, or
  - (B) the inefficiency,
  - (C) or don't you get involved in group undertakings?
- 55 When you go somewhere for the day, would you rather
  - (A) plan what you will do and when, or
  - (B) just go?
- 56 Are the things you worry about
  - (A) often really not worth it, or
  - (B) always more or less serious?
- 57 In deciding something important, do you
   (A) find you can trust your feeling about what is best to do, or
  - (B) think you should do the *logical* thing, no matter how you teel about it<sup>2</sup>

- 58 Do you tend to have (A) deep triendships with a very tew people or
  - (B) broad friendships with many different people?
- 59 Do you think your friends
  - (A) feel you are open to suggestions, or (B) know better than to try to talk you out of anything you've decided to do?
- 60 Does the idea of making a list of what you should get done over a week-end
  - (A) appeal to you, or
  - (B) leave you cold, or
  - (C) positively depress you?
- 61 In traveling, would you rather go
  - with a companion who had made the (4) trip before and "knew the ropes", or (B) alone or with someone greener at it
- than yourself? 62 Would you rather have (A) an opportunity that may lead to
  - bigger things, or an experience that you are sure (B) to enjoy?
- 63 Among your personal beliefs, are there
  - (A) some things that cannot be proved, or
  - (B) only things than can be proved?
- 64 Would you rather
  - (A) support the established methods of doing good, or
  - (B) analyze what is still wrong and attack unsolved problems?
- 65 Has it been your experience that you
  - (A) often fall in love with a notion or project that turns out to be a disappointment-so that you "go up like a rocket and come down like the stick", or do you
  - (B) use enough judgment on your enthuslasms so that they do not let you down?

- ob Do you think you get 1 <sup>(</sup> (A) more enthusiastic about things than the average person or
  - (B) less enthusiastic about things than the average person?
- 67 If you divided all the people you know into
- those you like, those you dislike, and those toward whom you feel indifferent, would there be more of (A) those you like, or
  - (B) those you dislike?
- On this next question only, if two answers
- are true, mark both ] 4
- 68 In your daily work, do you (A) rather enjoy an emergency that makes you work against time, or (B) hate to work under pressure, or
  - (C) usually plan your work so you won t need to work under pressure?
- Are you more likely to speak up in
- (A) praise, or blame? (B)
- 70 Is it higher praise to say someone has (A) vision, or
- 71 When playing cards, do vou enjoy most
  - (A) the sociability,
  - (B) the excitement of winning,
  - the problem of getting the most out (C) of each hand,
  - (D) the risk of plaving for stakes,
  - (E) or don't you enjoy playing cards?

### Go on to the next page

(B) common sense?

| 72 | (4)         | fırm-mınded | warm-hearted   | (B) | 98  | (A) | sensible   | fascinating | (B)          |
|----|-------------|-------------|----------------|-----|-----|-----|------------|-------------|--------------|
| 73 | (A)         | imaginative | matter-of-fact | (B) | 99  | (4) | changing   | permanent   | (B)          |
| 74 | (A)         | systematic  | spontaneous    | (B) | 100 | (A) | determined | devoted     | (B)          |
| 75 | (A)         | congenial   | effective      | (B) | 101 | (A) | system     | zest        | (B)          |
| 76 | (4)         | theory      | certainty      | (B) | 102 | (A) | facts      | ıdeas       | (B)          |
| 77 | (A)         | parts       | theater        | (B) | 103 | (A) | compassion | foresight   | (B)          |
| 78 | (A)         | build       | invent         | (B) | 104 | (4) | concrete   | abstract    | (B)          |
| 79 | (4)         | analvze     | sympathize     | (B) | 105 | (A) | justice    | mercv       | (B)          |
| 80 | (4)         | popular     | intimate       | (B) | 106 | (4) | calm       | hvelv       | (B)          |
| 81 | (A)         | benefits    | blessings      | (B) | 107 | (A) | make       | create      | (B)          |
| 82 | (4)         | casual      | correct        | (B) | 108 | (A) | wary       | trustful    | (B)          |
| 83 | (A)         | active      | intellectual   | (B) | 109 | (4) | orderly    | easy-going  | (B)          |
| 84 | (4)         | uncritical  | critical       | (B) | 110 | (4) | approve    | question    | (B)          |
| 85 | (A)         | scheduled   | unplanned      | (B) | 111 | (1) | gentle     | tirm        | (B)          |
| 86 | (1)         | convincing  | touching       | (B) | 112 | (1) | foundation | spire       | (B)          |
| 87 | (A)         | reserved    | talkative      | (B) | 113 | (A) | quick      | carctul     | (B)          |
| 88 | (A)         | statement   | concept        | (B) | 114 | (3) | thinking   | feeling     | (B)          |
| 89 | <b>( \)</b> | soft        | hard           | (B) | 115 | (4) | theory     | experience  | ( <b>B</b> ) |
| 90 | (A)         | production  | design         | (B) | 116 | (A) | sociable   | detached    | (B)          |
| 91 | (4)         | forgive     | tolerate       | (B) | 117 | (A) | sıgn       | symbol      | (B)          |
| 92 | (A)         | hearty      | quiet          | (B) | 118 | (A) | systematic | casual      | (B)          |
| 93 | (4)         | who         | what           | (B) | 119 | (4) | literal    | figurative  | (B)          |
| 94 | (4)         | impulse     | decision       | (B) | 120 | (A) | peacemaker | judge       | (B)          |
| 95 | (A)         | speak       | write          | (B) | 121 | (A) | accept     | change      | (B)          |
| 96 | (1)         | affection   | tenderness     | (B) | 122 | (1) | 161ce      | discuss     | (B)          |
| 97 | (4)         | punctual    | leisurely      | (B) | 123 | (1) | executive  | scholar     | (B)          |

Which word in each pair appeals to you more? Think what the words mean, not how they look or how they sound

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#### Which answer comes closest to telling how you usually teel or act?

- 124 Do you find the more routine parts of your day
  - (A) restful or
  - (B) boring?
- 125 If you think you are not getting a square deal in a club or team to which you belong, is it better to
  - (A) share better to
  - (A) shut up and take it, or(B) use the threat of resigning if
  - necessary to get your rights?
- 126 Can you
  - (A) talk easily to almost anyone for as long as you have to, or(B) find a lot to say only to certain
  - people or under certain conditions?
- 127 When strangers notice vou, does it (A) make you uncomfortable, or
- (B) not bother you at all?
- 128 If you were a teacher, would you rather teach
  - (A) fact courses, or
  - (B) courses involving theory'
- 129 When something starts to be the fashion, are you usually
  - (A) one of the first to try it, or
  - (B) not much interested?
- 130 In solving a difficult personal problem, do vou
  - (A) tend to do more worrying than is
  - useful in reaching a decision, or
     (B) feel no more anxiety than the situation requires<sup>2</sup>
- 131 If people seem to slight you, do you-(A) tell yourself they didn't mean any
  - thing by it, or (B) distrust their good will and stay on guard with them thereafter?
- 132 When you have a special job to do, do you like to
  - (A) organize it carefully before you start, or
  - (B) find out what is necessary as you go along<sup>2</sup>
- 133 Do you feel it is a worse fault
  - (A) to show too much warmth, or
  - (B) not to have warmth enough?

## 134. When you are at a party, do you like to

- (A) help get things going, or
- (B) let the others have fun in their own way?

- 135 When a new opportunity comes up, do vou
  - (A) decide about it fairly quickly, or(B) sometimes miss out through taking
    - too long to make up your mind?
- 136 In managing your life, do you, tend to (A) undertake too much and get into a tight spot, or
  - (B) hold yourself down to what you can comfortably handle?
- 137 When you find vourself definitely in the wrong, would you rather
  - (A) admit you are wrong, or
  - (B) not admit it, though everyone knows it.
  - (C) or don't you ever find vourself in the wrong?
- 138 Can the new people vou meet tell what vou are interested in
  - (A) right away, or
  - (B) only after they really get to know you<sup>3</sup>
- 139 In your home life, when you come to the end of some undertaking, are you
  - (A) clear as to what comes next and ready to tackle it, or
  - (B) glad to relax until the next inspiration hits you?
- 140 Do you think it more important to (A) be able to see the possibilities in a situation, or
  - (B) be able to adjust to the facts as they are?
- 141 Do you feel that the people whom you know personally owe their successes more to
  - (A) ability and hard work, or
  - (B) luck, or
  - (C) bluff, pull and shoving themselves ahead of others?
- 142. In getting a job done, do you depend upon
  - (A) starting early, so as to finish with time to spare, or
  - (B) the extra speed you develop at the last minute?
- 143 After associating with superstitious people, have you
  - (A) found yourself slightly affected by their superstitions, or
  - (B) remained entirely unaffected? Go on to the next page

- 144 When you don't agree with what has just been said, do you usually (A) let it go, or
  - (B) put up an argument?
- 145. Would you rather be considered (A) a practical person, or (B) an ingenious person?
- 146 Out of all the good resolutions you may have made, are there (A) some you have kept to this day, or
  - (B) none that have really lasted?
- 147 Would you rather work under someone who is
  - (A) always kind, or
  - (B) always fair?
- 148 In a large group, do you more often
  - (A) introduce others, or
  - (B) get introduced?
- 149 Would you rather have as a friend someone who
  - (A) is always coming up with new ideas, or (B) has both feet on the ground?
- 150 When you have to do business with strangers, do you feel
  - (A) confident and at ease, or
  - (B) a little fussed or afraid that they won't want to bother with you?
- 151 When it is settled well in advance that you will do a certain thing at a certain time, do you find it
  - (A) nice to be able to plan accordingly, or
  - (B) a little unpleasant to be tied down?
- 152 Do you feel that sarcasm
  - (A) should never be used where it can hurt people's feelings, or
  - is too effective a form of speech to be (B) discarded for such a reason?
- 153 When you think of some little thing you should do or buy, do you
  - (A) often forget it till much later, or usually get it down on paper to (B)
  - remind yourself, or always carry through on it (C)
- without reminders? 154 Do you more often let
  - (A) your heart rule your head, or (B) your head rule your heart?
- 155 In listening to a new idea, are you more anxious to
  - (A) find out all about it, or
  - (B) judge whether it is right or wrong?

- 156 Are you oppressed by (A) many different worries, or (B) comparatively few?
- 157 When you don't approve of the way a friend is acting, do you (A) wait and see what happens, or (B) do or say something about it?
- 158 Do you feel it is a worse fault to be (A) unsympathetic, or (B) unreasonable?
- 159. When a new situation comes up which conflicts with your plans, do you try first to (A) change your plans to fit the
  - situation, or (B) change the situation to fit your plans?
- 160 Do you think the people close to you know how you feel
  - (A) about most things, or
  - (B) only when you have had some special reason to tell them?
- 161 When you have a serious choice to make, do you
  - (A) almost always come to a clear-cut decision, or
  - sometimes find it so hard to decide (B) that you do not wholeheartedly follow up either choice?
- 162 On most matters, do you
  - (A) have a pretty definite opinion, or
  - (B) like to keep an open mind?
- 163 As you get to know people better, do you more often find that they
  - (A) let you down or disappoint you in some way, or
  - (B) improve upon acquaintance?
- 164 When the truth would not be polite are you more likely to tell
  - (A) a polite lie, or
  - (B) the impolite truth?
- 165 In your way of living, do you prefer to be
  - (A) original, or
  - (B) conventional?
- 166. Would you have liked to argue the meaning of
  - (A) a lot of these questions, or

- - (B) only a few?

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| ID | 0 |
|----|---|
|    |   |

| 1. | What is yo | ur date of birth?                                         |
|----|------------|-----------------------------------------------------------|
|    | Day        | Month Year                                                |
| 2. | Where have | you resided most of your life? (Check appropriate space). |
|    | 1,         | Farm                                                      |
|    | 2.         | Non-farm rural residence/village                          |
|    | 3.         | Small town (Population under 2,500)                       |
|    | 4.         | Large town (Population 2,500-25,000)                      |
|    | 5.         | Small city (Population 25,000-100,000)                    |

- 6. Large city (Population over 100,000)
- 3. Please identify all persons who lived in the above household.

Write in the title of each person (e.g. Mother, father . . . see list below\*) Person Age Sex (Write In) (Circle) \_\_\_\_\_ 1. self MF 2. MF MF 3. \_\_\_\_\_ 4. \_\_\_\_\_ M F MF 5. \_\_\_\_\_ 6. MF 7. \_\_\_\_\_ MF MF 8. \_\_\_\_\_ MF 9.\_\_\_\_\_ MF 10. \_\_\_\_\_

Household Members

\*Self = you; Others include Mother, Father, Sister, Brother, Aunt, Uncle, etc. Please indicate their relationship to you.

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4. What is the highest grade or level of education your parents

completed and the highest that you expect to complete?

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| Mother | Father                                 | Self     | N Contraction of the second |
|--------|----------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------|
|        | ·· · · · · · · · · · · · · · · · · · · |          | 1. Graduate or professional education                                                                           |
|        |                                        | i        | 2. Graduate of four year college                                                                                |
|        | ·                                      | `` :     | 3. Some college                                                                                                 |
|        |                                        |          | 4. Intermediate or pre-university                                                                               |
|        |                                        |          | 5. High school                                                                                                  |
|        |                                        | (        | 6. Grade school                                                                                                 |
|        |                                        | · ' ':   | 7. No education                                                                                                 |
| ·      |                                        | <u> </u> | 8. Don't know                                                                                                   |

5. What is the current occupation of your parents?

| Mother | Father  |     | 1                                                                    |
|--------|---------|-----|----------------------------------------------------------------------|
|        |         | 1.  | Professional Other Than Teacher (Doctor,<br>Lawyer, Nurse, Manager)  |
|        |         | 2.  | Teacher                                                              |
|        | -)      | 3.  | Skilled/Construction Trades (Carpenter,<br>Electrician, Brick Layer) |
|        |         | 4.  | Clerical, Technical (Secretary, Clerk,<br>Computer Operator)         |
|        |         | 5.  | Laborer/Factory Worker (Field worker,<br>Waitress)                   |
|        | ,<br>   | 6.  | General Service Employees (Maintenance,<br>Operator)                 |
|        |         | 7.  | Student                                                              |
|        |         | 8.  | Works In The Home                                                    |
|        |         | 9.  | Retired                                                              |
|        | <u></u> | 10. | Unemployed                                                           |
|        |         |     | Other (-land specify)                                                |
|        |         | 11. | other (piease spectry)                                               |

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| 10461 |
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\_\_\_\_\_ 1. 0 years

2. 5 years or less

\_\_\_\_ 3. Between 5 and 10 years

4. Between 10 and 15 years

\_\_\_\_\_ 5. Over 15 years

7. In making the selection of your career in early childhood education, how much emotional support have your parents provided? (Circle Number)

Very Supportive Some Support No Support .

- 3 5 4 2 1
- Presently, how satisfied are you with your decision to be an early childhood teacher? (Circle Number)

Extremely Satisfied Satisfied Not at all Satisfied 1

5 4 3 2

9. How religious would you say that you are?

|     |                                       |            | 1                     |
|-----|---------------------------------------|------------|-----------------------|
|     | 1. Very Religious                     | 2.         | Somewhat Religious    |
|     | 3. Not Religious                      | 4.         | Opposed to Religion   |
| 10. | How religious would you say that your | mother is? | ,<br>,                |
|     | l. Very Religious                     | 2.         | Somewhat Religious    |
|     | 3. Not Religious                      | 4.         | Opposed to Religion • |
| 11. | How religious would you say that your | father is? |                       |
|     | 1. Very Religious                     | 2.         | Somewhat Religious    |
|     | 3. Not Religious                      | 4.         | Opposed to Religion   |

3,

# FACES III

| NSTRUCTIO | DNS: The following statements describe common family situations. Using the 5 responses listed above, please place the NUMBER (1-5) that you believe best describes your family of origin. |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.        | Family members ask each other for help.                                                                                                                                                   |
| 2.        | In solving problems, the childrens'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.                                                                                                     |
|           | 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 reponsibilities 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.                                                                                                                                       |

Developed at the University of Minnesota by David H. Olson, Joyce Portner & Yoay Lavee

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APPENDIX D

VARIABLE CODES

RAW DATA

DESCRIPTIVE DATA

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## VARIABLE CODES

VARIABLE NAME

<u>CODE</u>

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| OBSTOTAL | Early Childhood Teacher Observation<br>Checklist Total Score                                                   |
|----------|----------------------------------------------------------------------------------------------------------------|
| OBSCOG   | Early Childhood Teacher Observation<br>Checklist Score for enhancing cognitive<br>development                  |
| OBSEMOT  | Early Childhood Teacher Observation<br>Checklist Score for enhancing emotional<br>health and self-concept      |
| OBSSOC   | Early Childhood Teacher Observation<br>Checklist Score for enhancing social<br>competence                      |
| OBSPHYS  | Early Childhood Teacher Observation<br>Checklist Score for enhancing physical<br>competence, health and safety |
| OBSMGMT  | Early Childhood Teacher Observation<br>Checklist Score for management and<br>communication skills              |
| MBTI2    | Myers-Briggs Type Indicator Score for<br>Sensing vs. Intuition                                                 |
| MBTI4    | Myers-Briggs Type Indicator Score for<br>Judging vs. Perception                                                |
| FACESIII | Family Adaptability and Cohesion<br>Evaluation Scale III                                                       |
| WORK     | Mothers working outside the home                                                                               |
| SUPPORT  | Perceived parental support                                                                                     |
| SATISFY  | Satisfaction with career choice                                                                                |
| MTEACH   | Mother is a teacher                                                                                            |
| FTEACH   | Father is a teacher                                                                                            |
|          |                                                                                                                |

|      |      | CODENUM  | MBTI2   | MBTI4   | OBSCOG   | OBSEMOT             |
|------|------|----------|---------|---------|----------|---------------------|
|      |      | OBSSOC   | OBSPHYS | OBSMGMT | OBSTOTAL | FACESIII            |
|      |      | WORK     | SUPPORT | SATISFY | MTEACH   | FTEACH              |
|      |      | COHESION | ADAPT   |         |          |                     |
| CASE | 1    | 3.000    | 97.000  | 75.000  | ) 45.45  | 50 58.330           |
| CASE | 1    | 33.330   | 45.450  | 52.840  | ) 235.40 | 2.000               |
| CASE | 1    | 4.000    | 3.000   | 5.000   | 0.00     | 0.000               |
| CASE | 1    | 34.000   | 30.000  | ,,<br>  |          |                     |
| CASE | 2    | 4.000    | 109.000 | 93.000  | ) 18.18  | 50.000              |
| CASE | 2    | 25.000   | 58.330  | 100.000 | 251.51   | .0 3.000            |
| CASE | 2    | 1.000    | 4.000   | , 5.000 | 0.00     | 1.000               |
| CASE | 2    | 33.000   | 28.000  | 03.000  |          |                     |
| CASE | 2    | 22,000   | 79.000  | 97.000  |          | 0 83.330            |
| CASE | 3    | 1 000    | 5.560   | 1.430   | 299.21   |                     |
| CASE | 2    | 40.000   | 23 000  | 4.000   | 0.00     | 0.000               |
| CASE | 4    | 3 7.000  | 73 000  | 73.000  | 91.67    | 91.670              |
| CASE | 4    | 50,000   | 90.000  | 85.710  | 409.05   | 0 2.000             |
| CASE | 4    | 5,000    | 5.000   | 4.000   | 0.00     | 0,000               |
| CASE | 4    | 34.000   | 31.000  |         |          |                     |
| CASE | 5    | 8.000    | 97.000  | 75.000  | 91.67    | 0 83.330            |
| CASE | 5    | 66.670   | 70.000  | 83.330  | 395.00   | 3.000               |
| CASE | 5    | 4.000    | 4.000   | 5.000   | 0.00     | 0.000               |
| CASE | 5    | 33.000   | 23.000  |         |          |                     |
| CASE | 6    | 9.000    | 89.000  | 61.000  | 83.33    | 83.330              |
| CASE | 6    | 87.500   | 83.330  | 80.000  | ) 417.49 | 3.000               |
| CASE | 6    | 2.000    | 4.000   | 5.000   | 0.00     | 0.000               |
| CASE | 6    | 41.000   | 22.000  |         |          |                     |
| CASE | 7    | 10.000   | 81.000  | 121.000 | ) 100.00 | 75.000              |
| CASE | 7    | 62.500   | 90.000  | 87.500  | 415.00   | 2.000               |
| CASE | 7    | 3.000    | 5.000   | 5.000   | 0.00     | 0.000               |
| CASE | 7    | 47.000   | 29.000  |         |          |                     |
| CASE | 8    | 11.000   | 93.000  | 97.000  | 91.67    | <sup>0</sup> 91.670 |
| CASE | 8    | 80.000   | 40.000  | /5.000  | 3/8.34   | 2.000               |
| CASE | 8    | 27.000   | 4.000   | 5.000   | 0.00     | 0.000               |
| CASE |      | 12 000   | 79 000  | 111 000 | . 50.22  | 0 82 220            |
| CASE | 9    | £2.000   | 80 000  | 100 000 | ) 384 16 | 0 03.330<br>0 2.000 |
| CASE | 9    | 1.000    | 5.000   | 5.000   | 0.00     | 0 0.000             |
| CASE | á    | 40.000   | 31:000  | 5.000   |          | 0.000               |
| CASE | 10   | 13.000   | 79.000  | 99,000  | 75.00    | 90.000              |
| CASE | 10   | 57.140   | 85,710  | 100.000 | 407.85   | 3.000               |
| CASE | 10   | 2.000    | 5.000   | 4.000   | 0.00     | 0.000               |
| CASE | 10   | 38.000   | 25.000  |         |          |                     |
| CASE | 11   | 15.000   | 101.000 | 77.000  | 63.64    | 0 83.330            |
| CASE | 11 - | 70.000   | 57.140  | 77.780  | ) 351.89 | 1.000               |
| CASE | 11   | 2.000    | 5.000   | 5.000   | 0.00     | 0.000               |
| CASE | 11   | 46.000   | 35.000  |         |          | χ.                  |
| CASE | 12   | 17.000   | 37.000  | 45.000  | 100.00   | 91.600              |
| CASE | 12   | 100.000  | 85.700  | 100.000 | 477.30   | 1.000               |
| CASE | 12   | 5.000    | 5.000   | : 5.000 | 0.00     | 0.000               |
| CASE | 12   | 17.000   | 14.000  |         |          | ·                   |
| CASE | 13   | 18.000   | 73.000  | 59.000  | 91.67    | 100.000             |
| CASE | 13   | 88.890   | 83.330  | 100.000 | 463.89   | 3.000               |
| CASE | 13   | 2.000    | 5.000   | 5.000   | 0.00     | 1.000               |

| CASE | 13  | 40.000          | 26.000              |         | ~ (     | r       |
|------|-----|-----------------|---------------------|---------|---------|---------|
| CASE | 14  | 19.000          | 147.000             | 155.000 | 75.000  | 100 000 |
| CASE | 14  | 50.000          | 45 450              | 94 440  | 364 890 | 2 000   |
| CASE | 14  | 5 000           | 5 000               | 5 000   | 0 000   | 2.000   |
| CASE | 1 / | 35,000          | 12 000              | 5.000   | 0.000   | 0.000   |
| CASE | 15  | 30.000          | 140,000             |         | 75 000  | 01 (00  |
| CASE | 15  | 20.000          | 149.000             | 89.000  | /5.000  | 91.670  |
| CASE | 15  | 62.500          | 100.000             | 93.750  | 422.920 | 1.000   |
| CASE | 15  | 3.000           | 5.000               | ,4.000  | 0.000   | 0.000   |
| CASE | 15  | 45.000          | 31.000              |         |         |         |
| CASE | 16  | 21.000          | 89.000              | 83.000  | 75.000  | 91.670  |
| CASE | 16  | 57.140          | 54.550              | 92.860  | 371.220 | 1.000   |
| CASE | 16  | 3.000           | 5.000               | 5.000   | 0.000   | 0.000   |
| CASE | 16  | 31.000          | 17.000              | 3       |         |         |
| CASE | 17  | 24.000          | 95.000              | 119.000 | 83.330  | 83.330  |
| CASE | 17  | 90.000          | 88.890              | 100.000 | 445.550 | 3.000   |
| CASE | 17  | .3.000          | 4.000               | 5.000   | 0.000   | 0.000   |
| CASE | 17  | 37,000          | 25,000              |         |         |         |
| CASE | 18  | 25.000          | 131.000             | 105.000 | 81.820  | 83.330  |
| CASE | 18  | 50 000          | 40 000              | 64 710  | 310 860 | 2 000   |
| CASE | 18  | 3 000           | 3,000               | 5 000   | 0.000   | 2.000   |
| CASE | 10  | 29,000          | 26 000              | 5.000   | 0.000   | 0.000   |
| CASE | 10  | 29.000          | 28.000              |         | E0 220  | 50 000  |
| CASE | 19  | 32.000          | 93.000              | 83.000  | 58.330  | 58.330  |
| CASE | 19  | 25.000          | 23.080              | 52.940  | 217.680 | 2.000   |
| CASE | 19  | 4.000           | 5:000               | 5.000   | 0.000   | 1.000   |
| CASE | 19  | 41.000          | 33.000              |         |         |         |
| CASE | 20  | 33.000          | 59.000              | 55.000  | 58.330  | 66.670  |
| CASE | 20  | 30.000          | 37,500              | 75.000  | 267.500 | 3.000   |
| CASE | 20  | 1.000           | 1.000               | 3.000   | 0.000   | 0.000   |
| CASE | 20  | 40.000          | 26.000              |         |         |         |
| CASE | 21  | 34.000          | 105.000             | 129.000 | 83.330  | 83.330  |
| CASE | 21  | 50.000          | 80.000              | 94.440  | 391.100 | 3.000   |
| CASE | 21  | 5.000           | 4.000               | 5.000   | 0.000   | 0.000   |
| CASE | 21  | 40.000          | 24.000              |         |         |         |
| CASE | 22  | 36,000          | 97.000              | 81.000  | 83.330  | 81.810  |
| CASE | 22  | 57.140          | <sup>2</sup> 90,000 | 87.500  | 399.780 | 3,000   |
| CASE | 22  | 3.000           | 5:000               | 5.000   | 0.000   | 0.000   |
| CASE | 22  | 42.000          | 26.000              |         |         |         |
| CASE | 23  | 37.000          | 55 000              | 55,000  | 66.670  | 63 640  |
| CASE | 22  | 50,000          | 80 000              | 85 710  | 346 020 | 3 000   |
| CASE | 23  | 3 000           | 2 000               | 3 000   | 0 000   | 0.000   |
| CASE | 23  | 3.000           | 3.000               | 3.000   | 0.000   | 0.000   |
| CASE | 23  | 34.000          | 23.000              | 07 000  | 50 000  | 50 220  |
| CASE | 24  | 39.000          | 93.000              | 67.000  |         | 58.330  |
| CASE | 24  | 30.000          | 5/.140              | 61.110  | 256.580 | 1.000   |
| CASE | 24  | 2.000           | 4.000               | 4.000   | 0.000   | 0.000   |
| CASE | 24  | 47.000          | 31.000              |         |         |         |
| CASE | 25  | 40.000          | 87.000              | 71.000  | 83.330  | 100.000 |
| CASE | 25  | 71.430          | 50.000              | 85.700  | 390.460 | 1.000   |
| CASE | 25  | 3.000           | 5.000               | 5.000   | 0.000   | 0.000   |
| CASE | 25  | 48.000          | 38.000              |         |         |         |
| CASE | 26  | 41.000          | 121.000             | 147.000 | 83.330  | 100.000 |
| CASE | 26  | 100.000         | 75.000              | 100.000 | 458.330 | 3.000   |
| CASE | 26  | 2.000           | 4.000               | 4.000   | 0.000   | 0.000   |
| CASE | 26  | 42.000          | 30.000              |         |         |         |
| CASE | 27  | 44.000          | 77.000              | 57.000  | 72.730  | 75.000  |
| CASE | 27  | * 33.330        | 66.670              | 94.120  | 341.850 | 2.000   |
| CASE | 27  | 2.000           | 5.000               | 5.000   | 0.000   | 0.000   |
| CASE | 27  | 45 000          | 21 000              | 5.000   | 0.000   | 0.000   |
| CASE | 20  | 45.000          | 97 000              | 93 000  | 66 670  | 75 000  |
| CASE | 20  | 45.000          | 37 500              | 80 000  | 312 500 | 12 000  |
| CASE | 20  | 44+44U<br>E 000 | 57.500              | 4 000   | 1 000   | 1 000   |
| CADE | 20  | 5.000           | 5.000               | 4.000   | 1.000   | 1.000   |

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| CASE | 28 | 45.000  | 42.000  |         |         |         |
|------|----|---------|---------|---------|---------|---------|
| CASE | 29 | 46.000  | 59.000  | 47.000  | 83.330  | 81,200  |
| CASE | 29 | 33.330  | 58.430  | 100.000 | 356.290 | 2.000   |
| CASE | 29 | 4.000   | 5.000   | 3.000   | 0.000   | 0.000   |
| CASE | 29 | 47.000  | 25.000  |         |         |         |
| CASE | 30 | 48.000  | 57.000  | 85.000  | 45.550  | 75.000  |
| CASE | 30 | 20.000  | 50.000  | 66.670  | 257.220 | 3.000   |
| CASE | 30 | 4.000   | 5.000   | 2.000   | 0.000   | 0.000   |
| CASE | 30 | 37.000  | 28.000  |         |         |         |
| CASE | 31 | 49.000  | 121.000 | 78.000  | 66.670  | 91.670  |
| CASE | 31 | 50.000  | 90.000  | 93.750  | 392.090 | 2.000   |
| CASE | 31 | 3.000   | 5.000   | 4.000   | 1.000   | 0.000   |
| CASE | 31 | 47.000  | 27.000  |         |         |         |
| CASE | 32 | 50.000  | 78.000  | 81.000  | 100.000 | 91.670  |
| CASE | 32 | 100.000 | 90.000  | 100.000 | 481.670 | 1.000   |
| CASE | 32 | 3.000   | 5.000   | 4.000   | 0.000   | 0.000   |
| CASE | 32 | 47.000  | 39.000  |         |         |         |
| CASE | 33 | 51.000  | 85.000  | 116.000 | 91.600  | 83.330  |
| CASE | 33 | 88.890  | 83.330  | 94.000  | 441.150 | 1.000   |
| CASE | 33 | 1.000   | 4.000   | 5.000   | 0.000   | 0.000   |
| CASE | 33 | 48.000  | 40.000  |         |         |         |
| CASE | 34 | 52.000  | 114.000 | 122.000 | 91.670  | 100.000 |
| CASE | 34 | 71.430  | 90.900  | 100.000 | 454.000 | 2.000   |
| CASE | 34 | 5.000   | 5.000   | 4.000   | 0.000   | 0.000   |
| CASE | 34 | 45.000  | 26.000  |         |         |         |
| CASE | 35 | 53.000  | 100.000 | 115.000 | 75.000  | 90.000  |
| CASE | 35 | 50.000  | 50.000  | 78.570  | 343.570 | 1.000   |
| CASE | 35 | 3.000   | 4.000   | 5.000   | 0.000   | 0.000   |
| CASE | 35 | 48.000  | 40.000  |         |         |         |
| CASE | 36 | 59.000  | 100.000 | 80.000  | 91.670  | 100.000 |
| CASE | 36 | 80.000  | 85.710  | 100.000 | 457.380 | 3.000   |
| CASE | 36 | 3.000   | 4.000   | 4.000   | 0.000   | 0.000   |
| CASE | 36 | 34.000  | 21.000  |         |         |         |
| CASE | 37 | 64.000  | 92.000  | 79.000  | 100.000 | 83.330  |
| CASE | 37 | 75.000  | 81.810  | 94.440  | 434.580 | 3.000   |
| CASE | 37 | 3.000   | 3.000   | 5.000   | 0.000   | 0.000   |
| CASE | 37 | 32.000  | 23.000  |         |         |         |
| CASE | 38 | 76.000  | 103.000 | 100.000 | 100.000 | 91.670  |
| CASE | 38 | 100.000 | 100.000 | 100.000 | 491.670 | 2.000   |
| CASE | 38 | 3.000   | 5.000   | 5.000   | 0.000   | 0.000   |
| CASE | 38 | 31.000  | 21.000  |         |         |         |
| CASE | 39 | 78.000  | 90.000  | 94.000  | 66.670  | 75.000  |
| CASE | 39 | 40.000  | 66.670  | 93.750  | 342.090 | 3.000   |
| CASE | 39 | 2.000   | 5.000   | 5.000   | 0.000   | 0.000   |

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## TOTAL OBSERVATIONS: 39

|                                                          | CODENUM                                     | MBTI2                                       | MBTI4                                       | OBSCOG                                        | OBSEMOT                                     |
|----------------------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|-----------------------------------------------|---------------------------------------------|
| N OF CASES<br>MINIMUM<br>MAXIMUM<br>MEAN<br>STANDARD DEV | 39<br>3.000<br>78.000<br>32.000<br>20.295   | 39<br>37.000<br>149.000<br>91.821<br>23.240 | 39<br>45.000<br>155.000<br>89.462<br>25.769 | 39<br>18.180<br>100.000<br>76.555<br>18.075   | 39<br>50.000<br>100.000<br>83.074<br>12.890 |
|                                                          | OBSSOC                                      | OBSPHYS                                     | OBSMGMT                                     | OBSTOTAL                                      | FACESIII                                    |
| N OF CASES<br>MINIMUM<br>MAXIMUM<br>MEAN<br>STANDARD DEV | 39<br>20.000<br>100.000<br>59.369<br>24.027 | 39<br>23.080<br>100.000<br>69.158<br>20.451 | 39<br>52.840<br>100.000<br>87.332<br>13.694 | 39<br>217.680<br>491.670<br>375.488<br>73.036 | 39<br>1.000<br>3.000<br>2.154<br>0.812      |
|                                                          | WORK                                        | SUPPORT                                     | SATISFY                                     | MTEACH                                        | FTEACH                                      |
| N OF CASES<br>MINIMUM<br>MAXIMUM<br>MEAN<br>STANDARD DEV | 39<br>1.000<br>5.000<br>2.974<br>1.224      | 39<br>1.000<br>5.000<br>4.410<br>0.880      | 39<br>2.000<br>5.000<br>4.487<br>0.756      | 39<br>0.000<br>1.000<br>0.051<br>0.223        | 39<br>0.000<br>1.000<br>0.103<br>0.307      |
|                                                          | COHESION                                    | ADAPT                                       |                                             | ~                                             |                                             |
| N OF CASES<br>MINIMUM<br>MAXIMUM<br>MEAN<br>STANDARD DEV | 39<br>17.000<br>48.000<br>39.410<br>6.773   | 39<br>12.000<br>42.000<br>27.026<br>7.132   |                                             |                                               |                                             |

## APPENDIX E

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# REGRESSION ANALYSES

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| DEP VAR:OBS       | STOTAL<br>QUARED | N:<br>MULTIPLE   | 39<br>R: .( | MULTI           | PLE R:<br>STANDARI | .050<br>D ERRO | SQUARI<br>OR OF ES | ED MULTIPL<br>FIMATE: | E R:   | .003<br>73.923 |
|-------------------|------------------|------------------|-------------|-----------------|--------------------|----------------|--------------------|-----------------------|--------|----------------|
| VARIABLE          | COE              | FFICIENT         | STI         | ERROR           | STD                | COEF           | TOLERAN            | CE T                  | P(2    | TAIL)          |
| CONSTANT<br>MBTI2 | ſ                | 361.021<br>0.158 |             | 48.836<br>0.516 | (                  | 0.000<br>0.050 | 1.000000           | 00 7.39<br>00 0.30    | 3<br>5 | 0.000<br>0.762 |

#### ANALYSIS OF VARIANCE

| SOURCE                 | SUM-OF-SQUARES        | +   | DF      | MEAN-SQUARE         | F-RATIO | P     |  |
|------------------------|-----------------------|-----|---------|---------------------|---------|-------|--|
| REGRESSION<br>RESIDUAL | 509.469<br>202192.544 | × , | 1<br>37 | 509.469<br>5464.663 | 0.093   | 0.762 |  |
|                        |                       |     |         |                     |         |       |  |

DEP VAR:OBSTOTAL N: 39 MULTIPLE R: .134 SQUARED MULTIPLE R: .018 ADJUSTED SQUARED MULTIPLE R: .000 STANDARD ERROR OF ESTIMATE: 73.350

| VARIABLE | COEFFICIENT | STD ERROR | STD COEF TOLERANCE | T P(2 | TAIL) |
|----------|-------------|-----------|--------------------|-------|-------|
| CONSTANT | 341.552     | 42.947    | 0.000 1.0000000    | 7.953 | 0.000 |
| MBTI4    | 0.379       | 0.462     | 0.134 1.0000000    | 0.822 | 0.417 |

### ANALYSIS OF VARIANCE

| REGRESSION 3631<br>RESIDUAL 199070 | .147 1<br>.866 37 | 363<br>538 | 31.147 0<br>30.294 | 0.675 | 0.417 |
|------------------------------------|-------------------|------------|--------------------|-------|-------|

DEP VAR: OBSSOC N: 39 MULTIPLE R: .337 SQUARED MULTIPLE R: .114 ADJUSTED SQUARED MULTIPLE R: .090 STANDARD ERROR OF ESTIMATE: 22.922

| VARIABLE | COEFFICIENT | STD ERROR | STD COEF TOLERANCE | T P(  | 2 TAIL) |
|----------|-------------|-----------|--------------------|-------|---------|
| CONSTANT | 11.288      | 22.361    | 0.000 1.0000000    | 0.505 | 0.617   |
| SATISFY  | 10.715      | 4.916     | 0.337 1.0000000    | 2.180 | 0.036   |

### ANALYSIS OF VARIANCE

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| SOURCE                 | SUM-OF-SQUARES        | DF      | MEAN-SQUARE         | F-RATIO | P     |
|------------------------|-----------------------|---------|---------------------|---------|-------|
| REGRESSION<br>RESIDUAL | 2496.447<br>19440.902 | 1<br>37 | 2496.447<br>525.430 | 4.751   | 0.036 |

| DEP VAR:OBSTOTAL N: 39 MULTIPLE R: .030 SQUARED MULTIPLE R: .001<br>ADJUSTED SQUARED MULTIPLE R: .000 STANDARD ERROR OF ESTIMATE: 73.983 |                                                                                                                                    |                                                                                                                                    |                                                                                                                                                                           |                                                                                                                  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|--|--|--|
| VARIABLE                                                                                                                                 | COEFFICIENT                                                                                                                        | STD ERROR                                                                                                                          | STD COEF TOLERA                                                                                                                                                           | NCE T P(2 TAIL)                                                                                                  |  |  |  |
| CONSTANT<br>FACESIII                                                                                                                     | 381.302<br>-2.699                                                                                                                  | 33.954<br>14.774                                                                                                                   | 0.000 1.0000<br>-0.030 1.0000                                                                                                                                             | 000 11.230 0.000<br>000 -0.183 0.856                                                                             |  |  |  |
|                                                                                                                                          |                                                                                                                                    | ANALYSIS OF                                                                                                                        | VARIANCE                                                                                                                                                                  |                                                                                                                  |  |  |  |
| SOURCE                                                                                                                                   | SUM-OF-SQUARES                                                                                                                     | DF MEAN-SO                                                                                                                         | QUARE F-RATIO                                                                                                                                                             | P                                                                                                                |  |  |  |
| REGRESSION<br>RESIDUAL                                                                                                                   | 182.711<br>202519.302                                                                                                              | 1 182<br>37 5473                                                                                                                   | 2.711 0.033<br>3.495                                                                                                                                                      | 0.856                                                                                                            |  |  |  |
| DEP VAR:OBST<br>ADJUSTED SQL                                                                                                             | TOTAL N: 39<br>JARED MULTIPLE R:                                                                                                   | MULTIPLI                                                                                                                           | E R: .096 SQUA<br>FANDARD ERROR OF E                                                                                                                                      | RED MULTIPLE R: .009<br>STIMATE: 73.671                                                                          |  |  |  |
| VARIABLE                                                                                                                                 | COEFFICIENT                                                                                                                        | STD ERROR                                                                                                                          | STD COEF TOLERA                                                                                                                                                           | NCE T P(2 TAIL)                                                                                                  |  |  |  |
| CONSTANT<br>WORK                                                                                                                         | 358.379<br>5.752                                                                                                                   | 31.336<br>9.760                                                                                                                    | 0.000 1.0000<br>0.096 1.0000                                                                                                                                              | 000 11.437 0.000<br>000 0.589 0.559                                                                              |  |  |  |
| ANALYSIS OF VARIANCE                                                                                                                     |                                                                                                                                    |                                                                                                                                    |                                                                                                                                                                           |                                                                                                                  |  |  |  |
|                                                                                                                                          |                                                                                                                                    | ANALYSIS OF                                                                                                                        | VARIANCE                                                                                                                                                                  |                                                                                                                  |  |  |  |
| SOURCE                                                                                                                                   | SUM-OF-SQUARES                                                                                                                     | ANALYSIS OF<br>DF MEAN-SQ                                                                                                          | VARIANCE<br>QUARE F-RATIO                                                                                                                                                 | P                                                                                                                |  |  |  |
| SOURCE<br>REGRESSION<br>RESIDUAL                                                                                                         | SUM-OF-SQUARES<br>1885.160<br>200816.854                                                                                           | ANALYSIS OF<br>DF MEAN-SQ<br>1 1885<br>37 542                                                                                      | VARIANCE<br>QUARE F-RATIO<br>5.160 0.347<br>7.483                                                                                                                         | P<br>0.559                                                                                                       |  |  |  |
| SOURCE<br>REGRESSION<br>RESIDUAL<br>DEP VAR:OBST<br>ADJUSTED SQU                                                                         | SUM-OF-SQUARES<br>1885.160<br>200816.854<br>TOTAL N: 39<br>JARED MULTIPLE R:                                                       | ANALYSIS OF<br>DF MEAN-SQ<br>1 1885<br>37 542<br>9 MULTIPLI<br>.048 ST                                                             | VARIANCE<br>QUARE F-RATIO<br>5.160 0.347<br>7.483<br>E R: .270 SQUA<br>FANDARD ERROR OF E                                                                                 | P<br>0.559<br>RED MULTIPLE R: .073<br>STIMATE: 71.276                                                            |  |  |  |
| SOURCE<br>REGRESSION<br>RESIDUAL<br>DEP VAR:OBS<br>ADJUSTED SQU<br>VARIABLE                                                              | SUM-OF-SQUARES<br>1885.160<br>200816.854<br>FOTAL N: 39<br>JARED MULTIPLE R:<br>COEFFICIENT                                        | ANALYSIS OF<br>DF MEAN-SO<br>1 1885<br>37 542<br>37 542<br>9 MULTIPLI<br>.048 ST<br>STD ERROR                                      | VARIANCE<br>QUARE F-RATIO<br>5.160 0.347<br>7.483<br>E R: .270 SQUA<br>FANDARD ERROR OF E<br>STD COEF TOLERA                                                              | P<br>0.559<br>RED MULTIPLE R: .073<br>STIMATE: 71.276<br>NCE T P(2 TAIL)                                         |  |  |  |
| SOURCE<br>REGRESSION<br>RESIDUAL<br>DEP VAR:OBST<br>ADJUSTED SQU<br>VARIABLE<br>CONSTANT<br>SUPPORT                                      | SUM-OF-SQUARES<br>1885.160<br>200816.854<br>TOTAL N: 39<br>JARED MULTIPLE R:<br>COEFFICIENT<br>276.827<br>22.371                   | ANALYSIS OF<br>DF MEAN-S(<br>1 1885<br>37 542<br>37 542<br>9 MULTIPLI<br>.048 ST<br>STD ERROR<br>59.052<br>13.137                  | VARIANCE<br>QUARE F-RATIO<br>5.160 0.347<br>7.483<br>E R: .270 SQUA<br>FANDARD ERROR OF E<br>STD COEF TOLERA<br>0.000 1.0000<br>0.270 1.0000                              | P<br>0.559<br>RED MULTIPLE R: .073<br>STIMATE: 71.276<br>NCE T P(2 TAIL)<br>000 4.688 0.000<br>000 1.703 0.097   |  |  |  |
| SOURCE<br>REGRESSION<br>RESIDUAL<br>DEP VAR:OBST<br>ADJUSTED SQU<br>VARIABLE<br>CONSTANT<br>SUPPORT                                      | SUM-OF-SQUARES<br>1885.160<br>200816.854<br>TOTAL N: 35<br>JARED MULTIPLE R:<br>COEFFICIENT<br>276.827<br>22.371                   | ANALYSIS OF<br>DF MEAN-S(<br>1 1885<br>37 542<br>9 MULTIPLI<br>.048 ST<br>STD ERROR<br>59.052<br>13.137<br>ANALYSIS OF             | VARIANCE<br>QUARE F-RATIO<br>5.160 0.347<br>7.483<br>E R: .270 SQUA<br>FANDARD ERROR OF E<br>STD COEF TOLERA<br>0.000 1.0000<br>0.270 1.0000<br>VARIANCE                  | P<br>0.559<br>RED MULTIPLE R: .073<br>STIMATE: 71.276<br>NCE T P(2 TAIL)<br>0000 4.688 0.000<br>0000 1.703 0.097 |  |  |  |
| SOURCE<br>REGRESSION<br>RESIDUAL<br>DEP VAR:OBST<br>ADJUSTED SQU<br>VARIABLE<br>CONSTANT<br>SUPPORT<br>SOURCE                            | SUM-OF-SQUARES<br>1885.160<br>200816.854<br>TOTAL N: 39<br>JARED MULTIPLE R:<br>COEFFICIENT<br>276.827<br>22.371<br>SUM-OF-SQUARES | ANALYSIS OF<br>DF MEAN-SO<br>1 1885<br>37 542<br>MULTIPLI<br>.048 ST<br>STD ERROR<br>59.052<br>13.137<br>ANALYSIS OF<br>DF MEAN-SO | VARIANCE<br>QUARE F-RATIO<br>5.160 0.347<br>7.483<br>E R: .270 SQUA<br>FANDARD ERROR OF E<br>STD COEF TOLERA<br>0.000 1.0000<br>0.270 1.0000<br>VARIANCE<br>QUARE F-RATIO | P<br>0.559<br>RED MULTIPLE R: .073<br>STIMATE: 71.276<br>NCE T P(2 TAIL)<br>0000 4.688 0.000<br>1.703 0.097      |  |  |  |

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AL N: 39<br>RED MULTIPLE R:  | MULTIPLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | R: .213<br>ANDARD ERROR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SQUARED MULTI<br>OF ESTIMATE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PLE R: .045<br>72.320                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| COEFFICIENT                  | STD ERROR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | STD COEF TO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LERANCE T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | P(2 TAIL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 283.262<br>20.553            | 70.550<br>15.509                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.000 1.<br>0.213 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0000000 4.<br>0000000 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 015 0.000<br>325 0.193                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                              | ANALYSIS OF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | VARIANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | - ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| M-OF-SQUARES                 | DF MEAN-SQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | UARE F-RA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TIO P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 9185.387<br>193516.627       | 1 9185<br>37 5230                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | .387 1.<br>.179                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 756 0.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 93                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| ,                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| TAL N: 39<br>RED MULTIPLE R: | MULTIPLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | R: .075<br>ANDARD ERROR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SQUARED MULTI<br>OF ESTIMATE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PLE R: .006<br>73.809                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| COEFFICIENT                  | STD ERROR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | STD COEF TO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LERANCE T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | P(2 TAIL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 376.742<br>-24.447           | 12.134<br>53.583                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.000 1.<br>-0.075 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0000000 31.<br>0000000 -0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 048 0.000<br>456 0.651                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| e<br>J                       | ANALYSTS OF Y                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| ,                            | ANALISIS OF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | VARIANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | i.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| M-OF-SQUARES                 | DF MEAN-SQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | UARE F-RA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ATÍO P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1134.004<br>201568.010       | 1 1134<br>37 5447                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | .004 0.<br>.784                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 208 0.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 51                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| AL N: 39<br>RED MULTIPLE R:  | MULTIPLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | R: .301<br>ANDARD ERROR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SQUARED MULTI<br>OF ESTIMATE:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | PLE R: .090<br>70.594                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| COEFFICIENT                  | STD ERROR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | STD COEF TO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | LERANCE T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | P(2 TAIL)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 382.813<br>-71.418           | 11.933<br>37.260                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.000 1.<br>-0.301 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 0000000 32.<br>0000000 -1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 081 0.000<br>917 0.063                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                              | ANALYSIS OF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | VARIANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                              | YAL       N: 39         RED       MULTIPLE       R:         COEFFICIENT       283.262       20.553         CM-OF-SQUARES       9185.387       193516.627         YAL       N: 35       35         COEFFICIENT       376.742       -24.447         COEFFICIENT       376.742       -24.447         COEFFICIENT       376.742       -24.447         COEFFICIENT       376.8010       36         YAL       N: 35       35         EED       MULTIPLE       R:         COEFFICIENT       382.813       -71.418 | YAL         N:         39         MULTIPLE           RED         MULTIPLE         R:         .020         ST           COEFFICIENT         STD         ERROR         283.262         70.550           20.553         15.509         ANALYSIS OF         30           ANALYSIS OF         MULTIPLE         STD         ERROR           9185.387         1         9185         193516.627         37         5230           YAL         N:         39         MULTIPLE         STD         ERROR           YAL         N:         39         MULTIPLE         STD         STD           YAL         N:         39         MULTIPLE         STD         STD         STD           YAL         N:         39         MULTIPLE         STD         STD         STD           YAL         N:         39         MULTIPLE         STD         STD         STD           YAL | AL       N: 39       MULTIPLE R: .213         EED MULTIPLE R: .020       STANDARD ERROR         COEFFICIENT       STD ERROR       STD COEF TO         283.262       70.550       0.000 1.         20.553       15.509       0.213 1.         ANALYSIS OF VARIANCE         M-OF-SQUARES       DF       MEAN-SQUARE       F-RA         9185.387       1       9185.387       1.         193516.627       37       5230.179       1.         YAL       N:       39       MULTIPLE R: .075       0.000 1.         YAL       N:       39       MULTIPLE R: .000       0.000 1.         YAL | AL       N: 39       MULTIPLE R: .213       SQUARED MULTI         EED       MULTIPLE R: .020       STANDARD ERROR OF ESTIMATE:         COEFFICIENT       STD ERROR       STD COEF TOLERANCE       T         283.262       70.550       0.000 1.0000000       4.         20.553       15.509       0.213 1.0000000       1.         ANALYSIS OF VARIANCE         MOUTTIPLE R: .000       1.0000000         ANALYSIS OF VARIANCE         MOUTTIPLE R: .075       SQUARED MULTIPLE         YAL       N: 39       MULTIPLE R: .000       10000000         YAL       1134.004       1       0.208       0.6         YAL       N: 39       MULTIPLE R: .301       SQUARED MULTIPLE         YAL       N: 39 |

| SOURCE     | SUM-OF-SQUARES | DF | MEAN-SQUARE | F-RATIO | P     |  |
|------------|----------------|----|-------------|---------|-------|--|
| REGRESSION | 18309.671      | 1  | 18309.671   | 3.674   | 0.063 |  |
| RESIDUAL   | 184392.343     | 37 | 4983.577    |         |       |  |

| DEP VAR: S<br>ADJUSTED S | SATISFY<br>SQUARED N | N:<br>NULTIPLE  | 39<br>R: .08 | MULTII<br>30   | PLE R:<br>STANDAR | .322<br>D ERRO | SQUARED                | MULTIPLE R:<br>MATE: | .104<br>0.726  |
|--------------------------|----------------------|-----------------|--------------|----------------|-------------------|----------------|------------------------|----------------------|----------------|
| VARIABLE                 | e coef               | FICIENT         | STD          | ERROR          | STD               | COEF           | TOLERANCE              | T P(2                | TAIL)          |
| CONSTANT<br>MBTI2        |                      | 3.523<br>0.010  |              | 0.479<br>0.005 | 1                 | 0.000<br>0.322 | 1.0000000<br>1.0000000 | 7.350<br>2.072       | 0.000<br>0.045 |
|                          |                      |                 | ANAI         | LYSIS C        | OF VARIA          | NCE            |                        |                      |                |
| SOURCE                   | SUM-OF               | -SQUARES        | DF           | MEAN-          | SQUARE            | F-             | RATIO                  | P                    |                |
| REGRESSIC<br>RESIDUA     | ON<br>AL             | 2.261<br>19,483 | 1<br>37      | -<br>-<br>-    | 2.261<br>0.527    | ¢              | 4.294                  | 0.045                | ,              |
| DEP VAR: S<br>ADJUSTED S | SUPPORT<br>SQUARED M | N:<br>NLTIPLE   | 39<br>R: .07 | MULTII<br>73   | PLE R:<br>STANDAR | .311<br>D ERRC | SQUARED<br>DR OF ESTIN | MULTIPLE R:<br>MATE: | .097<br>0.848  |
| VARIABLI                 | E COEF               | FICIENT         | STD          | ERROR          | STD               | COEF           | TOLERANCE              | T P(2                | TAIL)          |
| CONSTANT<br>FACESIII     |                      | 5.137<br>-0.337 |              | 0.389<br>0.169 | -                 | 0.000<br>0.311 | 1.0000000<br>1.0000000 | 13.206<br>-1.994     | 0.000<br>0.054 |

ANALYSIS OF VARIANCE

| SOURCE     | SUM-OF-SQUARES | DF | MEAN-SQUARE | F-RATIO | P     |
|------------|----------------|----|-------------|---------|-------|
| REGRESSION | 2.855          | 1  | 2.855       | 3.974   | 0.054 |
| RESIDUAL   | 26.581         | 37 | 0.718       |         |       |

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# VITA

## Karla Paige Davis

#### Candidate for the Degree of

Master of Science

Thesis: EARLY CHILDHOOD STUDENT TEACHERS: PERSONAL AND FAMILY CHARACTERISTICS

Major Field: Family Relations and Child Development

Biographical:

- Personal Data: Born in McAlester, Oklahoma, September 23, 1966, the daughter of Glenn and Jerry Davis
- Education: Graduated from Hartshorne High School, Hartshorne, Oklahoma, May, 1984; received Bachelor of Science Degree in Elementary Education from Oklahoma State University, May, 1988; completed requirements for the Master of Science Degree in Family Relations and Child Development, Oklahoma State University, December, 1990
- Professional Experience: Graduate Teaching Assistant, Oklahoma State University Child Development Laboratories, August 1988 to May 1989; Graduate Administrative Assistant, Oklahoma State University Child Development Laboratories, June 1989 to May 1990; Graduate Research Assistant, Oklahoma State University Department of Family Relations and Child Development, August 1988 to July 1990
- Professional Affiliations: National Association for the Education of Young Children; Oklahoma Association for the Education of Young Children; Southern Association on Children Under Six; Oklahoma Association on Children Under Six; Payne County Association on Children Under Six