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GRADUATE COLLEGE

# THE VOCATIONAL CHOICE OF FRESHMEN COLLEGE WOMEN AS INFLUENCED BY PSYCHOLOGICAL NEEDS AND PARENT-CHILD RELATIONSHIPS

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APPROVED BY

DISSERTATION COMMITTEE

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# THE VOCATIONAL CHOICE OF FRESHMEN COLLEGE WOMEN AS INFLUENCED BY PSYCHOLOGICAL NEEDS AND PARENT-CHILD RELATIONSHIPS

## CHAPTER I

## INTRODUCTION

### Statement of the Problem

The three-fold purpose of this study was to investigate and analyze the relationships between: (1) parental influence and vocational choice of freshmen college women; (2) psychological "needs" and vocational choice of freshmen college women; and (3) disruption of the familial environment[1] and vocational choice of freshmen college women.

The first part of the problem was to test a theory first formulated by Roe,[2] that an individual is predisposed toward[3] work predomi-

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[1] See Appendix I for definitions.

[2] Anne Roe, "Early Determinants of Vocational Choice," Journal of Counseling Psychology, IV, No. 3 (Fall, 1957), 212-217.

[3] Roe classified occupations as towards person or towards non-person. In the current study the terms toward person and toward non-person will be employed. Also used as synonomous will be: toward person and not toward person; and person-oriented and non-person-oriented.

nantly person-oriented, or toward work predominantly non-person oriented[4] as a direct result of the parent-child relationship experienced within the family environment. Will a freshman college woman who recalls a warm, loving, and protecting family environment choose an occupation primarily involving people? Will a freshman college woman who recalls a cold, rejecting, and neglecting family environment choose an occupation not primarily involving people?

The second part of the problem was to test a theory presented by Murray[5] that characteristic "needs" or "presses" motivate individuals to various kinds of behavior. Are there significant differences or relations between the choice of vocations and psychological "needs" of freshmen college women?

The third part of the problem was to learn whether disruption in the familial structure will affect, or is related to the vocational choice of freshmen college women. Will disruption in the family environment during the tentative vocational choice-making period (ages eleven through seventeen)[6] be significantly related to the occupational choice of freshmen women?

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[4]Gravitating toward other living things, inanimate objects, or ideas rather than toward people.

[5]Henry A. Murray, et al., Explorations in Personality (New York: Oxford University Press, 1938).

[6]Eli Ginsberg, Sol W. Ginsburg, Sidney Axelrod, and John L. Herma, Occupational Choice: An Approach to a General Theory (New York: Columbia University Press, 1951), p. 60.

All freshmen women domiciled in residential housing at The University of Oklahoma at the time of testing had previously completed a Personal Data Sheet as a part of their residence information. All women who responded to the parental information portion of the Personal Data Sheet that their parents were divorced, or that either parent was deceased were considered to be a part of the disrupted family population. An equal number of freshmen women domiciled in residential housing at the time of testing, selected at random, who came from intact family environments were considered the control group. These freshmen women from both disrupted and intact family environments were invited to participate in a research project.

A measure of the parent-child relationship was obtained from the Roe-Siegelman Parent-Child Relations Questionnaire[7] (hereinafter referred to as the PCR). The vocational choice of each university freshman woman in the experimental group and the control group was obtained in a personal interview prior to testing. These vocational choices were then classified according to Roe's occupational schema.[8]

The degree to which the parent-child relationship in disrupted or intact family environments influenced the freshman college woman's vocational choice was analyzed with appropriate statistics.

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[7]Anne Roe and Marvin Siegelman, A Parent-Child Relations Questionnaire (Cambridge, Massachusetts: Graduate School of Education, Harvard University, 1962). See Appendix II for a copy of the PCR.

[8]Anne Roe, The Psychology of Occupations (New York: John Wiley and Sons, 1956). See Appendix III for examples of Roe's occupational classification.

A measure of the psychological needs was obtained from the Edwards Personal Preference Schedule[9] (hereinafter referred to as the EPPS). A statistical analysis was made to determine congruence between parent-child relationships (as measured by the PCR) and psychological needs.

## Background of the Study

Sociologists, family caseworkers, clergymen, and laymen have been concerned about the increasing disruption in the family environment in the United States, and with its effects upon the personalities of young people. Each year about one-third of a million children are affected by divorce or annulment. The number orphaned each year is slightly higher.[10] Professional workers have viewed the rising delinquency rates with alarm. Increased emotional disturbance and the aimlessness and seeming dissatisfaction of some youth in our country have also created concern. The family structure has been scrutinized as a possible contributor to these social ills in our society.

The importance of the family in shaping needs and values, in providing positive and negative role models, and in providing resources for the implementation of self-concepts cannot be minimized. Super and others have thought of vocational development in terms of the self-

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[9] Allen L. Edwards, The Edwards Personal Preference Schedule (New York: The Psychological Corporation, 1959).

[10] Ruth Hartley, One Parent Family, Children and Youth in the 1960's, Survey Papers prepared for the 1960 White House Conference on Children and Youth.

concept. "In choosing an occupation one is, in effect, choosing a means of implementing a self-concept."[11]

It seems to be an important consideration in discussing vocational choice to explore the parental environment as perceived by the young adult, since this environment is instrumental in the implementation of the self-concept.

Roe's hypothesis that there is a relationship between early experiences and later attitudes, interests, and abilities, and other personality factors which affect the ultimate vocational choice will be the point of departure for this exploration. Roe utilized Maslow's hierarchical classification of needs[12] as the basis for her theory that the relationship existing between the parents and the child, because of the frustration or satisfaction of the child's basic needs, will influence his orientation toward persons or toward non-persons.

It was Maslow's contention that the expenditure of psychic energy leading to special ability development is determined by the patterning of early satisfactions and frustrations of the individual needs. According to Maslow's theory, higher-order needs cannot appear until lower-order needs are at least relatively well satisfied (see Appendix IV for Maslow's hierarchy of needs).

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[11] Donald E. Super, Psychology of Careers (New York: Harper and Brothers, 1957), p. 196.

[12] A. H. Maslow, Motivation and Personality (New York: Harper and Brothers, 1954), pp. 107-122.

Roe is concerned with the higher-order needs and the relationship of needs to motivation of behavior. Important aspects of her theory include:[13]

1. Needs satisfied routinely do not develop into unconscious motivators.
2. Needs for which minimum satisfaction is rarely achieved will be expunged if of a higher order and if of a lower order will prevent the appearance of higher-order needs; these rarely satisfied needs will become dominant and restricting motivators.
3. Needs will become unconscious motivators when their satisfaction is delayed but eventually accomplished.
4. The intensity of these unconscious needs is the major determinant of motivation expressed in accomplishment.

If an individual has his basic needs satisfied by persons, he will move toward persons for continued satisfaction of these basic and higher-order needs. If the individual's lower-order needs are not satisfied by persons, he will seek such satisfaction with non-person things, i.e., other living things, inanimate things, or ideas. Thus individuals who have experienced a casual, loving, protecting parent-child relationship which satisfied lower-order needs, will gravitate toward person occupations which Roe classifies as service, business contact, organization,

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[13] Anne Roe and Marvin Siegelman, The Origin of Interests, APGA Inquiry Series Number One (Washington, D. C.: American Personnel and Guidance Association, 1964), p. 5.

general culture, and arts and entertainment.[14] Conversely, individuals who have experienced a demanding, rejecting, neglecting parent-child relationship which has not satisfied lower-order needs will orient toward non-person occupations classified as technological, outdoor, and scientific.[15]

Other psychologists as well as Maslow and Roe have been concerned with needs as motivating factors. Murray defined needs as a "disequilibrium which stresses toward equilibrium" and considered that needs arise as a result of previous influences which he called "presses."[16] Murray considered two kinds of needs: viscerogenic and psychogenic. Viscerogenic needs are presumably provoked by internal conditions regardless of the environment. Psychogenic needs operate without obvious dependence upon viscerogenic needs and are influenced by environment. Parental influence was considered to be an important aspect of the environment.[17] Murray constructed a subtle and comprehensive scale to measure the variables in the need system of the personality. He became dissatisfied with these variables and abandoned them, even though the correlations between the scales and the staff

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[14] Ibid., p. 7.

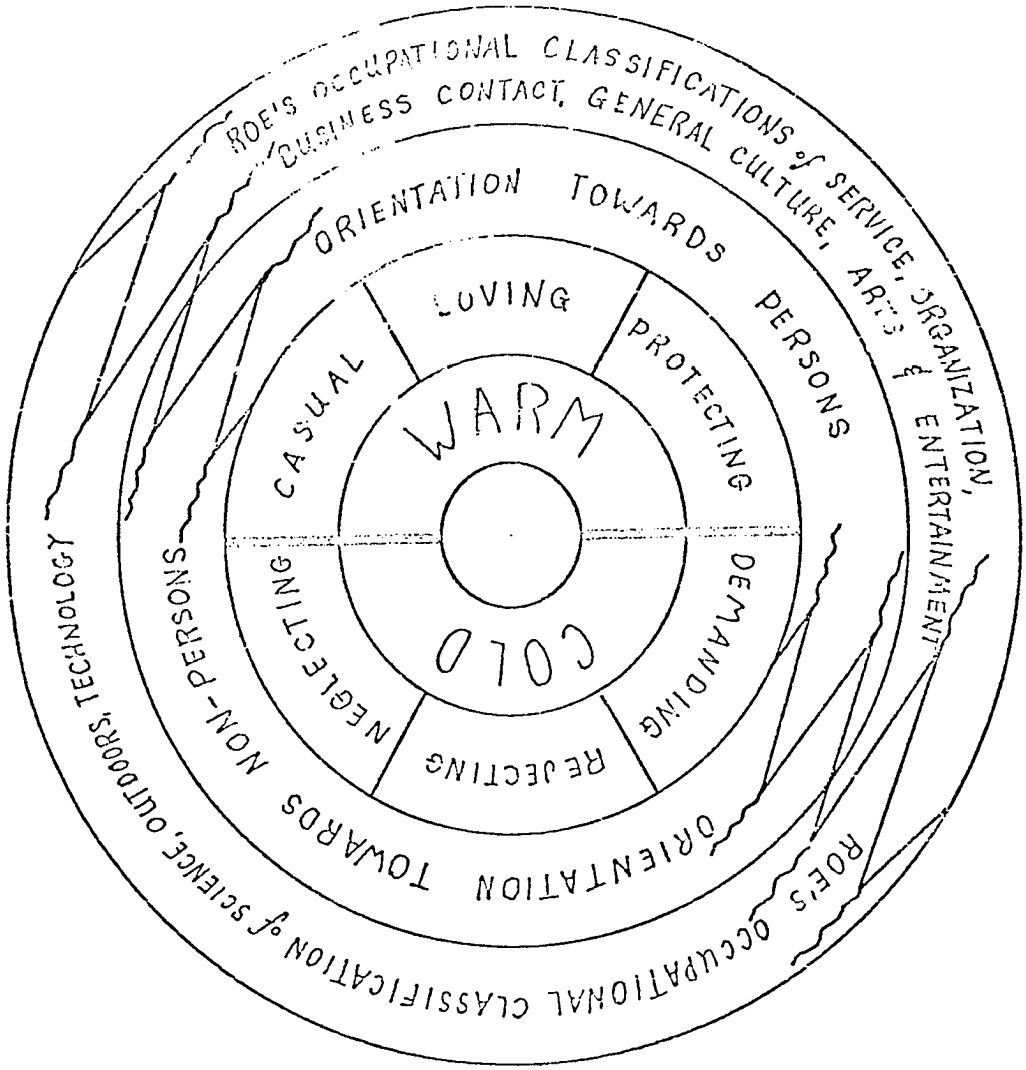
[15] Ibid. See Figure 1 for Roe's hypothetical construct of parent-child relationships and their effect on vocational choice.

[16] Murray, et al., Explorations in . . ., p. 67.

[17] Ibid., pp. 74-75.

FIGURE 1

ADAPTATION OF ROE'S HYPOTHETICAL CONSTRUCT MODEL



ratings of the same variables were increasing with each study.[18] From Murray's early pioneer work, Edwards adapted fifteen of the variables[19] and developed a psychological instrument useful for a normal population. The present study will focus on manifest needs as measured by the EPPS and their relationship to vocational choice of freshmen college women from both disrupted and intact family environments. The degree to which manifest needs have influenced the freshman college woman's vocational choice will be analyzed with appropriate statistics.

The congruence between Roe's parental climate and Edwards' manifest needs will also be analyzed with appropriate statistics.

## Need for the Study

The need for the present study is supported by the review of the literature (see Chapter II). This review will focus on recalled familial patterns, disruption in the family environment, manifest needs, and the effect of these factors upon the vocational choice of freshmen college women.

More data are needed to determine the extent to which the family environment and psychological needs represent influencing factors in the vocational choice of young people.

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[18] O. K. Buros (ed.), The Fifth Mental Measurement Yearbook (New Brunswick, New Jersey: Rutgers University Press, 1959), p. 48.

[19] The personality variables are: Achievement, Deference, Order, Exhibition, Autonomy, Affiliation, Intraception, Succorance, Dominance, Abasement, Nurturance, Change, Endurance, Heterosexuality, Aggression. See Appendix V for the manifest needs associated with these variables.

## Hypotheses

Disruption in the family environment as a factor in vocational choice is a major construct in the current study. Therefore, the following two hypotheses are suggested:

1. PCR and EPPS scores of freshmen college women from mother-absent homes will not be significantly different from scores of freshmen college women from homes where both parents have been present.
2. PCR and EPPS scores of freshmen college women from father-absent homes will not be significantly different from scores of freshmen college women from homes where both parents have been present.

Roe's theory and the PCR developed from that theory suggested several hypotheses, using recall by freshmen college women of the early home environment. These hypotheses are:

3. Freshmen college women who have experienced a Loving relationship in their homes should choose person-oriented occupations.
4. Freshmen college women who have experienced a Protecting relationship in their homes should choose person-oriented occupations.
5. Freshmen college women who have experienced a Casual relationship in their homes should choose person-oriented occupations.
6. Freshmen college women who have experienced a Reward Direct-Object relationship in their homes should choose person-oriented occupations.

7. Freshmen college women who have experienced a Reward Symbolic-Love relationship in their homes should choose person-oriented occupations.

8. Freshmen college women who have experienced a Rejecting relationship in their homes should choose non-person-oriented occupations.

9. Freshmen college women who have experienced a Neglecting relationship in their homes should choose non-person-oriented occupations.

10. Freshmen college women who have experienced a Demanding relationship in their homes should choose non-person oriented occupations.

11. Freshmen college women who have experienced a Punishment Direct-Object relationship in their homes should choose non-person-oriented occupations.

12. Freshmen college women who have experienced a Punishment Symbolic-Love relationship in their homes should choose non-person-oriented occupations.

It would appear that if an individual experienced combinations of certain relationships in the home, the direction of occupational choice would be more apparent. Accordingly, the following two hypotheses are suggested:

13. Freshmen college women who have experienced a combination of Loving, Protecting, Casual, Reward Direct-Object, and Reward Symbolic-Love relationships in their homes should choose person-oriented occupations.

14. Freshmen college women who have experienced a combination of Rejecting, Neglecting, Demanding, Punishment Direct-Object, and Punishment Symbolic-Love relationships in their homes should choose non-person-oriented occupations.[20]

From the EPPS and the rationale behind its development, several additional hypotheses were suggested. They are as follows:

15. Freshmen college women who responded to EPPS items indicative of Exhibition needs should choose person-oriented occupations.
16. Freshmen college women who responded to EPPS items indicative of Affiliation needs should choose person-oriented occupations.
17. Freshmen college women who responded to EPPS items indicative of Intraception needs should choose person-oriented occupations.
18. Freshmen college women who responded to EPPS items indicative of Succorance needs should choose non-person-oriented occupations.
19. Freshmen college women who responded to EPPS items indicative of Nurturance needs should choose person-oriented occupations.
20. Freshmen college women who responded to EPPS items indicative of Abasement needs should retrospectively recall a Neglecting relationship in the home environment.

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[20]In the remaining chapters of this study the PCR subtest titles will be abbreviated as follows: Loving (Lov), Protecting (Pro), Casual (Cas), Reward Direct-Object (Rew D-O), Reward Symbolic-Love (Rew S-L), Rejecting (Rej), Neglecting (Neg), Demanding (Dem), Punishment Direct-Object (Pun D-O), and Punishment Symbolic-Love (Pun S-L).

21. Freshmen college women who responded to EPPS items indicative of Abasement needs should retrospectively recall a Rejecting relationship in the home environment.

22. Freshmen college women who responded to EPPS items indicative of Abasement needs should retrospectively recall a Demanding relationship in the home environment.

23. Freshmen college women who responded to EPPS items indicative of Achievement needs should choose non-person-oriented occupations.

24. Freshmen college women who responded to EPPS items indicative of Autonomy needs should choose non-person-oriented occupations.

25. Freshmen college women who responded to EPPS items indicative of Dominance needs should choose person-oriented occupations.

26. Freshmen college women who responded to EPPS items indicative of Deference needs should choose person-oriented occupations.

27. Freshmen college women who responded to EPPS items indicative of Order needs should choose non-person-oriented occupations.

28. Freshmen college women who responded to EPPS items indicative of Change needs should choose person-oriented occupations.

29. Freshmen college women who responded to EPPS items indicative of Heterosexuality needs should choose person-oriented occupations.

30. Freshmen college women who responded to EPPS items indicative of Endurance needs should choose non-person-oriented occupations.

31. Freshmen college women who responded to EPPS items indicative of Aggression needs should choose non-person-oriented occupations.[21]

Two additional hypotheses are suggested by the literature. They are:

32. A Protecting home environment should be positively related to Deference needs.

33. A Protecting home environment should be negatively related to Autonomy needs.

## Summary

Chapter I has presented the problems for investigation. The background and the need for the study were discussed. The hypotheses to be tested were formulated.

Chapter II will focus upon a review of the literature. Chapter III will describe the investigative procedures. Chapter IV will analyze and report the results of the research. Chapter V will summarize the investigation, present the conclusions, and discuss the need for further research.

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[21] In the remaining chapters of this study the EPPS scales will be abbreviated as follows: Achievement (Ach), Deference (Def), Order (Ord), Exhibition (Exh), Autonomy (Aut), Affiliation, (Aff), Intraception (Int), Succorance (Suc), Dominance (Dom), Abasement (Aba), Nurturance (Nur), Change (Chg), Endurance (End), Heterosexuality (Het), Aggression (Agg), and Consistency (Con).

## CHAPTER II

## REVIEW OF THE LITERATURE

### Disruption of the Familial Environment and Vocational Choice

Personal disruption in the family environment should be a consideration in any discussion of vocational choice. If only one parent is helping the adolescent make his vocational choice, or if one of the role models is missing in the home, will the choice be the same as the choice made by other young women who have the influence of both parents? Patterns of career significance might also emerge from the composition of the family. For example, White found girls with career motivation tended to come from homes in which the father was deceased or in which there was less communication between the girl and her parents.[1] Seward found that girls with liberal attitudes about women's roles came from broken homes in which there had been either a divorced or a deceased parent.[2] This is in accordance with Roe's hypothesis that women who

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[1] Becky J. White, "The Relationship of Self Concept and Parental Identification to Women's Vocational Interests," Journal of Counseling Psychology, VI, No. 3 (1959), 202-206.

[2] Georgene Seward, "Cultural Conflict and the Feminine Role: An Experimental Study," Journal of Social Psychology, XXII (1945), 177-194.

deviate from typically feminine patterns of interests may reflect an atypical home structure.

The percentage of teen-agers growing up in disrupted homes is significant. "About ten per cent of the children in the United States are living with only one parent, usually the mother. . . . Two and a quarter million families in the U. S. today are composed of a mother and her children."[3] In the present study 128 out of 1,178 freshmen women in university housing at the time of testing had experienced some personal disruption in their family environment. The counselor, as well as other specialists are interested in the kinds of occupational predictions that can be made when only one parent has been predominantly influential in the vocational choice of freshmen college women.

Several authorities in the field of family dynamics have concluded that the withdrawal of one parent is damaging to the children's development.[4] Glasser and Navarre stated that the individual can have a "relatively undistorted channel of communication only if both parents are present. Therefore, whatever the interests, values, and opinions of the remaining parent, the loss of a parent . . . produces a structural distortion in the communications between the child and the adult world."[5] This may affect the psychological, social, and personal

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[3]Paul Glasser and Elizabeth Navarre, "Structural Problems of the One-Parent Family," Journal of Social Issues, XXI (January, 1965), 98.

[4]William Kenkel, Family Perspective (New York: Appleton-Century-Crofts, 1960), pp. 302-307.

[5]Glasser and Navarre, Journal of Social Issues, XXI (January, 1965), 102.

development of the child. However, recent research on the developmental characteristics of children from various types of disrupted and intact homes suggests that the widely held apprehension about the detrimental effects of disruption in the family environment may not be well founded.[6] Most of the studies are concerned with disruption as the antecedent variable to juvenile delinquency or emotional disturbance in young people. Few studies have attempted to relate the effects of family disruption upon the vocational choice of freshmen college women.

## Parental Influence and Vocational Choice

Since the single, most constant, continuous, and predominant influence in a person's early development is that of the parents,[7] it is reasonable to explore further parental influence on vocational choice even though the results of previously reported studies have been largely negative.

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[6] See, for example: Lee C. Burchinal, "Characteristics of Adolescents from Unbroken, Broken, and Reconstituted Families," Journal of Marriage and the Family, XXVI, No. 1 (February, 1964), 41-45. Paul H. Landis, "The Broken Home in Teen-Age Adjustments," Washington Agricultural Stations Bulletin, No. 542 (June, 1953). William J. Goode, After Divorce (Glencoe, Illinois: The Free Press, 1956), pp. 307-329.

[7] Roe and Siegelman, The Origin of . . ., pp. 4-7.

Six previous studies by Grigg (1959),[8] Hagen (1960),[9] Utton (1962),[10] Switzer, et al. (1962),[11] Roe and Siegelman (1962),[12] and Green and Parker (1965)[13] generally failed to support Roe's theory. All except one used adult, college, or graduate students as their subjects. Roe and Siegelman, and Green and Parker used the PCR as the measure of the parent-child relationship, whereas the other studies did not.

Grigg devised a fifteen-item questionnaire to reflect the kinds of parental reactions postulated by Roe as to person, non-person orientation. His subjects were twenty-four graduate nurses who had been employed as nurses and twenty graduate women from the departments of

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[8]Austin E. Grigg, "Childhood Experience with Parental Attitudes: A Test of Roe's Hypothesis," Journal of Counseling Psychology, VI, No. 2 (Summer, 1959), 153-155.

[9]Douglas Hagen, "Careers and Family Atmospheres: An Empirical Test of Roe's Theory," Journal of Counseling Psychology, VII, No. 4 (Winter, 1960), 251-256.

[10]Alden C. Utton, "Recalled Parent-Child Relations as Determinants of Vocational Choice," Journal of Counseling Psychology, IX, No. 1 (Spring, 1962), 49-53.

[11]David K. Switzer, Austin E. Grigg, Jerome S. Miller, and Robert K. Young, "Early Experiences and Occupational Choice: A Test of Roe's Hypothesis," Journal of Counseling Psychology, IX, No. 1 (Spring, 1962),

[12]Roe and Siegelman, The Origin of . . ., pp. 1-98.

[13]Laurence B. Green and Harry J. Parker, "Parental Influence Upon Adolescents' Occupational Choice: A Test of an Aspect of Roe's Theory," Journal of Counseling Psychology, XII, No. 4 (1965), 379-383.

chemistry, physics, and mathematics who were interested in research rather than in teaching. Women in nursing were not significantly different in their responses to the items on the questionnaire, from graduate women in science and mathematics.[14] In an addendum to Grigg's article, Roe wrote that she doubted there was a sharp enough contrast between graduate nurses and graduate women in science to test the hypothesis. She had pointed out earlier that there was some difficulty in classifying nurses by interest groups.[15]

Utton used thirty-three social workers, and twenty-six occupational therapists representing people employed in person-oriented occupations. The non-person-oriented occupations were represented by forty-one dietitians and twenty-eight laboratory technicians. The subjects were women working in Veterans Administration hospitals in New York and Boston. Utton's instruments were the "Social Scale" from the Study of Values, and two scales adapted from the Fels Parent Behavior Rating Scales designed to measure acceptance, direction of criticism, child-centeredness, rapport, and affection of the parents. His hypothesis that person-oriented women would manifest greater altruistic love of people was supported by the data. The hypothesis that the members of the person-oriented group would recall their early childhood environments as having been warmer than the non-person group

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[14] Grigg, Journal of Counseling Psychology, VI, No. 2 (Summer, 1959), 153-155.

[15] Roe, The Psychology of . . ., p. 221.

was not supported. The social workers felt less accepted by their parents than did either of the non-person-oriented groups.[16]

Utton's devised scales were very short. The acceptance scale, for example, was made up of only six items. Individuals were to rate as being "more true than false" or "more false than true" such statements as "You were openly resented and rejected by your parents. You felt left out, unwanted,"[17] etc. The instrument itself may not have been sufficiently subtle to eliminate the factor of social desirability. Unless there is subtlety in the construction of items in a questionnaire, individuals may select answers which are socially desirable rather than those which accurately reflect their true feeling.

Roe, in commenting on Utton's study, stated that there is probably not enough contrast between the work and training of occupational therapists and dietitians to place the occupational therapists in the person-oriented category and the dietitians in the non-person-oriented group.

Switzer, et al., used 120 graduate and undergraduate male subjects: forty ministerial students and forty graduate theological students whose parents were assumed to be overdemanding according to Roe's hypothetical construct (see page 8) and forty chemistry majors whose parents were assumed to be rejecting. A two-scale questionnaire was constructed to measure each parent's attitudes toward the child on the dimensions of overdemanding and rejecting. There were no signifi-

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[16]Utton, Journal of Counseling Psychology, IX, No. 1 (Spring, 1962), 49-53.

[17]Ibid.

cant differences between the recall of fathers' and mothers' attitudes. It was found that the magnitude of difference between attitudes of parents was predictive of vocational choice;[18] e. g., if the mother was extremely demanding in her attitude and the father was extremely rejecting, these male subjects were likely to choose non-person occupations.

In the foregoing studies Grigg, Utton, and Switzer, et al. made no attempt to control the factor of disruption in the family environment.

Hagen collected data from early family histories of participants in the "Study of Adult Development" at Harvard University. The men had first been contacted as sophomores between 1938 and 1942, with a follow-up until 1956. These data included extensive tests, observations of families, and socio-economic variables. Careers were predicted from the type of family atmosphere. Hagen divided the occupations into verbal (services, business contact, organization, and general culture) and quantitative (technology, outdoor, and science). He based the "hits and misses" on this dichotomy. The predicted relationship between occupational group and family atmosphere did not hold generally. Only subjects from Casual families had a "hit rate" beyond chance expectancy. "All cases in which there were untoward situational problems in the family were eliminated from the sample."[19]

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[18] Switzer, et al., Journal of Counseling Psychology, IX, No. 1 (Spring, 1962), 45.

[19] Hagen, Journal of Counseling Psychology, VII, No. 4 (Winter, 1960), 251-256.

Hagen concluded that the total atmosphere of the home may not be so important as the climate in which one or another parent and the child interact. "The mother-child relationship may be much more significant that the total atmosphere in the childhood period."[20]

McArthur in a follow-up study of these same Harvard men, now in their forties, found that three variables were significant in the occupational choice: social class, dominant parent, and reaction to the family. For example, men who entered scientific research did so from two directions. The first direction was that of the working-class boy from a father-dominated home who reacted rejectingly to his dominant father. This supports Roe's theory that an individual may have turned away from people early in life, and turned to the laboratory as an escape from emotional interaction with people. The other direction for entry into scientific research was for men with families whose father or grandfather was in a scientific career, a perpetuation of the occupational role model.[21]

Roe and Siegelman used the PCR and other variables with a sample of 142 male Harvard seniors and ninety-four adults in four sub-samples of men and women engineers, and men and women social workers. Harvard students whose parents were known to be deceased or divorced were not included. The disruption factor was not controlled in the adult group and Roe concluded that this may have been a significant factor.

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[20] Ibid., p. 256.

[21] Charles C. McArthur, "Career Choice: It Starts at Home," Think (March-April, 1966), 15-18.

For the two male groups (Harvard and adult) only Loving and Rejecting for the father, and Casual for the mother were significant. For the two adult groups (engineers and social workers) only Loving and Rejecting for father, and Reward Direct-Object for the mother were significant.[22]

Both men and women social workers had more stress with less affection from parents than did engineers, and there were more personality and other problems in their parents. Their choice of occupations may have resulted from a search for more satisfying personal relations. Roe concluded that this is in accord with the suggestion that some unsatisfying experiences may lead, not to giving up the quest for such satisfaction, but to a further search for sources of such satisfaction.[23]

Green and Parker attempted to overcome some limitations of retrospection by using the PCR with seventh grade children. Subjects (205 boys and 150 girls living with their "natural cohabitating parents") were administered a slightly modified PCR. Although all aspects of Roe's theory were not confirmed, certain parent-child relationships provided partial but statistically significant support. The choice boys made of person-oriented occupations was influenced by a Protecting, Casual, and Rewarding relationship with either mother or father. Girls'

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[22]Roe and Siegelman, The Origin of . . ., p. 29.

[23]Ibid., p. 66.

orientation toward non-person occupations was strongly influenced by a Neglecting, Rejecting, Demanding, and Punishing relationship with the father. When perceived mother-daughter relationship was strongly negative, girls oriented toward non-person occupations. When perceived as single factors, Demanding and Rejecting behavior of mothers did not seem to influence the occupational choices of girls.[24]

## Psychological Needs and Vocational Choice

Several researchers have used the EPPS to relate vocational choice with personality characteristics.[25] Although a multiple scale interpretation of the EPPS has not proved useful for prediction of occupational choice, the direction of individual scales (particularly Achievement, Endurance, Nurturance, Intraception, Dominance, and Change) has shown predictive value in occupational choice.

Hoyt and Kennedy, using the EPPS, found differences among five scales in a group of career-motivated and homemaking-motivated women. The homemaking group scored higher than the career group on Hetero-

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[24] Green and Parker, Journal of Counseling Psychology, XII, No. 4 (1965), 382-383.

[25] M. D. Gynther and B. Bertz, "Personality Characteristics of Student Nurses in South Carolina," Journal of Social Psychology, LVI (1962), 227-284. See also: P. Heist, "Personality Characteristics of Dental Students," Educational Record, XLI (1960), 240-252. C. E. Izard, "Personality Characteristics of Engineers as Measured by the Edwards Personal Preference Schedule," Journal of Applied Psychology, XLIV (1960), 332-335. G. Lang, "Motives in Selecting Elementary and Secondary School Teaching," Journal of Experimental Education, XXIX (1960), 101-104.

sexuality and Succorance, but lower on Achievement, Intraception, and Endurance scales.[26]

Heilbrun in the area of college achievement found that non-achieving women had a different EPPS pattern than non-achieving men. Women were apparently more influenced by social interaction and had EPPS profiles suggesting assertive, aggressive, and independent behavior patterns.[27]

Suziedelis and Steimel related inventoried interests to manifest needs and found that Endurance and Achievement needs were found to be related to interest in biological and physical sciences. Dominance needs were found to be related to an interest in selling; Affiliation needs were related to inventoried interest in social service.[28]

## Summary and Conclusions

Many young people are growing up in our society in one-parent families. Disruption in the family environment may be an important factor in the vocational development of young men and women. Therefore,

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[26]Donald P. Hoyt and Carroll E. Kennedy, "Interest and Personality Correlates of Career-Motivated and Homemaking-Motivated College Women," Journal of Counseling Psychology, V, No. 1 (1958), 44-47.

[27]A. B. Heilbrun, "Configural Interpretation of the Edwards Personal Preference Schedule and the Prediction of Academic Performance," The Personnel and Guidance Journal, XLII, No. 3 (1963), 222-224.

[28]A. Suziedelis and R. J. Steimel, "The Relationship of Need Hierarchies to Inventoried Interests," The Personnel and Guidance Journal, XLII, No. 4 (1963), 393-396.

it seemed consequential to explore family disruption as a variable in the vocational choice of freshmen college women.

Comparatively little empirical evidence was found in the literature concerning an individual's perception of his parents' attitudes toward him, and how this perception was significantly related to vocational choice. Six studies have generally failed to support Roe's theory that an individual is predisposed toward work predominantly person-oriented or toward work predominantly non-person-oriented as a direct result of the parent-child relationship experienced within the family environment.

The development of the EPPS generated a considerable amount of psychological research. A number of studies have specifically related vocational choice to "manifest needs." Several of the EPPS scales have shown predictive value in occupational choice.

The PCR and the EPPS both purport to measure "needs." No previous investigator attempted to ascertain if the PCR and the EPPS measure the same phenomena. An investigation of parent-child interaction and manifest need in both intact and disrupted family environments may promote an understanding of the etiological factors of vocational choice of freshmen women.

The investigative procedures employed in the current study will be described in Chapter III.

# CHAPTER III

# METHOD

## Selection of the Sample

Two sample groups were utilized in this study: an experimental group composed of freshmen women from disrupted family environments, and a control group composed of freshmen women from intact family environments.[1]

The criteria established for selection of the experimental group were: (1) women must have been residents in freshman housing during the spring semester of 1966; and (2) women had previously indicated some type of disruption in the family environment. All women meeting these criteria were invited to participate in the research. Only those volunteering to cooperate were included in the experimental sample.

The criteria established for selection of the control group were: (1) women must have been residents in freshman housing during

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[1] A student personnel form containing this information was completed by all women during the first six weeks of residency in freshman housing in the fall of 1965-66. All freshmen women enrolled at The University of Oklahoma live in university housing unless they commute from home, or have special permission from the Dean of Women.

the spring semester of 1966; and (2) women had previously indicated an intact family environment. Randomly selected women meeting these criteria were invited to participate in this research. Only those volunteering to cooperate were included in the control sample. The size of the control group was equal to the size of the experimental group.

The age range for both the experimental sample and the control sample was from 209 months to 290 months, with a mean of 227.6 months and a standard deviation of 5.2 months.

Every woman was interviewed by the investigator concerning family environment and vocational choice. The interview took place prior to testing, was semi-structured, and usually lasted from ten to fifteen minutes. Most women indicated interest in the outcome of the study; several requested test results. Two freshmen women from disrupted family environments did not wish to participate in the study. Four women from disrupted families who indicated a willingness to participate failed to appear for the initial testing period, or for a rescheduled testing session. No further effort was made to contact them.

Each woman from a disrupted family environment was categorized by length of disruption, and whether there was a mother or father surrogate in the home during the tentative choice making years (see Figure 2 for categories). Six women interviewed and tested failed to meet the criteria for categorization and were not included in this study.[2]

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[2]Due to recency of death of father (n = 2); both parents deceased (n = 1); and living with relatives other than parents for prolonged periods of time (n = 3).

FIGURE 2

NUMBER OF FRESHMEN COLLEGE WOMEN FROM DISRUPTED FAMILY ENVIRONMENTS BY CATEGORIES

| Category Number | Category Description | Number of Cases |
|---|---|---|
| | Mother Absent (N = 15) | |
| 1 | Absent during ages 10 to 17 | 7 |
| 2 | Surrogate[a] mother after absence of 1 to 3 years | 4 |
| 3 | Surrogate mother after absence of 3 or more years | 2 |
| 4 | Other[b] | 2 |
| | Father Absent (N = 101) | |
| 4 | Other | 19 |
| 5 | Absent during ages 10 to 17 | 51 |
| 6 | Surrogate father after absence of 1 to 3 years | 19 |
| 7 | Surrogate father after absence of 3 or more years | 12 |

[a]Remarriage of mother or of father.

[b]Living with grandparent(s); mother or father remarried, then divorced; family disruption occurring prior to age 10 or after age 17; mother or father absent due to prolonged hospitalization or illness.

## Instruments Employed in the Study

### The PCR

The PCR was devised by Roe and Siegelman to obtain a measure of the perceived behavior of parents toward their children. There are separate questionnaires of 130 items each for mother and for father. The 130 items are divided into ten subtests: six of these relate to the Roe model for parent-child relations (Lov, Pro, Dem, Rej, Neg, and Cas),[3] and four to punishments and rewards (Pun D-O, Pun S-L, Rew D-O, and Rew S-L).[4] The last four subtests were suggested by the work of Sears, Maccoby, and Levin.[5]

> [The PCR] was devised to obtain a measure of the characteristic behavior of parents towards their young children, as experienced by the child. It has been used in studies of late adolescents and of adults who have filled it out with reference to their own childhood. There are separate questionnaires for Father and Mother.[6]

### Reliability of the PCR

Reliabilities for the Harvard sample[7] are shown in column two and column three of Table 1. These reliabilities range from .68 to .89.

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[3]Figure 1, page 8, shows Over-Protecting and Over-Demanding. Roe later dropped these modifiers.

[4]Roe and Siegelman, The Origin of . . ., p. 22.

[5]Robert R. Sears, Eleanor E. Maccoby, and Harry Levin, Patterns of Child Rearing (New York: Row Peterson and Company, 1957), pp. 318-341.

[6]Anne Roe and Marvin Siegelman, "A Parent-Child Relations Questionnaire," Child Development, XXXIV, No. 2 (1963), 355.

[7]Ibid., p. 358.

Siegelman[8] obtained reliabilities of approximately the same magnitude (.71 to .91) with ninety-seven freshmen women at New York University who were enrolled in an education course. These reliabilities are shown in column four and column five of Table 1.

TABLE 1

TRYON RELIABILITIES FOR THE HARVARD AND NEW YORK UNIVERSITY SAMPLES

| | Harvard Sample | | NYU Sample | |
|---|---|---|---|---|
| PCR Subtest | Mother | Father | Mother | Father |
| Lov | .896 | .872 | .881 | .918 |
| Pro | .780 | .761 | .786 | .858 |
| Dem | .826 | .836 | .711 | .881 |
| Rej | .850 | .759 | .802 | .881 |
| Neg | .868 | .745 | .778 | .859 |
| Cas | .810 | .800 | .831 | .829 |
| Rew S-L | .757 | .708 | .766 | .836 |
| Rew D-O | .783 | .798 | .818 | .870 |
| Pun S-L | .687 | .759 | .782 | .679 |
| Pun D-O | .788 | .769 | .751 | .837 |

The reliability of each PCR subtest in the two configurations (women-mothers, women-fathers) was computed for the present study by using an item analysis technique of Tryon.[9]

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[8]Marvin Siegelman, unpublished materials.

[9]R. C. Tryon, "Reliability and Behavior Domain Validity: Reformulation and Historical Critique," Psychological Bulletin, LIV, No. 3 (1959), 229-249.

$$R = \left[\frac{n}{n-1}\right]\left[1 - \frac{\Sigma s_1^2}{s_x^2}\right]$$

$n$ = number of items

$s_1^2$ = variance of each item

$s_x^2$ = total variable variance

$$S_x^2 = \frac{\Sigma x^2}{N} - \left[\frac{\Sigma x}{N}\right]^2$$

Validity of the PCR

Content validity was obtained by inter-judge agreement on items.

> A large number of items were culled or adapted from the literature and others were constructed to fit the ten categories. These were submitted to colleagues with descriptions of the categories. Each one independently assigned each item to a category or discarded it. All of the items included in the questionnaire were assigned to the same category by all the judges, and the same items were originally used for both parents.[10]

A later modification of the questionnaire changed eleven items which are different for mother and for father (items 24, 26, 31, 54, 61, 64, 74, 81, 91, 113, and 122).[11]

The EPPS

A second research instrument is the EPPS, which provides measures of fifteen relatively independent normal personality variables. The EPPS attempts to minimize the influence of social desirability by the

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[10] Roe and Siegelman, Child Development, XXIV, No. 2 (1963), 355.

[11] Ibid., p. 356.

use of a forced-choice format. The instrument was developed in 1953, and revised in 1959. It is a paper-and-pencil instrument, useful for group and individual administration. Each of the fifteen personality variables is paired twice with each of the other variables. If the individual chooses a statement for a given variable as being more characteristic of himself than the statements for the other variables, his score for this variable would be twenty-eight.[12]

Standardization of the EPPS

The members of the normative sample of 749 college women and 760 college men were enrolled in liberal arts classes in various colleges and universities. A wide age distribution was obtained. However, as would be expected from the sample selected, 679 of the 749 men were between the ages of fifteen and twenty-nine; 692 of the 749 college women were between the ages of fifteen and twenty-nine. There is also an adult normative group of 9,000 men and women who were members of a consumer purchase panel used for market surveys. This sample covers urban and rural areas in forty-eight states. Significant differences were found between the general sample and the college sample.[13] In addition, there are norms based on 799 male and 760 female high school students which are not reported in the Manual.[14] There are separate

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[12]Allen L. Edwards, The Edwards Personal Preference Schedule, Manual (New York: The Psychological Corporation, 1959), p. 1.

[13]Ibid., p. 4.

[14]O. K. Buros, The Sixth Mental Measurement Yearbook (New Brunswick, New Jersey: Gryphon Press, 1965), p. 88.

profiles in the test manual for both groups. Most of the EPPS research has been with college groups.

Reliability of the EPPS

Split-half reliability for the EPPS varies from .60 to .87; test-retest coefficients range from .74 to .88.[15] Reliabilities reported by other researchers have compared favorably to those found in the test manual, ranging from .60 to .88.[16] These reliabilities were considered adequate for purposes of this study.

Intercorrelations of the fifteen sub-scores show the largest positive relations were between Aff and Nur, and an equally negative correlation was found between Aut and Nur. Generally, the intercorrelational data supported independence of the sub-scores.[17]

Validity of the EPPS

The EPPS is based on construct validity. One study correlated the EPPS with the Guilford-Martin Personality Scale and with the Taylor Manifest Anxiety Scale. Several correlations significant at the five per cent level were found.[18] Most research with the EPPS has been

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[15] Edwards, EPPS Manual . . ., p. 12.

[16] Paul Horst and Calvin E. Wright, "The Comparative Reliability of Two Techniques of Personality Appraisal," Journal of Clinical Psychology, XV (October, 1959), 388-391. Milton E. Lipets, "Reliability of EPPS Autonomy for Males and Females," Psychological Report, VIII (June, 1961), 456.

[17] Edwards, EPPS Manual . . ., p. 12.

[18] Ibid., p. 14.

correlational, so little data have been obtained to enhance the validity of the instrument. The general criticism of the EPPS by test reviewers has been that the research has not demonstrated the validity and thus the instrument should be clearly designated "experimental."[19]

## Administration of the PCR and the EPPS

Each woman was administered the PCR and the EPPS in one testing period. Several testing times were established to accommodate all of the freshmen women. Instructions were the same for all sessions. Women from disrupted family environments were administered the appropriate PCR questionnaire, i. e., if the father was absent from the home, the mother questionnaire was given. All women from intact family environments were administered both the mother and the father PCR questionnaire.

## Scoring of the EPPS and the PCR

In accordance with the instructions in the Manual, the first fifteen variables on the EPPS answer sheets for each subject were machine-scored on the IBM 805. The Con scale was hand-scored for each answer sheet. The score for each of the sixteen scales ranged from zero to twenty-eight. A high score for any of the EPPS scales indicated the individual had greater "need" on this variable than the average college woman. A low score for any of the scales indicated that the individual had less "need" on this variable than the average college woman. All EPPS scores were recorded on an IBM card.

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[19] Buros, The Fifth Mental . . . , p. 48.

Individual scores for both mother and father sections of the PCR were recorded on IBM cards directly from the answer sheets. The IBM 1410 computer totaled each item on each PCR subtest as follows: each item on the PCR received a positive score of one to five, depending upon the response to the question.[20] A low total score for any one subtest indicated that a woman did not perceive that parent-behavioral relationship as "true" for her. A high total score for any one subtest indicated that a woman perceived that parent-behavioral relationship as "true."

The possible range of scores for any woman on each fifteen-item subtest for Pro, Lov, Cas, Neg, Rej, and Dem was between fifteen and seventy-five. The possible range of scores for any woman on each ten-item subtest for Rew S-L, Rew D-O, Pun S-L, and Pun D-O was from ten to fifty.

For the occupational choice given by each subject during the interview, a code number (see Appendix VI) was recorded on the IBM card. A code number was also assigned to each woman who had indicated a disruption in the family environment (see Figure 2, page 29). This "disruption" code number was then recorded on the IBM card.

## Statistical Treatment of the Data

The score of each individual on each item for mother and for father on the PCR, plus the individual's score on each of the EPPS

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[20] Scores assigned were: One (1) for a response of "Very Untrue," two (2) for a response of "Seems Untrue," three (3) for a response of "Sometimes Untrue-Sometimes True," Four (4) for a response of "Seems to be True," and five (5) for a response of "Very True."

scales were used for statistical analysis. These scores were analyzed by dichotomizing all subjects on their person, non-person occupational choice. These scores were then analyzed for all subjects (i. e., women from disrupted families and women from intact families).

Test for Normality of Distributions

In order to determine if the sample result represented a normal population distribution, a Chi Square ($X^2$) Goodness of Fit Test, using the .05 level of significance, was computed for the following randomly selected subtests and EPPS scales:

1. Lov, Pro, and Rew S-L subtests for the intact family, mother group.
2. Neg, Dem, and Cas subtests for the intact family, father group.
3. Rew D-O, Pun S-L, and Pun D-O subtests for the disrupted family, mother group.
4. Dom, End, Aut, and Ach scales for the entire intact family sample.
5. Nur, Agg, Int, and Ord scales for the disrupted family, mother group.

A class interval of three was used for the PCR subtests, and a class interval of two was used for the EPPS scales.

The total $X^2$ value for each distribution was computed by the following formula:

$$X^2 = \sum \left[ \frac{(fo - fe)^2}{fe} \right]$$

Significance was determined using degrees of freedom equal to the number of class intervals minus three.

Frequency Distributions were prepared for those PCR subtests and EPPS scales for which the hypothesis of normality was rejected by the $X^2$ tests. These distributions were inspected to determine whether or not the data met Guilford's criteria for use of parametric statistics,[21] i. e., distributions should not be abnormally skewed, distributions should be fairly symmetrical, and distributions should be unimodal.

Ranges, Means, and Standard Deviations

Tables were prepared for the ranges, means, and standard deviations for all PCR subtest data and for the EPPS scales, for both the intact and disrupted family groups. These data and their significance will be discussed in Chapter IV.

Tests for Significance between Means and Variances

The t test of significance (hereinafter referred to as t), and the F Ratio Test for homogeneity of variance (hereinafter referred to as F) were computed. Some departure from normality does not invalidate the t and F tests.[22]

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[21] J. P. Guilford, Fundamental Statistics in Psychology and Education, 3rd Edition (New York: McGraw-Hill, 1956), p. 150.

[22] Helen M. Walker and Joseph Lev, Statistical Inference (New York: Holt, Rinehart, and Winston, 1953), p. 143.

Intercorrelation of the PCR and EPPS

To determine the degree to which the "needs" as reflected by the PCR are related to the "needs" revealed by the EPPS, two Pearson Product-Moment intercorrelational matrices were computed (one for the intact family group and one for the disrupted family group). Additionally, these matrices provided statistical information for hypotheses thirty-four and thirty-five.

The basic formula for a Pearson Product-Moment coefficient of correlations was used.[23]

$$r_{xy} = \frac{\Sigma xy}{N \sigma x \sigma y}$$

$r_{xy}$ = correlation between X and Y

x = deviation of any X score from the mean in test X

y = deviation of the corresponding Y score from the mean in test Y

$\Sigma_{xy}$ = sum of all the products of deviations, each x deviation times its corresponding y deviation

$\sigma x$ and $\sigma y$ = standard deviations of the distributions of X and Y scores

PCR Subtest Intercorrelation

To determine the extent to which the PCR subtests were measuring discrete behaviors, two Pearson Product-Moment intercorrelational matrices were computed (women-fathers, women-mothers). Additionally, these matrices provided statistical information for hypotheses six and twelve.

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[23] J. P. Guilford, Fundamental Statistics in Psychology and Education, 4th Edition (New York: McGraw-Hill, 1965), p. 95.

The same coefficient of correlation formula used for the PCR and EPPS intercorrelations was used for the PCR subtest intercorrelations.

### PCR Inter-Parent Correlations

To determine the degree to which the women in the intact family group perceived their parents as separate entities, an inter-parent correlation matrix was computed for each PCR subtest. Correlations were sought to determine if the subjects in the present study showed a "halo" effect in their perceptions of their parents, as was discussed by Roe.

The same coefficient of correlation formula used for the PCR and EPPS intercorrelations and for the PCR subtest intercorrelation was employed for the inter-parent correlations.

### Statistical Treatment of Data Related Specifically to the Stated Hypotheses

#### Hypotheses One and Two

Support for the proposition that disruption in the family environment is an important factor in the vocational choice of freshmen women would be obtained if the mean score of intact family women choosing person occupations was higher with statistical significance on those PCR subtests and EPPS scales defined as person-oriented relationships, than those women from disrupted family environments. The proposition would also gain support if the mean score of women from disrupted families choosing non-person occupations was significantly higher on those PCR subtests and EPPS scales defined as non-person oriented family relationships, than women from intact family environments.

Since wide deviations in the variances of the PCR subtest and EPPS scale scores affect the mean differences, F ratios were computed for each PCR subtest and EPPS scale in all configurations. A significant F will indicate that there are non-chance variations among the means of the PCR and the means of the EPPS. The following formula was used to compute the F ratios:[24]

$$F = \frac{s_1^2}{s_2^2}$$

$s_1^2$ = larger variance

$s_2^2$ = smaller variance

If the F test was significant, $\underline{t}$ was computed by the following formula for uncorrelated means:[25]

$$\underline{t} = \frac{M_1 - M_2}{\sqrt{\frac{X_1^2 + X_2^2}{N_i(N_i - 1)}}}$$

$M_1$ and $M_2$ = means of the two samples

$X_1^2$ and $X_2^2$ = sums of squares in the two samples

$N_i(N_i - 1)$ = numbers of cases in two samples of equal size.

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[24] Jerome C. R. Li, Statistical Inference I (Ann Arbor, Michigan: Edwards Brothers, Inc., 1964), p. 119.

[25] Guilford, Fundamental Statistics . . ., 4th Edition, p. 184.

If the F test was not significant, $t$ was computed by the following formula for uncorrelated means:[26]

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\left[\Sigma\Sigma X^2 - \frac{(\Sigma X_1)^2}{n_1} - \frac{(\Sigma X_2)^2}{n_2}\right]\left[\frac{1}{n_1} + \frac{1}{n_2}\right]}}$$

$$\frac{}{n_1 + n_2 - 2}$$

$\bar{X}$ = mean number of scores

d. f. = $n_1 + n_2 - 2$

Hypotheses Three through Twelve

Support for Roe's theory would be obtained if the mean score of those women selecting toward person occupations was higher with statistical significance on those PCR subtests defined as person-oriented relationships (e. g., Pro and Lov) than those subjects selecting not toward person occupations. Roe's theory would also gain support if the mean score of those subjects selecting not toward person occupations was significantly higher on those PCR subtests defined as non-person-oriented familial relationships (e. g., Rej and Dem) than those subjects selecting toward person occupations.

Since wide deviations in the variances of the PCR subtest scores affect the mean differences, F ratios were computed in all configurations. The formulas used to compute F ratios and $t$ values were the same as those previously cited.

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[26] Ibid., p. 185.

In order to further test the person, non-person rationale, a Median $X^2$ test using a two-by-two contingency table was computed for each PCR subtest for women from intact and disrupted families.

The subjects were dichotomized on their person, non-person occupational choice and whether their cumulative score on any PCR subtest fell above or below the median (see Figure 3 for the contingency table).

FIGURE 3

CONTINGENCY TABLE FOR PCR SUBTESTS

| | Women Selecting Person Occupations | Women Selecting Non-Person Occupations |
|---|---|---|
| Subjects Above the Median | | |
| Subjects Below the Median | | |

The formula used to compute $X^2$ was:

$$X^2 = \frac{(fo - fe)^2}{fe}$$

fo = Observed frequency

fe = Expected frequency

Roe's theory was supported on any PCR subtest if the observed frequency of those subjects above the median who selected person occupations was significantly different from expected frequency. Roe's theory was also supported by those non-person oriented PCR subtests if the observed frequency of those subjects above the median who selected non-person occupations was significantly different from expected frequency.

Hypotheses Thirteen and Fourteen

These two hypotheses are based upon positive and negative combinations of PCR subtests. If Roe's theory is valid, various combinations of positive behavior (Pro, Cas, Lov, Rew S-L, and Rew D-O) should operate in conjunction to provide a more powerful impetus toward selection of person-oriented occupations. This would also be true of the various combinations of negative behavior (Rej, Neg, Dem, Pun S-L, and Pun D-O) which would provide a more powerful impetus toward selection of non-person occupations.

This combining of the PCR subtests to provide a total parent-child relationship of either positive or negative nature was then tested by F and *t* tests. The conditions stated earlier regarding the F test and the appropriateness of the *t* test also pertained to hypotheses thirteen and fourteen. The formulas previously shown were utilized.

Hypotheses Fifteen through Thirty-three

Validation support for the PCR would be obtained if the mean score of the women selecting toward person occupations was signifi-

cantly higher on those EPPS scales defined as person-oriented than the mean scores of women selecting not toward person occupations. Validation support for the PCR would also be obtained if the mean scores of those subjects selecting not toward person occupations was significantly higher on those EPPS scales defined as non-person-oriented than those women selecting toward person occupations.

## Summary

In this chapter the selection of the sample, the instruments employed, administration and scoring of the PCR and the EPPS, and the statistical treatment of the derived data have been discussed.

Chapter IV contains an analysis of all the data obtained to support or to reject the hypotheses formulated in Chapter I.

CHAPTER IV

# RESULTS

## Investigation of Appropriateness of Using Parametric Statistics

The tests for normality of distribution (see Chapter III, pp. 37-38) showed that three of the nine randomly selected PCR subtests were not statistically significant. Seven of the eight randomly selected EPPS scales were not statistically significant. The hypothesis of normality was accepted for these ten subtests and scales. The cumulative $X^2$ tests of normality are shown in Table 2 and Table 3. Appendix VII and Appendix VIII contain the frequency distributions of the six PCR subtests and the one EPPS scale for which the statistical null hypothesis of normality was rejected. An inspection of these frequency distributions revealed that they approximated Guilford's criteria[1] for the use of parametric statistics.

## EPPS and PCR Subtest Ranges, Means, and Standard Deviations

To assist in the comparison of the EPPS scales and the PCR subtests and for descriptive purposes, ranges, means, and standard

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[1]Guilford, Fundamental Statistics . . ., 3rd edition, p. 150.

deviations were computed for each PCR subtest in the two configurations (women-mothers, women-fathers), and for each EPPS scale for women in the intact and the disrupted family environments. These values are presented in Table 4 and Table 5.

TABLE 2

CUMULATIVE CHI SQUARE VALUES FOR RANDOMLY SELECTED PCR SUBTESTS TO DETERMINE DISTRIBUTION NORMALITY

| PCR Subtest | Intact Family Mother | Intact Family Father | Disrupted Family Father Absent |
|---|---|---|---|
| Lov | 72.224[a] | | |
| Neg | | 28.530[a] | |
| Dem | | 9.102[b] | |
| Cas | | 104.766[a] | |
| Pro | 46.875[a] | | |
| Rew S-L | 24.300[c] | | |
| Rew D-O | | | 5.290[d] |
| Pun S-L | | | 8.740[c] |
| Pun D-O | | | 2.810[d] |

[a]Significant at .05 level, with 6 d. f.

[b]Not significant, d. f. = 7.

[c]Significant at .05 level, with 4 d. f.

[d]Not significant, d. f. = 5.

TABLE 3

CUMULATIVE CHI SQUARE VALUES FOR RANDOMLY SELECTED EPPS SCALES TO DETERMINE DISTRIBUTION NORMALITY

| EPPS Scale | Intact Family | Disrupted Family Father Absent |
|---|---|---|
| Nur | | 1.179[a] |
| Agg | | 5.080[a] |
| Int | | 10.790[a] |
| Ord | | 2.290[b] |
| Dom | 6.170[a] | |
| End | 32.920[c] | |
| Aut | 10.630[d] | |
| Ach | 3.910[b] | |

[a]Not significant, d. f. = 5.

[b]Not significant, d. f. = 4.

[c]Significant beyond .05 level, with 5 d. f.

[d]Not significant, d. f. = 7.

TABLE 4

PCR RANGES, MEANS, AND STANDARD DEVIATIONS

| PCR Subtest | | Intact Family (N = 116) Mother | Intact Family (N = 116) Father | Disrupted Family (N = 116) Father Absent | Disrupted Family (N = 116) Mother Absent |
|---|---|---|---|---|---|
| Pro | | | | | |
| | Range | 25- 66 | 24- 67 | 26- 52 | 31- 68 |
| | Mean | 42.560 | 45.870 | 42.920 | 46.800 |
| | S.D. | 7.610 | 9.846 | 7.645 | 11.289 |
| Pun | S-L | | | | |
| | Range | 15- 44 | 14- 46 | 16- 49 | 15- 44 |
| | Mean | 26.258 | 24.172 | 26.217 | 27.466 |
| | S.D. | 5.690 | 5.668 | 5.649 | 7.633 |
| Rej | | | | | |
| | Range | 15- 56 | 15- 54 | 16- 57 | 17- 48 |
| | Mean | 26.155 | 25.784 | 26.861 | 28.600 |
| | S.D. | 7.456 | 7.858 | 8.738 | 9.693 |
| Cas | | | | | |
| | Range | 27- 72 | 24- 65 | 26- 71 | 34- 64 |
| | Mean | 44.525 | 42.775 | 45.900 | 48.400 |
| | S.D. | 7.293 | 7.913 | 9.048 | 9.440 |
| Rew | S-L | | | | |
| | Range | 19- 48 | 12- 49 | 22- 47 | 19- 46 |
| | Mean | 25.939 | 35.284 | 35.792 | 32.900 |
| | S.D. | 5.344 | 6.596 | 5.845 | 7.710 |
| Dem | | | | | |
| | Range | 20- 66 | 27- 69 | 23- 68 | 25- 62 |
| | Mean | 41.543 | 44.155 | 42.762 | 44.866 |
| | S.D. | 8.560 | 8.608 | 9.024 | 9.627 |
| Pun | D-O | | | | |
| | Range | 10- 42 | 10- 42 | 11- 46 | 14- 33 |
| | Mean | 24.560 | 23.689 | 23.316 | 20.733 |
| | S.D. | 6.889 | 7.081 | 6.728 | 6.860 |
| Lov | | | | | |
| | Range | 27- 75 | 23- 27 | 28- 76 | 30- 73 |
| | Mean | 60.810 | 60.034 | 59.396 | 54.800 |
| | S.D. | 9.793 | 11.105 | 10.593 | 11.923 |
| Neg | | | | | |
| | Range | 15- 48 | 15- 56 | 16- 61 | 21- 53 |
| | Mean | 23.818 | 25.405 | 24.980 | 30.800 |
| | S.D. | 6.365 | 7.597 | 7.628 | 10.058 |
| Rew | D-O | | | | |
| | Range | 11- 44 | 10- 46 | 11- 49 | 14- 40 |
| | Mean | 28.405 | 28.525 | 27.544 | 23.800 |
| | S.D. | 6.755 | 8.093 | 6.915 | 8.857 |

TABLE 5

EPPS RANGES, MEANS, AND STANDARD DEVIATIONS

| EPPS Scale | | Intact Family (N = 116) | Disrupted Family Father Absent (N = 101) | Disrupted Family Mother Absent (N = 15) |
|---|---|---|---|---|
| Ach | | | | |
| | Range | 5 - 25 | 4 - 24 | 7 - 23 |
| | Mean | 13.146 | 13.346 | 14.066 |
| | S.D. | 3.959 | 4.932 | 3.881 |
| Def | | | | |
| | Range | 3 - 23 | 2 - 24 | 5 - 21 |
| | Mean | 14.853 | 14.653 | 13.933 |
| | S.D. | 3.959 | 4.932 | 3.881 |
| Ord | | | | |
| | Range | 0 - 22 | 0 - 22 | 3 - 19 |
| | Mean | 9.474 | 9.049 | 9.533 |
| | S.D. | 4.509 | 4.486 | 4.323 |
| Exh | | | | |
| | Range | 6 - 28 | 6 - 28 | 9 - 25 |
| | Mean | 18.517 | 18.950 | 18.466 |
| | S.D. | 4.504 | 4.486 | 4.323 |
| Aut | | | | |
| | Range | 3 - 27 | 3 - 23 | 4 - 20 |
| | Mean | 13.189 | 12.752 | 12.600 |
| | S.D. | 5.049 | 4.782 | 3.737 |
| Aff | | | | |
| | Range | 1 - 25 | 5 - 25 | 8 - 24 |
| | Mean | 14.810 | 15.227 | 15.400 |
| | S.D. | 5.049 | 4.816 | 3.737 |
| Int | | | | |
| | Range | 8 - 27 | 7 - 28 | 11 - 27 |
| | Mean | 18.474 | 17.465 | 18.600 |
| | S.D. | 4.646 | 4.819 | 5.234 |
| Suc | | | | |
| | Range | 1 - 20 | 0 - 21 | 1 - 17 |
| | Mean | 9.525 | 10.534 | 9.400 |
| | S.D. | 4.646 | 4.819 | 5.234 |
| Dom | | | | |
| | Range | 1 - 24 | 2 - 25 | 6 - 20 |
| | Mean | 13.387 | 12.455 | 11.733 |
| | S.D. | 4.656 | 4.731 | 3.534 |
| Aba | | | | |
| | Range | 4 - 27 | 3 - 26 | 8 - 21 |
| | Mean | 14.603 | 15.544 | 16.266 |
| | S.D. | 4.658 | 4.731 | 3.534 |

TABLE 5 -- Continued

| EPPS Scale | Intact Family (N = 116) | Disrupted Family Father Absent (N = 101) | Disrupted Family Mother Absent (N = 15) |
|---|---|---|---|
| Nur | | | |
| Range | 3 - 28 | 6 - 27 | 11 - 22 |
| Mean | 17.206 | 17.623 | 16.886 |
| S.D. | 5.125 | 4.851 | 3.888 |
| Chg | | | |
| Range | 0 - 25 | 1 - 22 | 6 - 15 |
| Mean | 10.793 | 10.376 | 11.133 |
| S.D. | 5.125 | 4.851 | 3.888 |
| End | | | |
| Range | 1 - 26 | 2 - 26 | 1 - 23 |
| Mean | 12.034 | 11.960 | 13.733 |
| S.D. | 5.028 | 5.330 | 7.245 |
| Het | | | |
| Range | 2 - 27 | 2 - 26 | 5 - 27 |
| Mean | 15.965 | 16.029 | 14.266 |
| S.D. | 5.028 | 5.345 | 7.245 |
| Agg | | | |
| Range | 1 - 23 | 1 - 24 | 4 - 18 |
| Mean | 10.931 | 11.970 | 11.066 |
| S.D. | 4.596 | 4.508 | 5.077 |
| Con | | | |
| Range | 9 - 15 | 7 - 15 | 9 - 14 |
| Mean | 12.370 | 11.980 | 11.666 |
| S.D. | 1.483 | 1.902 | 1.290 |

## Reliability of the PCR

An item analysis technique of Tryon[2] using Variance Form[3] was employed to compute reliability. Results for each PCR subtest in the two configurations (women-mothers, women-fathers) for the intact family group are contained in Table 6.

[2]Tryon, Psychological Bulletin, LIX, No. 3 (1959), 229-249.

[3]Ibid.

TABLE 6

PCR SUBTEST RELIABILITIES FOR WOMEN FROM INTACT FAMILIES

| PCR Subtest | Mothers | Fathers |
|---|---|---|
| Pro | .731 | .827 |
| Pun S-L | .686 | .711 |
| Rej | .815 | .861 |
| Cas | .730 | .763 |
| Rew S-L | .684 | .799 |
| Dem | .805 | .811 |
| Pun D-O | .791 | .817 |
| Lov | .890 | .925 |
| Neg | .772 | .825 |
| Rew D-O | .806 | .876 |

The range of reliabilities was from .68 to .93. All the reliabilities compared favorably with those reported by Roe[4] and Siegelman,[5] and were considered to be sufficient for purposes of the present study.

Inter-Parent Correlations of the PCR

Inter-parent correlations of the women from intact families were compared with the inter-parent correlations of Roe's Harvard sample. These data are presented in Table 7.

[4]Roe and Siegelman, Child Development, XXXIV, No. 2 (1963), 358.

[5]Siegelman, unpublished . . .

TABLE 7

PCR INTER-PARENT CORRELATIONS

| PCR Subtest | Harvard Sample | Freshmen Women |
|---|---|---|
| Lov | .495 | .606 |
| Pro | .568 | .701 |
| Dem | .398 | .487 |
| Rej | .569 | .468 |
| Neg | .546 | .573 |
| Cas | .425 | .556 |
| Rew S-L | .550 | .577 |
| Rew D-O | .667 | .753 |
| Pun S-L | .530 | .457 |
| Pun D-O | .639 | .587 |

Inter-parent correlations for Neg and Rew S-L were approximately the same in both studies. Inter-parent correlations for the subtests Lov, Pro, Cas, Rew D-O, and Dem were higher in the current study than in Roe's Harvard study. Inter-parent correlations for Rej, Pun S-L, and Pun D-O were lower in the present study than in Roe's Harvard study. With the exception of the subtest Dem, it appeared that the women from intact families viewed their parents as an entity on the positive subtests, but not on three negative subtests. These women viewed their parents as more of an entity on the subtest Dem than did the Harvard sample.

## Statistical Results Concerning Disruption in the Family Environment

It was conjectured that disruption in the family environments would provide impetus toward selection of non-person occupations and that environments where both parents were present would provide the impetus toward selection of person occupations. Therefore, hypotheses one and two were formulated.

In order to determine if there were significant differences on the PCR, mean scores and variances were computed for the two groups (intact families, disrupted families) by choice of person, non-person occupations. This procedure was followed for both the father and the mother categories. The values of the PCR means and variances are shown in Table 8.

F ratios were computed to establish homogeneity of variance. The *t* tests were employed to determine if any statistically significant differences existed between the means of the intact and the disrupted family groups. If F was either significant or non-significant, the appropriate *t* was computed. As Hays pointed out, the F ratios are dependent upon the distribution, which if atypical can cause rejection of the hypothesis whereas the *t* might be significant.[6] Table 9 and Table 10 contain the values of *t* and F associated with each PCR subtest. The .05 level was used to establish the significance of the *t*'s and F's. These values were used to accept or to reject the statistical null

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[6] William L. Hays, Statistics for Psychologists (New York: Holt, Rinehart, and Winston, 1963), p. 352.

TABLE 8

MEANS AND VARIANCES OF EACH PCR SUBTEST FOR WOMEN FROM INTACT AND DISRUPTED FAMILIES BY CHOICE OF PERSON, NON-PERSON OCCUPATIONS

| PCR Subtest | Intact or Disrupted Family | Person Occupation | | | | Non-Person Occupation | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Mothers | | Fathers | | Mothers | | Fathers | |
| | | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ |
| Pro | IF | 43.192 | 58.377 | 46.216 | 103.269 | 40.969 | 54.905 | 45.000 | 82.687 |
| | DF | 43.037 | 61.834 | 47.545 | 158.872 | 42.476 | 47.761 | 44.750 | 57.583 |
| Pun S-L | IF | 25.915 | 37.565 | 24.024 | 36.731 | 27.121 | 19.047 | 24.545 | 21.130 |
| | DF | 26.137 | 30.955 | 29.636 | 52.854 | 26.523 | 37.161 | 21.500 | 31.000 |
| Rej | IF | 26.000 | 62.707 | 25.915 | 69.200 | 26.545 | 38.880 | 35.454 | 44.443 |
| | DF | 26.712 | 77.397 | 31.272 | 99.818 | 27.428 | 75.657 | 21.250 | 7.583 |
| Cas | IF | 44.469 | 57.983 | 42.566 | 64.516 | 44.666 | 42.541 | 43.303 | 59.342 |
| | DF | 45.137 | 87.664 | 49.909 | 83.491 | 48.809 | 51.861 | 44.250 | 106.250 |
| Rew S-L | IF | 36.090 | 29.423 | 35.566 | 44.516 | 35.636 | 27.113 | 34.575 | 41.564 |
| | DF | 35.887 | 34.202 | 31.090 | 54.091 | 35.428 | 35.557 | 37.500 | 57.000 |
| Dem | IF | 40.927 | 68.214 | 43.783 | 83.928 | 43.090 | 85.085 | 45.090 | 50.022 |
| | DF | 43.312 | 88.318 | 46.818 | 73.163 | 40.666 | 52.533 | 39.500 | 136.333 |
| Pun D-O | IF | 24.481 | 48.594 | 23.879 | 51.912 | 24.757 | 46.001 | 23.212 | 46.859 |
| | DF | 23.812 | 51.572 | 20.727 | 41.218 | 21.428 | 17.957 | 20.750 | 82.250 |
| Lov | IF | 61.144 | 102.491 | 60.192 | 125.938 | 59.969 | 81.030 | 59.636 | 120.301 |
| | DF | 59.337 | 109.213 | 51.454 | 146.672 | 59.619 | 129.647 | 64.000 | 20.666 |
| Neg | IF | 23.698 | 39.164 | 25.469 | 59.886 | 24.121 | 45.109 | 25.242 | 53.939 |
| | DF | 24.625 | 56.186 | 33.272 | 115.018 | 26.333 | 66.633 | 24.000 | 4.666 |
| Rew D-O | IF | 28.783 | 43.415 | 29.216 | 61.830 | 27.454 | 51.443 | 26.787 | 72.609 |
| | DF | 27.737 | 47.284 | 23.000 | 95.600 | 26.809 | 51.661 | 26.000 | 38.666 |

TABLE 9

PCR t AND F VALUES FOR WOMEN SELECTING PERSON OCCUPATIONS[a]

| PCR Subtest | Mothers t[b] | Mothers F[c] | Fathers t[d] | Fathers F[e] |
|---|---|---|---|---|
| Pro | .369 | 1.059 | .992 | 1.538 |
| Pun S-L | .244 | 1.213 | 1.981 | 1.438 |
| Rej | .555 | 1.234 | 1.959 | 1.442 |
| Cas | .506 | 1.511 | 2.421 | 1.294 |
| Rew S-L | .232 | 1.162 | 2.065 | 1.215 |
| Dem | 1.742 | 1.294 | 1.039 | 1.147 |
| Pun D-O | .647 | 1.061 | 1.377 | 1.259 |
| Lov | 1.134 | 1.065 | 2.416 | 1.164 |
| Neg | .867 | 1.434 | 3.010 | 1.920 |
| Rew D-O | 1.003 | 1.089 | 2.404 | 1.546 |

[a]In the mother configuration 83 women were from intact families, 80 were from disrupted families. In the father configuration 83 women were from intact families, 11 were from disrupted families.

[b]Significant t at .05 level, with 162 d. f. = 1.976.

[c]When the variance of those women from intact families was greater than the variance of those from disrupted families the value of F which was significant at the .05 level = 1.454. When the reverse situation existed, F = 1.453.

[d]Significant t at .05 level, with 93 d. f. = 1.987.

[e]When the variance of those women from intact families was greater than the variance of those from disrupted families the value of F which was significant at the .05 level = 2.611. When the reverse situation existed, F = 1.951.

TABLE 10

PCR *t* AND F VALUES FOR WOMEN SELECTING NON-PERSON OCCUPATIONS[a]

| PCR Subtest | Mothers | | Fathers | |
|---|---|---|---|---|
| | *t*[b] | F[c] | *t*[d] | F[e] |
| Pro | .746 | 1.149 | .052 | 1.435 |
| Pun S-L | .422 | 1.951 | 1.227 | 1.467 |
| Rej | .437 | 1.945 | 1.236 | 5.860 |
| Cas | .110 | 1.219 | .224 | 1.790 |
| Rew S-L | .136 | 1.311 | .844 | 1.371 |
| Dem | 1.025 | 1.619 | 1.394 | 2.725 |
| Pun D-O | 1.621 | 2.561 | .658 | 1.755 |
| Lov | .126 | 1.599 | .780 | 5.821 |
| Neg | 1.090 | 1.477 | .332 | 11.560 |
| Rew D-O | 1.992 | 1.004 | .178 | 1.877 |

[a]In the mother configuration 33 women were from intact families, 21 were from disrupted families. In the father configuration 33 women were from intact families, 4 were from disrupted families.

[b]Significant *t* at .05 level, with 53 d. f. = 2.006.

[c]When the variance of those women from intact families was greater than the variance of those from disrupted families the value of F which was significant at the .05 level = 2.03. When the reverse situation existed, F = 1.91.

[d]Significant *t* at .05 level, with 36 d. f. = 2.028.

[e]When the variance of those women from intact families was greater than the variance of those women from disrupted families, the value of F which was significant at the .05 level = 8.62. When the reverse situation existed, F = 2.90.

TABLE 11

MEANS AND VARIANCES OF EACH EPPS SCALE FOR WOMEN FROM INTACT AND DISRUPTED FAMILIES BY CHOICE OF PERSON, NON-PERSON OCCUPATIONS

| EPPS Scale | Intact or Disrupted Family | Person Occupation | | | | Non-Person Occupation | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Mothers | | Fathers | | Mothers | | Fathers | |
| | | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ |
| Ach | IF | 12.381 | 13.556 | 12.831 | 13.556 | 13.939 | 20.683 | 13.939 | 20.683 |
| | DF | 13.150 | 22.989 | 14.818 | 13.363 | 14.095 | 30.090 | 12.000 | 18.000 |
| Def | IF | 15.168 | 13.556 | 15.168 | 13.556 | 14.060 | 20.683 | 14.069 | 20.683 |
| | DF | 14.850 | 22.989 | 13.181 | 13.363 | 13.904 | 30.090 | 16.000 | 18.000 |
| Ord | IF | 9.277 | 19.885 | 9.277 | 19.885 | 9.969 | 21.780 | 9.969 | 21.780 |
| | DF | 8.787 | 20.118 | 8.000 | 12.000 | 10.047 | 19.847 | 13.750 | 14.916 |
| Exh | IF | 18.710 | 19.817 | 18.710 | 19.817 | 18.030 | 21.780 | 18.030 | 21.780 |
| | DF | 19.212 | 20.118 | 20.000 | 12.000 | 17.952 | 19.847 | 14.250 | 14.916 |
| Aut | IF | 13.084 | 25.029 | 13.084 | 25.029 | 13.454 | 27.380 | 13.454 | 27.380 |
| | DF | 12.362 | 24.537 | 12.818 | 16.763 | 14.238 | 14.490 | 12.000 | 8.666 |
| Aff | IF | 14.915 | 25.029 | 14.915 | 25.029 | 14.545 | 27.380 | 14.545 | 27.380 |
| | DF | 15.637 | 24.537 | 15.181 | 16.763 | 13.666 | 15.833 | 16.000 | 8.666 |
| Int | IF | 18.722 | 20.275 | 18.722 | 20.275 | 17.848 | 25.070 | 17.848 | 25.070 |
| | DF | 17.762 | 24.866 | 18.545 | 28.872 | 16.333 | 16.233 | 18.750 | 31.583 |
| Suc | IF | 9.277 | 20.275 | 9.277 | 20.275 | 10.151 | 25.070 | 10.151 | 25.070 |
| | DF | 10.237 | 24.866 | 9.454 | 28.872 | 11.666 | 16.233 | 9.250 | 31.583 |

TABLE 11 -- Continued

| EPPS Scale | Intact or Disrupted Family | Person Occupation | | | | Non-Person Occupation | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Mothers | | Fathers | | Mothers | | Fathers | |
| | | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ |
| Dom | IF | 13.493 | 20.911 | 13.493 | 20.911 | 13.121 | 24.234 | 13.121 | 24.234 |
| | DF | 12.650 | 20.964 | 12.636 | 12.254 | 11.714 | 28.415 | 9.250 | 6.250 |
| Aba | IF | 14.506 | 20.911 | 14.506 | 20.911 | 14.848 | 24.320 | 14.848 | 24.320 |
| | DF | 15.350 | 20.964 | 15.363 | 12.254 | 16.285 | 28.414 | 18.750 | 6.250 |
| Nur | IF | 17.518 | 25.106 | 17.518 | 25.106 | 16.424 | 29.189 | 16.424 | 29.189 |
| | DF | 17.825 | 22.753 | 16.636 | 16.854 | 16.857 | 27.028 | 17.500 | 13.666 |
| Chg | IF | 10.481 | 25.106 | 10.481 | 25.106 | 11.575 | 29.189 | 11.575 | 29.189 |
| | DF | 10.175 | 22.753 | 11.363 | 16.854 | 11.142 | 27.028 | 10.500 | 13.666 |
| End | IF | 11.590 | 24.488 | 11.590 | 24.488 | 13.151 | 26.320 | 13.151 | 26.320 |
| | DF | 11.137 | 25.234 | 11.272 | 48.218 | 15.095 | 29.390 | 20.500 | 1.000 |
| Het | IF | 16.409 | 24.488 | 16.409 | 24.488 | 14.848 | 26.320 | 14.848 | 26.320 |
| | DF | 16.850 | 25.445 | 16.727 | 48.218 | 12.904 | 29.390 | 7.500 | 1.000 |
| Agg | IF | 10.987 | 21.475 | 10.987 | 21.475 | 10.787 | 20.859 | 10.787 | 20.859 |
| | DF | 11.925 | 19.006 | 11.545 | 25.872 | 12.142 | 26.528 | 9.750 | 30.916 |
| Con | IF | 12.433 | 2.516 | 12.433 | 2.516 | 12.212 | 1.422 | 12.212 | 1.422 |
| | DF | 11.975 | 3.822 | 11.818 | 1.363 | 12.000 | 3.000 | 11.250 | 2.916 |

TABLE 12

EPPS t AND F VALUES FOR WOMEN FROM INTACT AND DISRUPTED HOMES CHOOSING PERSON OCCUPATIONS[a]

| EPPS Scale | Mothers | | Fathers | |
|---|---|---|---|---|
| | t[b] | F[c] | t[d] | F[e] |
| Ach | .483 | 1.695 | 1.691 | 1.014 |
| Def | .815 | 1.695 | 1.691 | 1.014 |
| Ord | .707 | 1.011 | .916 | 1.657 |
| Exh | .725 | 1.011 | .928 | 1.651 |
| Aut | .936 | 1.020 | .169 | 1.493 |
| Aff | .928 | 1.020 | .169 | 1.493 |
| Int | 1.306 | 1.226 | .120 | 1.424 |
| Suc | 1.306 | 1.226 | .120 | 1.424 |
| Dom | 1.190 | 1.002 | .600 | 1.706 |
| Aba | 1.192 | 1.002 | .600 | 1.706 |
| Nur | .405 | 1.103 | .561 | 1.489 |
| Chg | .403 | 1.102 | .561 | 1.489 |
| End | .586 | 1.030 | .192 | 1.969 |
| Het | .570 | 1.039 | .192 | 1.969 |
| Agg | 1.345 | 1.129 | .372 | 1.204 |
| Con | .526 | 1.519 | 1.344 | 1.845 |

[a]In the mother configuration 83 women were from intact families, 80 were from disrupted families. In the father configuration 83 women were from intact families, 11 were from disrupted families.

[b]Significant t at .05 level, with 162 d. f. = 1.976.

[c]When the variance of those women from intact families was greater than the variance of those from disrupted families the value of F which was significant at the .05 level = 1.454. When the reverse situation existed, F = 1.453.

[d]Significant t at .05 level, with 93 d. f. = 1.987.

[e]When the variance of those women from intact families was greater than the variance of those from disrupted families, the value of F which was significant at the .05 level = 2.611. When the reverse situation existed, F = 1.951.

TABLE 13

EPPS t AND F VALUES FOR WOMEN FROM INTACT AND DISRUPTED HOMES CHOOSING NON-PERSON OCCUPATIONS[a]

| EPPS Scale | Mothers | | Fathers | |
|---|---|---|---|---|
| | t[b] | F[c] | t[d] | F[e] |
| Ach | .077 | 1.454 | .810 | 1.149 |
| Def | .114 | 1.454 | .810 | 1.149 |
| Ord | .613 | 1.097 | 1.552 | 1.460 |
| Exh | .613 | 1.097 | 1.552 | 1.460 |
| Aut | .596 | 1.889 | .541 | 3.159 |
| Aff | .661 | 1.729 | .541 | 3.159 |
| Int | 1.173 | 1.544 | .336 | 1.259 |
| Suc | 1.173 | 1.544 | .336 | 1.259 |
| Dom | .997 | 1.168 | 1.536 | 3.877 |
| Aba | 1.019 | 1.168 | 1.545 | 3.891 |
| Nur | .293 | 1.079 | .385 | 2.135 |
| Chg | .293 | 1.079 | .386 | 2.135 |
| End | 1.336 | 1.116 | 2.826 | 26.320 |
| Het | 1.336 | 1.116 | 2.826 | 26.320 |
| Agg | 1.018 | 1.271 | .357 | 1.482 |
| Con | .536 | 2.109 | .344 | 2.050 |

[a]In the mother configuration 33 women were from intact families, 21 from disrupted families. In the father configuration 33 women were from intact families, 4 from disrupted families.

[b]Significant t at .05 level, with 53 d. f. = 2.066.

[c]When the variance of those women from intact families was greater than the variance of those from disrupted families, the value of F which was significant at the .05 level = 2.03. When the reverse situation existed, F = 1.91.

[d]Significant t at .05 level, with 36 d. f. = 2.028.

[e]When the variance of those women from intact families was greater than the variance of those from disrupted families, the value of F which was significant at the .05 level = 8.62. When the reverse situation existed, F = 2.90.

hypothesis of no differences existing between the variances of the means of the two father categories (intact families, disrupted families), for both person and non-person occupations. These values were also used to accept or reject the statistical null hypothesis of no differences existing between the variances of the means of the two mother categories for both person and non-person occupations.

The same statistical procedures were followed for all the EPPS data. All relevant EPPS data are presented in Tables 11, 12, and 13.

## Hypothesis One

The first hypothesis stated that PCR and EPPS scores of freshmen college women from mother-absent homes will not be significantly different from scores of freshmen college women from homes where both parents have been present.

None of the PCR and EPPS data differed significantly for women from intact families and women from mother-absent homes. Therefore, hypothesis one was supported.

Repeatedly, the mother-absent category showed statistical significance in person, non-person orientation of occupational choice for freshmen women. However, it would be imprudent to attach psychological significance to data where chance factors might account for differences. While hypothesis one was supported by the data, no further discussion was possible since proper statistical procedure required a more significant number than found in the mother-absent category (N = 15). Since t and F tests required a pairing of the means and variances, the women-father relationship for women from intact homes could not be discussed on the disruption factor.

## Hypothesis Two

The second hypothesis stated that PCR and EPPS scores of freshmen college women from father-absent homes will not be significantly different from scores of freshmen college women from homes where both parents have been present.

None of the PCR and EPPS data differ significantly for women from intact families and women from father-absent homes. Therefore, hypothesis two was supported.

Women from intact family environments tended to recall a more Lov, Pro, Rew D-O, and Rew S-L relationship with their parents than did women from disrupted family environments. For the Cas subtest, the difference between the means was not in the expected direction: disrupted family means were larger than intact family means. Women from father-absent homes recalled their relationship as being more casual. A possible explanation for the daughter recalling her mother as "letting her do pretty much as she pleased" may be related to the two roles (breadwinner and maternal) usually assumed by the mother as the remaining parent in the home.

Women from disrupted families tended to recall their mother relationship as more Rej and Neg than women from intact families. For the Rej subtest there was a significant F ratio, but not a significat $t$ in the non-person mother category. There was significant variability among women from disrupted families (disrupted family variance = 75.657, intact family variance = 38.880).

Women from intact families who selected non-person occupations tended to recall a Dem relationship with the mother. However, among

women who selected person occupations, women from disrupted families tended to recall a Dem relationship with the mother.

Women from intact families tended to recall a more Pun D-O and Pun S-L relationship with their mothers than did women from disrupted families. It was interesting to note that women from intact homes tended to recall a more positive as well as a more punitive relationship than did women from disrupted families.

Women from intact family environments tended to respond to EPPS scales indicative of Int, Dom, Def, and Chg needs than did women from disrupted family environments. These scales supported the supposition that psychological "needs" hypothesized as related to person occupations also appertained to family environment.

Women from disrupted family environments tended to respond more frequently to EPPS items indicative of Suc, Aba, Ach, and Agg needs than did women from intact family environments. These scales supported the supposition that psychological "needs" hypothesized as related to non-person-oriented occupations also appertained to family environment.

The differences between the means on the Nur scale were not in the expected direction: disrupted family means were larger than intact family means. Women from father-absent homes tended to respond to EPPS items inticative of Nur needs more frequently than women from intact families. This could have resulted from unfulfilled needs which may have caused a freshman woman to seek satisfactory interpersonal relationships by helping others.

For the remainder of the EPPS scales (Exh, Aff, Aut, Ord, Het, and End), there were differences in the person, non-person choices of women from intact and father-absent family environments, but no clear patterns emerged. The difference between the means for person-oriented occupations in the women-mother category (intact family) was larger for Aut, Ord, and End needs. The difference between the means for person-oriented occupations in the father-absent category was larger for Exh, Aff, and Het. The difference between the means for non-person-oriented occupations for the women-mother category (intact family) was larger for Aff, Exh, and Het. The difference between the means for non-person occupations of the father-absent category was larger for Aut, Ord, and End.

Hypotheses Three Through Twelve

All subjects were dichotomized on each PCR subtest in the two configurations (women-mother, women-father). The dichotomy was determined by the subject's selection of either a person occupation or a non-person occupation. There were 116 women from intact homes: 83 selected person occupations and 33 selected non-person occupations. There were 116 women from disrupted homes: 91 selected person occupations and 25 selected non-person occupations. This selection of predominantly person-oriented occupations by women of both groups is in accord with cultural expectations.[7]

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[7]Roe stated that "men are more interested in scientific activities, mechanics, physical activities, politics, and sales activities. . . . Women show greater interest than men do in people, social and clerical work, teaching, literature, art, and music." Roe, The Psychology of . . ., p. 87.

Using the above dichotomy (person, non-person), mean scores and variances were computed for the experimental group and the control group on each PCR subtest in the two configurations (women-mothers, women-fathers). The values of these means and variances are shown in Table 14.

F ratios were computed to establish homogeneity of variance. The t tests were employed to determine if any statistically significant differences existed between the means of the person, non-person groups. The values of t and F associated with each PCR subtest are contained in Table 15 and Table 16; the .05 level of significance was used. These values were used to accept or to reject the statistical null hypothesis of no differences existing between the variances or means.

To further test the person, non-person rationale, a Median Chi Square Test ($X^2$) using a two-by-two contingency table was computed for each subtest of the PCR, for all subjects. A Yates correction[8] was used to compensate for the small numbers in some cells of the mother-absent categories. Not all $X^2$ values were used, since Guilford indicates that where there are fewer than two entries in a cell, $X^2$ even with the Yates correction should not be used.[9] The $X^2$ was computed to test the null hypothesis of no significant difference between

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[8]Guilford, Fundamental Statistics . . ., 4th edition, p. 237.

[9]Ibid., p. 238.

TABLE 14

MEANS AND VARIANCES OF EACH PCR SUBTEST BY CHOICE OF PERSON, NON-PERSON OCCUPATIONS

| PCR Subtest | Person or Non-Person Occupation | Intact Family | | | | Disrupted Family | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Mothers | | Fathers | | Father-Absent | | Mother-Absent | |
| | | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ |
| Pro | P | 43.192 | 58.377 | 46.216 | 103.269 | 43.037 | 61.834 | 47.545 | 158.872 |
| | NP | 40.969 | 54.905 | 45.000 | 82.687 | 42.476 | 47.761 | 44.750 | 57.583 |
| Pun S-L | P | 25.915 | 37.565 | 24.024 | 36.731 | 26.137 | 30.955 | 29.636 | 52.854 |
| | NP | 27.121 | 19.047 | 24.545 | 21.130 | 26.523 | 37.161 | 21.500 | 31.000 |
| Rej | P | 26.000 | 62.707 | 25.915 | 69.200 | 26.712 | 77.397 | 31.272 | 99.818 |
| | NP | 26.545 | 38.880 | 25.454 | 44.443 | 27.428 | 75.657 | 21.250 | 7.583 |
| Cas | P | 44.469 | 57.983 | 42.566 | 64.516 | 45.137 | 87.664 | 49.909 | 83.491 |
| | NP | 44.666 | 42.451 | 43.303 | 59.342 | 48.809 | 51.861 | 44.250 | 106.250 |
| Rew S-L | P | 36.060 | 29.423 | 35.566 | 44.516 | 35.887 | 34.202 | 31.090 | 54.091 |
| | NP | 35.636 | 27.113 | 34.575 | 41.564 | 35.428 | 35.557 | 37.500 | 57.000 |
| Dem | P | 40.927 | 68.214 | 43.783 | 83.928 | 43.312 | 88.318 | 46.818 | 73.163 |
| | NP | 43.090 | 85.085 | 45.090 | 50.022 | 40.666 | 52.533 | 39.500 | 136.333 |
| Pun D-O | P | 24.481 | 48.594 | 23.879 | 51.912 | 23.812 | 51.572 | 20.727 | 41.218 |
| | NP | 24.757 | 46.001 | 23.212 | 46.859 | 21.428 | 17.957 | 20.750 | 82.250 |
| Lov | P | 61.144 | 102.491 | 60.192 | 125.938 | 59.337 | 109.213 | 51.454 | 146.672 |
| | NP | 59.969 | 81.030 | 59.636 | 120.301 | 59.619 | 129.647 | 64.000 | 20.666 |
| Neg | P | 23.698 | 39.164 | 25.469 | 59.886 | 24.625 | 56.186 | 33.372 | 115.018 |
| | NP | 24.121 | 45.109 | 25.242 | 53.939 | 26.333 | 66.633 | 24.000 | 4.666 |
| Rew D-O | P | 28.783 | 43.415 | 29.216 | 61.830 | 27.737 | 47.284 | 23.000 | 95.600 |
| | NP | 27.454 | 51.443 | 26.787 | 72.609 | 26.809 | 51.661 | 26.000 | 38.666 |

TABLE 15

PCR t AND F VALUES ON A PERSON, NON-PERSON DICHOTOMY FOR WOMEN FROM INTACT FAMILIES
N = 116[a]

| PCR Subtest | Mothers | | Fathers | |
|---|---|---|---|---|
| | t[b] | F[c] | t[b] | F[c] |
| Pro | 1.432 | 1.063 | .601 | 1.248 |
| Pun S-L | 1.030 | 1.972 | .447 | 1.738 |
| Rej | .355 | 1.612 | .285 | 1.557 |
| Cas | .131 | 1.365 | .452 | 1.087 |
| Rew S-L | .385 | 1.085 | .731 | 1.071 |
| Dem | 1.236 | 1.247 | .739 | 1.677 |
| Pun D-O | .195 | 1.056 | .458 | 1.107 |
| Lov | .592 | 1.264 | .243 | 1.046 |
| Neg | .323 | 1.151 | .145 | 1.110 |
| Rew D-O | .961 | 1.118 | 1.472 | 1.174 |

[a]83 women selected person occupations; 33 selected non-person occupations.

[b]Significant t at .05 level, with 115 d. f. = 1.982.

[c]When the variance of those selecting person occupations was greater than the variance of those selecting non-person occupations the value of F which was significant at the .05 level = 1.68. When the reverse situation existed, F = 1.60.

TABLE 16

PCR t AND F VALUES ON A PERSON, NON-PERSON DICHOTOMY
FOR WOMEN FROM DISRUPTED FAMILIES
N = 116[a]

| PCR Subtest | Father-Absent | | Mother-Absent | |
|---|---|---|---|---|
| | t[b] | F[c] | t[d] | F[e] |
| Pro | .300 | 1.294 | .411 | 2.759 |
| Pun S-L | .280 | 1.200 | 2.018 | 1.704 |
| Rej | .355 | 1.022 | 3.026 | 13.163 |
| Cas | 1.685 | 1.690 | 1.030 | 1.272 |
| Rew S-L | .321 | 1.039 | 1.506 | 1.053 |
| Dem | 1.209 | 1.681 | 1.340 | 1.863 |
| Pun D-O | 1.947 | 2.871 | .005 | 1.995 |
| Lov | .109 | 1.187 | 1.984 | 7.097 |
| Neg | .921 | 1.185 | 1.698 | 24.650 |
| Rew D-O | .550 | 1.092 | .566 | 2.472 |

[a]101 women took the mother PCR: 80 selected person occupations, 21 selected non-person occupations. 15 women took the father PCR: 11 selected person occupations, 4 selected non-person occupations.

[b]Significant t at .05 level, with 100 d. f. = 1.984.

[c]When the variance of those selecting person occupations was greater than the variance of those selecting non-person occupations, the value of F which was significant at the .05 level = 1.92. When the reverse situation existed, F = 1.71.

[d]Significant t at .05 level with 14 d. f. = 2.145.

[e]When the variance of those selecting person occupations was greater than the variance of those selecting non-person occupations, the value of F which was significant at the .05 level = 8.78. When the reverse situation existed, F = 3.71.

the women scoring above or below the median on each PCR variable. These $X^2$ values are shown in Table 17.

Hypothesis Three

The third hypothesis stated that freshmen college women who have experienced a Loving relationship in their homes should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The $X^2$ tests to determine if scores above and below the median were dependent upon the person, non-person dichotomy showed that there were no significant differences in any of the categories. Therefore, hypothesis three was not supported.

The difference between the means was in the expected direction for women from intact homes: the person mean was greater than the non-person mean. However, in the father-absent group the direction was toward non-person orientation, i. e., women from father-absent homes who recalled a Lov parental relationship tended to select non-person occupations.

Roe and Siegelman found a significant difference for person, non-person orientation on the Lov subtest of the father PCR. Harvard seniors who viewed their father relationship as less loving tended to choose non-person occupations. This finding supported Roe's theory.[10] Green found that the Lov relationship for seventh grade girls and boys

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[10] Roe and Siegelman, The Origin of . . ., p. 29.

TABLE 17

VALUES OF $X^2$ FOR PCR SUBTEST SCORES DICHOTOMIZED ON PERSON, NON-PERSON OCCUPATIONAL CHOICE[a]

| PCR Subtest | Intact Family | | Disrupted Family | |
|---|---|---|---|---|
| | Mother | Father | Father Absent | Mother Absent |
| Pro | 1.457 | .831 | .231 | .205 |
| Pun S-L | 4.609 | 1.752 | .593 | N/A[b] |
| Rej | .949 | .315 | .627 | N/A |
| Cas | 1.058 | 2.461 | 3.079 | .205 |
| Rew S-L | .321 | 4.135 | .559 | N/A |
| Dem | 1.457 | .001 | .000 | 2.864 |
| Pun D-O | .104 | .145 | 1.272 | .205 |
| Lov | .630 | 1.580 | .158 | N/A |
| Neg | .042 | .071 | .037 | N/A |
| Rew D-O | .107 | 1.760 | .025 | N/A |

[a]Significant $X^2$ at .05 level, with 1 d. f. = 3.84.

[b]$X^2$ values were not used because cells had expected frequency of less than 2.

did not support the person-oriented theory. Green commented that it may have been the absence of love which was the discriminating factor.[11]

[11]Laurence B. Green, Relationship with Parents as an Influence upon Vocational Choice of Adolescents: An Investigation of Roe's Theory. Unpublished Doctoral Dissertation, The University of Oklahoma, Norman, Oklahoma, 1964, pp. 57-58.

Hypothesis Four

The fourth hypothesis stated that freshmen college women who have experienced a Protecting relationship in their homes should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The $X^2$ tests showed that there were no significant differences among any of the categories. Therefore, hypothesis four was not supported.

The differences between the means were in the expected direction: the person means were greater than the non-person means. Women from intact families and father-absent families who chose person occupations tended to view their parental relationship as more Pro than women who chose non-person occupations.

Roe and Siegelman found that the Pro relationship as measured by the PCR did not support the person, non-person occupational choice theory.[12] Green found that boys' orientation toward person occupations was influenced by a Pro relationship, but that there was no significant difference on the PCR subtest Pro for seventh grade girls in his sample.[13]

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[12]Roe and Siegelman, The Origin of . . ., p. 29.

[13]Green, Relationship with Parents . . ., p. 58.

## Hypothesis Five

The fifth hypothesis stated that freshmen college women who have experienced a Casual relationship in their homes should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ Tests showed that there were no significant differences among any of the categories. Therefore, hypothesis five was not supported.

The differences between the means were not in the expected direction: the non-person means were greater than the person means in all categories. Women recalling the Cas relationship may have viewed it as being negative or rejecting.

Roe and Siegelman found, with the Harvard sample, that the Cas relationship with the mother was significant for those young men who selected person-oriented occupations.[14]

## Hypothesis Six

The sixth hypothesis stated that freshmen college women who have experienced a Reward Direct-Object relationship in their homes should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ Tests showed that there were no signifi-

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[14] Roe and Siegelman, The Origin of . . ., p. 29.

cant differences among any of the categories. Therefore, hypothesis six was not supported.

The differences between the means were in the expected direction for the women-mother relationship for women from intact homes, and for women from father-absent homes: the person means were greater than the non-person means. The difference between the means was not in the expected direction for the women-father relationship for women from intact homes: the non-person mean was greater than the person mean.

Hypothesis Seven

The seventh hypothesis stated that freshmen college women who have experienced a Reward Symbolic-Love relationship in their homes should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. A Median $X^2$ Test showed that there were no significant differences among women from intact homes for the women-mother configuration. No significant differences were shown among women from the father-absent homes. However, the Median $X^2$ Test for the women from intact homes in the women-father configuration showed a statistically significant difference between the observed and expected frequencies of person-oriented occupational choices ($X^2 = 4.135$). Women from intact homes scoring above the median on the father portion of the PCR tended to choose person-oriented occupations rather than non-person-oriented occupations. Therefore, hypothesis seven was supported for the father relationship for women from intact homes.

That the phenomena of receiving praise from her father should influence a young woman's person, non-person occupational choice can perhaps be explained in psychoanalytic terms. Since the young women in this study were instructed to respond to items on the PCR in terms of how they felt when they were twelve years old, praise by a significant male figure would be particularly important and might, as Roe hypothesized, affect the orientation of vocational choice.

Hypothesis Eight

The eighth hypothesis stated that freshmen college women who have experienced a Rejecting relationship in their homes should choose non-person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ tests showed that there were no significant differences among any of the categories. Therefore, hypothesis eight was not supported.

The differences between the means were in the expected direction for the mother configurations: the non-person means were greater than the person means. The difference between the means was not in the expected direction for the women-father relationship for women from intact homes: the person mean was greater than the non-person mean. Women from intact homes who recalled that their father relationship was rejecting, tended to select person-oriented occupations.

Roe and Siegelman found that person-oriented women social workers experienced more stress and less affection from parents than did the non-person-oriented engineers. "Their choice of occupations

may have resulted from a search for more satisfying personal relations. . . . Some unsatisfying early experiences may lead, not to giving up the quest for such satisfactions, but to a further search for sources of such satisfaction."[15] Thus, if the daughter recalled a rejecting relationship with her father, this might cause her to seek an occupation which would satisfy this longing for interpersonal relationships which she had missed. However, Green found with seventh grade girls, that their non-person orientation was affected by a rejecting relationship with their fathers.[16]

Hypothesis Nine

The ninth hypothesis stated that freshmen college women who have experienced a Neglecting relationship in their homes should choose non-person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ tests showed that there were no significant differences among any of the categories. Therefore, hypothesis nine was not supported.

The means again showed a difference between the mother and the father categories. The differences between the means in the mother categories were in the expected direction: the non-person means were larger than the person means. The difference between the means in the

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[15] Roe and Siegelman, The Origin of . . ., p. 66.

[16] Green and Parker, Journal of Counseling Psychology, XII, No. 4 (1965), 382-383.

father category for women from intact homes was not in the expected direction: the person mean was larger than the non-person mean.

Green and Parker found the Neg relationship with the father to be significant in the non-person occupational choice of seventh grade girls, which supported Roe's theory.[17] If the PCR is valid, and in fact measures the discrete variables Rej and Neg, young girls tend to view these relationships differently than freshmen college women.

Hypothesis Ten

The tenth hypothesis stated that freshmen college women who have experienced a Demanding relationship in the homes should choose non-person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ tests showed that there were no significant differences among any of the categories. Therefore, hypothesis ten was not supported.

The differences between the means were in the expected direction for women from intact homes: the non-person means were greater than the person means. Women from intact families who recalled a Dem relationship with either parent tended to choose a non-person occupation. The difference between the means in the father-absent category was not in the expected direction: the person mean was greater than the non-person mean. This unexpected direction may have reflected the search

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[17] Ibid.

for satisfying interpersonal relationships, as mentioned for the previous hypothesis.

Green and Parker found the perceived Dem relationship of fathers toward their eleven-year-old girls was significant in the non-person occupational choice of girls.[18]

Hypothesis Eleven

The eleventh hypothesis stated that freshmen college women who have experienced a Punishment Direct-Object relationship in their homes should choose non-person occupations.

There were no significant differences in the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ tests showed that there were no significant differences among any of the categories. Therefore, hypothesis eleven was not supported.

The differences between the means were not in the expected direction for the women-fathers relationship for women from intact homes, and for women from father-absent homes: the person means were greater than the non-person means. Women from intact families who recalled a punitive relationship with fathers, and women from father-absent homes who recalled a punitive relationship with mothers tended to select person-oriented occupations. The difference between the means was in the expected direction for the women-mothers relationship for women from intact homes: the non-person mean was greater than the person mean.

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[18] Ibid.

## Hypothesis Twelve

The twelfth hypothesis stated that freshmen college women who have experienced a Punishment Symbolic-Love relationship in their homes should choose non-person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ tests showed that there were no significant differences among women from intact homes for the women-fathers configuration, or among women from father-absent homes. There was a significant difference among women from intact homes for the women-mothers configuration ($X^2 = 4.609$). Hypothesis twelve was supported for women from intact homes, in the women-mothers configuration.

The differences between the means were in the expected direction: the non-person means were greater than the person means. Women who recalled a Pun S-L relationship tended to select non-person occupations. Women from intact homes who recalled their mothers using the withdrawal of love as punishment tended to select non-person occupations. Most of these subjects came from middle class environments, where there is less emphasis on physical punishment as a means of control. It would be expected that women would recall a Pun S-L relationship with their mothers, rather than a Pun D-O relationship.

## Hypotheses Thirteen and Fourteen

An analysis of the PCR intercorrelation matrix (see Table 18) gave varying degrees of support for the positive and negative combinations of PCR subtests. The highest positive relationships were found between Pro and Rew S-L ($r = .482$), Pro and Lov ($r = .494$), and Pro

TABLE 18

PCR SUBTEST INTERCORRELATIONS FOR WOMEN FROM INTACT FAMILIES
(N = 116)

| PCR Subtest | Mother Father | Pro | Pun S-L | Rej | Cas | Rew S-L | Dem | Pun D-O | Lov | Neg | Rew D-O |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pro | M | | -.011 | -.064 | .103 | .242 | .154 | -.132 | .259 | -.235 | .441 |
| | F | | -.055 | -.319 | .189 | .482 | -.032 | -.227 | .494 | -.476 | .656 |
| Pun S-L | M | | | .569 | -.163 | -.133 | .578 | .587 | -.445 | .347 | -.078 |
| | F | | | .600 | -.223 | -.151 | .647 | .616 | -.440 | .386 | -.009 |
| Rej | M | | | | -.081 | -.560 | .472 | .464 | -.747 | .736 | -.209 |
| | F | | | | -.151 | -.588 | .518 | .475 | -.837 | .776 | -.254 |
| Cas | M | | | | | .162 | -.505 | -.449 | .073 | .149 | .117 |
| | F | | | | | .004 | -.459 | -.449 | .038 | .112 | .148 |
| Rew S-L | M | | | | | | -.102 | -.270 | .633 | -.585 | .464 |
| | F | | | | | | -.062 | -.113 | .727 | -.579 | .537 |
| Dem | M | | | | | | | .611 | -.268 | .110 | .000 |
| | F | | | | | | | .593 | -.336 | .233 | -.125 |
| Pun D-O | M | | | | | | | | -.409 | .335 | -.038 |
| | F | | | | | | | | -.370 | .255 | -.012 |
| Lov | M | | | | | | | | | -.761 | .287 |
| | F | | | | | | | | | -.808 | .395 |
| Neg | M | | | | | | | | | | -.228 |
| | F | | | | | | | | | | -.363 |
| Rew D-O | M | | | | | | | | | | |
| | F | | | | | | | | | | |

and Rew D-O ($r = .656$). These correlations were higher for the father than for the mother. This was to be expected because, as Bronfenbrenner pointed out, "There is a tendency for each parent to be relatively more affectionate and lenient with the child of the opposite sex."[19] Positive relationships were also found between Pun S-L and Rej ($r = .600$), Pun S-L and Dem ($r = .647$), Pun S-L and Pun D-O ($r = .615$), and Pun S-L and Neg ($r = .386$).

Using the person, non-person dichotomy, mean scores and variances were computed for the women from intact and disrupted families on the combined PCR subtests. The means and variances are presented in Table 19. The rationale for the use of F and t has been explained earlier. The .05 level was again used to establish the significance of these statistical procedures. The values of t and F associated with the PCR subtest combinations are shown in Table 20.

Hypothesis Thirteen

The thirteenth hypothesis stated that freshmen college women who have experienced a combination of Loving, Protecting, Casual, Reward Direct-Object, and Reward Symbolic-Love relationships in their homes should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. Therefore, hypothesis thirteen was not supported.

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[19] Urie Bronfenbrenner in Parental Attitudes and Behavior, John C. Glidwell, editor (Springfield, Illinois: Charles C. Thomas, 1961), p. 284.

TABLE 19

MEANS AND VARIANCES FOR COMBINED POSITIVE AND NEGATIVE PCR RELATIONSHIPS FOR WOMEN SELECTING PERSON AND NON-PERSON OCCUPATIONS

| PCR Subtest Combination | Toward Person or Non-Person Occupation | Intact Family[a] | | | |
|---|---|---|---|---|---|
| | | Mothers | | Fathers | |
| | | $\bar{x}$ | $s^2$ | $\bar{x}$ | $s^2$ |
| Lov+Pro+Cas+ | | | | | |
| Rew D-O+ | P | 42.730 | 174.323 | 42.751 | 189.718 |
| Rew S-L | NP | 41.739 | 167.425 | 41.860 | 195.840 |
| Rej+Neg+Dem+ | | | | | |
| Pun D-O+ | P | 28.204 | 92.081 | 28.164 | 118.039 |
| Pun S-L | NP | 29.127 | 95.953 | 28.709 | 110.341 |
| | | Disrupted Family[b] | | | |
| | | Father-Absent | | Mother-Absent | |
| | | $\bar{x}$ | $s^2$ | $\bar{x}$ | $s^2$ |
| Lov+Pro+Cas+ | | | | | |
| Rew D-O+ | P | 42.227 | 178.040 | 40.600 | 232.762 |
| Rew S-L | NP | 42.628 | 187.870 | 43.300 | 205.168 |
| Rej+Neg+Dem+ | | | | | |
| Pun D-O+ | P | 28.920 | 113.266 | 32.345 | 142.822 |
| Pun S-L | NP | 28.476 | 90.021 | 25.400 | 94.989 |

[a] Person N = 83
Non-Person N = 33

[b] Person N = 80
Non-Person N = 21

TABLE 20

VALUES OF t AND F FOR PCR SUBTEST COMBINATIONS

| PCR Subtest Combination | Intact[a] Family or Disrupted[b] Family | Mother | | Father | |
|---|---|---|---|---|---|
| | | t | F | t | F |
| Lov+Pro+Cas+ | | | | | |
| Rew D-O+ | IF | .368 | 1.041 | .314 | 1.032 |
| Rew S-L | DF | .038 | 1.055 | .307 | 1.134 |
| Rej+Neg+Dem+ | | | | | |
| Pun D-O+ | IF | .466 | 1.042 | .248 | 1.069 |
| Pun S-L | DF | .175 | 1.258 | 1.037 | 1.503 |

[a]Person N = 83
Non-Person N = 33

[b]Person N = 80
Non-Person N = 21

This was an unexpected finding. It had been anticipated that a combination of the subtests would provide added strength to individual subtests. Green obtained support for his hypothesis that children experiencing this positive combined relationship in the home would orient toward person occupations with seventh grade boys, though not with seventh grade girls.[20]

Hypothesis Fourteen

The fourteenth hypothesis stated that freshmen college women who have experienced a combination of Rejecting, Neglecting, Demanding,

[20]Green, Relationship with Parents . . ., p. 85.

Punishment Direct-Object, and Punishment Symbolic-Love relationships in their homes should choose non-person-oriented occupations.

There were no statistically significant differences in the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. Therefore, hypothesis fourteen was not supported.

Again, this was an unexpected result. The combination of subtests did not provide additional strength to make this negative combination of relationships statistically significant. Green obtained support for his hypothesis that children experiencing this negative combination of relationships in the home would orient toward non-person occupations with seventh grade girls, but not with seventh grade boys.[21]

Hypotheses Fifteen through Thirty-One

Subjects from intact families were dichotomized into person, non-person categories on each EPPS scale. Subjects from disrupted families were dichotomized on each EPPS scale in the two configurations (either mother or father). There were 116 women from intact families: 83 selected person occupations and 33 selected non-person occupations. There were 101 women from father-absent homes: 80 selected person occupations and 21 selected non-person occupations. There were 15 women from mother-absent homes: 11 selected person occupations and 4 selected non-person occupations.

Mean scores and variances were computed for women from intact and disrupted families, using the person, non-person dichotomy. The values of these means and variances are presented in Table 21.

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[21] Ibid.

TABLE 21

MEANS AND VARIANCES OF EACH EPPS SCALE BY CHOICE OF PERSON, NON-PERSON OCCUPATIONS

| EPPS Scale | Person or Non-Person Occupation | Intact Family | | Disrupted Family | | | |
|---|---|---|---|---|---|---|---|
| | | Mothers and Fathers | | Father-Absent | | Mother-Absent | |
| | | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ |
| Ach | P | 12.831 | 13.556 | 13.150 | 22.989 | 14.818 | 13.363 |
| | NP | 13.939 | 20.683 | 14.095 | 30.090 | 12.000 | 18.000 |
| Def | P | 15.168 | 13.556 | 14.850 | 22.989 | 13.181 | 13.363 |
| | NP | 14.060 | 20.683 | 13.904 | 30.090 | 16.000 | 18.000 |
| Ord | P | 9.277 | 19.885 | 8.787 | 20.118 | 8.000 | 12.000 |
| | NP | 9.969 | 21.780 | 10.047 | 19.847 | 13.750 | 14.916 |
| Exh | P | 18.710 | 19.817 | 19.212 | 20.118 | 20.000 | 12.000 |
| | NP | 18.030 | 21.780 | 17.952 | 19.847 | 14.250 | 14.916 |
| Aut | P | 13.084 | 25.029 | 12.362 | 24.537 | 12.818 | 16.760 |
| | NP | 13.454 | 27.380 | 14.238 | 14.490 | 12.000 | 8.666 |
| Aff | P | 14.915 | 25.029 | 16.637 | 24.537 | 15.181 | 16.763 |
| | NP | 14.545 | 27.380 | 13.666 | 15.833 | 16.000 | 8.666 |
| Int | P | 18.722 | 20.275 | 17.762 | 24.866 | 18.545 | 28.872 |
| | NP | 17.848 | 25.070 | 16.333 | 16.233 | 18.750 | 31.583 |
| Suc | P | 9.277 | 20.275 | 10.237 | 24.866 | 9.454 | 28.872 |
| | NP | 10.151 | 25.070 | 11.666 | 16.233 | 9.250 | 31.583 |

TABLE 21 -- Continued

| EPPS Scale | Person or Non-Person Occupation | Intact Family | | Disrupted Family | | | |
|---|---|---|---|---|---|---|---|
| | | Mothers and Fathers | | Father-Absent | | Mother-Absent | |
| | | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ | $\bar{X}$ | $s^2$ |
| Dom | P | 13.493 | 20.911 | 12.650 | 20.964 | 12.636 | 12.254 |
| | NP | 13.121 | 24.234 | 11.714 | 28.414 | 9.250 | 6.250 |
| Aba | P | 14.506 | 20.911 | 15.350 | 20.964 | 15.363 | 12.254 |
| | NP | 14.848 | 24.320 | 16.285 | 28.414 | 18.750 | 6.250 |
| Nur | P | 17.518 | 25.106 | 17.825 | 22.753 | 16.636 | 16.854 |
| | NP | 16.424 | 29.189 | 16.857 | 27.028 | 17.500 | 13.666 |
| Chg | P | 10.481 | 25.106 | 10.175 | 22.753 | 11.363 | 16.854 |
| | NP | 11.575 | 29.189 | 11.142 | 27.028 | 10.500 | 13.666 |
| End | P | 11.590 | 24.488 | 11.137 | 25.234 | 11.272 | 48.218 |
| | NP | 13.151 | 26.320 | 15.095 | 29.390 | 20.500 | 1.000 |
| Het | P | 16.409 | 24.488 | 16.850 | 25.445 | 16.727 | 48.218 |
| | NP | 14.848 | 26.320 | 12.904 | 29.390 | 7.500 | 1.000 |
| Agg | P | 10.987 | 21.475 | 11.925 | 19.006 | 11.545 | 25.872 |
| | NP | 10.787 | 20.859 | 12.142 | 26.528 | 9.750 | 30.916 |
| Con | P | 12.433 | 2.516 | 11.975 | 3.822 | 11.818 | 1.363 |
| | NP | 12.212 | 1.422 | 12.000 | 3.000 | 11.250 | 2.916 |

TABLE 22

EPPS t AND F VALUES ON A PERSON, NON-PERSON DICHOTOMY

| EPPS Scale | Intact Family Mother & Father t[a] | Intact Family Mother & Father F[b] | Disrupted Family Father-Absent t[c] | Disrupted Family Father-Absent F[d] | Disrupted Family Mother-Absent t[e] | Disrupted Family Mother-Absent F[f] |
|---|---|---|---|---|---|---|
| Ach | .808 | 1.525 | .787 | 1.308 | 1.272 | 1.347 |
| Def | 1.371 | 1.525 | .787 | 1.308 | 1.272 | 1.347 |
| Ord | .747 | 1.095 | 1.158 | 1.013 | 2.769 | 1.243 |
| Exh | .734 | 1.099 | 1.158 | 1.013 | 2.769 | 1.243 |
| Aut | .356 | 1.093 | 1.628 | 1.693 | .363 | 1.934 |
| Aff | .356 | 1.093 | 1.700 | 1.549 | .363 | 1.934 |
| Int | 2.903 | 1.236 | 1.223 | 1.531 | .064 | 1.093 |
| Suc | 2.903 | 1.236 | 1.223 | 1.531 | .064 | 1.093 |
| Dom | 1.227 | 1.158 | .813 | 1.355 | 1.761 | 1.960 |
| Aba | 1.128 | 1.163 | .813 | 1.355 | 1.762 | 1.960 |
| Nur | 1.070 | 1.162 | .820 | 1.187 | .369 | 1.233 |
| Chg | 1.070 | 1.162 | .820 | 1.187 | .368 | 1.233 |
| End | 1.522 | 1.074 | 3.191 | 1.164 | 4.408 | 48.218 |
| Het | 1.601 | 1.074 | 3.172 | 1.155 | 4.408 | 48.218 |
| Agg | .211 | 1.029 | .197 | 1.395 | .592 | 1.194 |
| Con | .257 | 1.769 | .053 | 1.274 | .742 | 2.139 |

[a]Significant t at .05 level, with 115 d. f. = 1.982.

[b]When the variance of those selecting person occupations was greater than the variance of those selecting non-person occupations, the value of F which was significant at the .05 level = 1.68. When the reverse situation existed, F = 1.60.

[c]Significant t at .05 level, with 100 d. f. = 1.984.

[d]When the variance of those selecting person occupations was greater than the variance of those selecting non-person occupations, the value of F which was significant at the .05 level = 1.92. When the reverse situation existed, F = 1.71.

[e]Significant t at .05 level, with 14 d. f. = 2.145.

[f]When the variance of those selecting person occupations was greater than the variance of those selecting non-person occupations, the value of F which was significant at the .05 level = 8.78. When the reverse situation existed, F = 3.71.

Variances were used to compute F ratios. The t tests were used to determine if any statistically significant differences existed between the means of the person, non-person groups. The .05 level was employed to establish the significance of these statistical procedures. Values of t and F associated with each EPPS scale are shown in Table 22.

To further test the person, non-person rationale, a Median Chi Square ($X^2$) Test using a two-by-two contingency table was computed for each scale of the EPPS. A Yates correction was used to compensate for the small numbers in some cells of the mother-absent category. Not all $X^2$ values were used since there were fewer than two entries in a cell. The $X^2$ was computed to test the null hypothesis of no significant difference existing between the women scoring above or below the median on each EPPS scale. These $X^2$ values are shown in Table 23.

Hypothesis Fifteen

The fifteenth hypothesis stated that freshmen college women who responded to EPPS items indicative of Exhibition needs should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent families. The Median $X^2$ tests showed that there were no significant differences in any of the categories. Therefore, hypothesis fifteen was not supported.

The differences between the means were in the expected direction in all categories: the person means were greater than the non-person means. Women who responded to EPPS items indicative of Exh needs tended to choose person-oriented occupations.

TABLE 23

VALUES OF $X^2$ FOR EPPS SCALE SCORES DICHOTOMIZED FOR PERSON, NON-PERSON OCCUPATIONAL CHOICE[a]

| EPPS Scale | Intact Family Mother & Father | Disrupted Family Father-Absent | Disrupted Family Mother-Absent |
|---|---|---|---|
| Ach | .074 | .012 | 2.864 |
| Def | .539 | .593 | .205 |
| Ord | .020 | 3.532 | N/A[b] |
| Exh | .193 | 2.198 | N/A |
| Aut | .147 | 3.438 | 9.230 |
| Aff | .382 | .056 | 2.070 |
| Int | .042 | 2.301 | .205 |
| Suc | .042 | 4.208 | .205 |
| Dom | 2.075 | 1.272 | N/A |
| Aba | 2.075 | 2.141 | N/A |
| Nur | 1.212 | .618 | N/A |
| Chg | 1.752 | .322 | .205 |
| End | 2.011 | 4.647 | N/A |
| Het | 9.242 | 6.074 | N/A |
| Agg | .069 | .056 | .205 |
| Con | 2.426 | .435 | 9.230 |

[a]Significant $X^2$ at .05 level, with 1 d. f. = 3.84.

[b]$X^2$ values were not used because cells had frequency of less than 2.

Hypothesis Sixteen

The sixteenth hypothesis stated that freshmen college women who responded to EPPS items indicative of Affiliation needs should choose person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy for women from intact or father-absent families. The Median $X^2$ tests showed that there were no significant differences among the categories. Therefore, hypothesis sixteen was not supported.

The differences between the means were in the expected direction: the person means were larger than the non-person means. Women who responded to EPPS items indicative of Aff needs tended to choose person occupations.

Hypothesis Seventeen

The seventeenth hypothesis stated that freshmen college women who responded to EPPS items indicative of Intraception needs should choose person-oriented occupations.

There was no significant difference between the mean scores for the person, non-person dichotomy for women from father-absent families. There was a significant mean difference for women from intact families (person mean = 18.772, non-person mean = 17.848). The Median $X^2$ tests showed that there were no significant differences between the observed or expected frequencies in any of the categories. Hypothesis seventeen was supported for the women from intact families.

The difference between the means for women from father-absent homes was in the expected direction: the person mean was greater than the non-person mean. The difference between the means for women from intact homes was also in the expected direction. Women from intact home environments who responded to EPPS items indicative of Int needs tended to choose person occupations.

Hypothesis Eighteen

The eighteenth hypothesis stated that freshmen college women who responded to EPPS items indicative of Succorance needs should choose non-person oriented occupations.

There was a significant mean difference on the person, non-person dichotomy for women from intact families (non-person mean = 10.151, person mean = 9.277). There was no significant mean difference on the person, non-person dichotomy for the father-absent category. There was a significant difference between the observed and the expected frequencies of non-person occupational choice for the father-absent category ($X^2 = 4.208$). There was no significant difference found between the observed frequencies and expected frequencies of occupational choice in the intact family group. Hypothesis eighteen was supported.

This finding clearly supported Roe's theory. One important aspect of her theory was: "Needs for which minimum satisfaction is rarely achieved . . . if of a lower order will prevent the appearance of higher-order needs: These rarely satisfied needs will become dominant and restricting motivators."[22] A need for support from others could result from early unsatisfying interpersonal experiences. These unfulfilled needs could then be motivators toward the selection of non-person occupations. While the difference between the means for the father-absent category was not significant statistically, it was in the expected direction: the non-person mean was greater than the person mean.

Hypothesis Nineteen

The nineteenth hypothesis stated that freshmen college women who responded to EPPS items indicative of Nurturance needs should choose person-oriented occupations.

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[22]Roe and Siegelman, The Origin of . . ., p. 2.

There were no significant differences in the mean scores for the person, non-person dichotomy for either category. The Median $X^2$ tests showed that there were no significant differences among the categories. Therefore, hypothesis nineteen was not supported.

The differences between the means were in the expected direction: the person means were greater than the non-person means. Women who responded to EPPS items indicative of Nur needs tended to choose occupations which were person-oriented.

Nurturance needs (involving the need to help others, being kind and sympathetic toward others, etc.) seem clearly related to person occupations. It was unexpected that none of the categories approached significance. An examination of the PCR-EPPS intercorrelational matrices (see Tables 24, 25, 26, 27) revealed only slight positive correlations between any of the mother or father PCR subtests and the EPPS scales for women from intact families. The correlation between Nur and the positive PCR subtests for the women from intact families ranged from .097 for Lov to .202 for Pro. For women from father-absent homes the positive correlations between any of the PCR subtests and EPPS scales were even smaller. These two instruments apparently measured similar phenomena, but the correlations were not significant.

### Hypotheses Twenty, Twenty-One, and Twenty-Two

The twentieth, twenty-first, and twenty-second hypotheses stated that freshmen college women who responded to EPPS items indicative of Abasement needs should retrospectively recall Neglecting, Rejecting, or Demanding relationships in the home environment.

TABLE 24

EPPS-MOTHER PCR INTERCORRELATION MATRIX FOR WOMEN FROM INTACT FAMILIES
(N = 116)

| EPPS Scale | PCR Subtest | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Pro | Pun S-L | Rej | Cas | Rew S-L | Dem | Pun D-O | Lov | Neg | Rew D-O |
| Ach | -.177 | .008 | .039 | .062 | -.004 | -.050 | .038 | -.173 | .073 | -.029 |
| Def | .177 | -.008 | -.039 | -.062 | .004 | .050 | -.038 | .173 | -.073 | .029 |
| Ord | .066 | -.037 | -.008 | .028 | -.056 | -.079 | -.118 | .094 | -.043 | -.053 |
| Exh | -.066 | .037 | .007 | -.027 | .055 | .077 | .117 | -.094 | .044 | .052 |
| Aut | -.180 | .038 | .237 | .084 | -.267 | .010 | -.000 | -.317 | .264 | -.180 |
| Aff | .180 | -.038 | -.237 | -.084 | .267 | -.010 | .000 | .317 | -.264 | .180 |
| Int | -.023 | -.063 | -.152 | .048 | .125 | -.139 | -.093 | .165 | -.128 | .029 |
| Suc | .023 | .063 | .152 | -.048 | -.125 | .139 | .093 | -.165 | .128 | -.029 |
| Dom | -.180 | -.065 | -.002 | .039 | -.087 | -.075 | -.010 | -.050 | .059 | -.058 |
| Aba | .180 | .064 | .001 | -.040 | .087 | .075 | .008 | .051 | -.060 | .058 |
| Nur | .184 | .097 | .007 | -.078 | .099 | .106 | .039 | .097 | -.034 | .120 |
| Chg | -.184 | -.097 | -.007 | .078 | -.099 | -.106 | -.039 | -.097 | -.034 | -.120 |
| End | -.261 | -.121 | -.152 | .087 | .012 | -.047 | -.101 | .146 | -.095 | -.069 |
| Het | .261 | .121 | .152 | -.087 | -.012 | .047 | .101 | -.146 | .095 | .069 |
| Agg | -.032 | .202 | .140 | .012 | -.055 | .048 | .210 | -.236 | .144 | -.051 |
| Con | .039 | -.067 | -.046 | .046 | .046 | -.066 | -.083 | -.020 | .017 | -.023 |

Significant r = .512

TABLE 25

EPPS-MOTHER PCR INTERCORRELATION MATRIX FOR WOMEN FROM DISRUPTED FAMILIES
(N = 101)

| EPPS Scale | PCR Subtest | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Pro | Pun S-L | Rej | Cas | Rew S-L | Dem | Pun D-O | Lov | Neg | Rew D-O |
| Ach | -.080 | -.216 | -.126 | .089 | -.087 | -.351 | -.272 | .128 | -.112 | -.023 |
| Def | .080 | .216 | .126 | -.089 | .087 | .351 | .272 | -.128 | .112 | .023 |
| Ord | .037 | .007 | -.081 | -.102 | .025 | -.047 | .059 | .083 | -.159 | .101 |
| Exh | -.037 | -.007 | .081 | .102 | -.025 | .047 | -.059 | -.083 | .159 | -.101 |
| Aut | -.139 | -.049 | .218 | .217 | -.254 | -.117 | -.014 | -.233 | .311 | -.132 |
| Aff | .138 | .054 | -.216 | -.216 | .251 | .120 | .011 | .230 | -.309 | .126 |
| Int | -.249 | -.138 | -.111 | .054 | -.047 | -.100 | -.035 | .059 | -.058 | -.187 |
| Suc | .249 | .138 | .111 | -.054 | .047 | .100 | .035 | -.059 | .058 | .187 |
| Dom | -.008 | -.012 | -.079 | .019 | .143 | -.131 | -.131 | .100 | -.151 | .113 |
| Aba | .008 | .012 | .079 | -.019 | -.143 | .131 | .131 | -.100 | .151 | -.113 |
| Nur | .078 | .082 | .046 | -.100 | .018 | .105 | .128 | .020 | -.041 | -.044 |
| Chg | -.078 | -.082 | -.046 | .100 | -.018 | -.105 | -.128 | -.020 | .041 | .044 |
| End | -.077 | -.182 | -.274 | -.057 | .140 | -.117 | -.261 | .232 | -.202 | -.004 |
| Het | .079 | .181 | .274 | .056 | -.140 | .116 | .259 | -.232 | .202 | .006 |
| Agg | -.141 | .141 | .264 | .164 | -.053 | .035 | .036 | -.200 | .268 | .043 |
| Con | .262 | .076 | -.143 | -.088 | .113 | .042 | .070 | .089 | -.129 | .040 |

Significant r = .530

TABLE 27

EPPS-FATHER PCR INTERCORRELATION MATRIX FOR WOMEN FROM INTACT HOMES
(N = 116)

| EPPS Scale | PCR Subtest | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Pro | Pun S-L | Rej | Cas | Rew S-L | Dem | Pun D-O | Lov | Neg | Rew D-O |
| Ach | -.216 | .171 | .179 | -.141 | -.105 | .131 | .202 | -.158 | .173 | -.134 |
| Def | .216 | -.171 | -.179 | .141 | .105 | -.131 | -.202 | .158 | -.173 | .134 |
| Ord | .085 | -.022 | .051 | -.089 | -.029 | -.002 | -.066 | .027 | -.004 | -.041 |
| Exh | -.085 | .022 | -.051 | .091 | .028 | .000 | .064 | -.027 | .006 | .041 |
| Aut | -.238 | .022 | .145 | .053 | -.202 | -.062 | .047 | -.224 | .144 | -.070 |
| Aff | .238 | -.022 | -.145 | -.053 | .202 | .062 | -.047 | .224 | -.144 | .070 |
| Int | .008 | -.067 | -.001 | -.024 | -.012 | -.040 | -.128 | .031 | -.086 | -.008 |
| Suc | -.008 | .067 | .001 | .024 | .012 | .040 | .128 | -.031 | .086 | .008 |
| Dom | -.243 | .015 | .061 | .008 | -.169 | -.031 | .058 | -.127 | .229 | -.274 |
| Aba | .243 | -.015 | -.062 | -.008 | .170 | .030 | -.060 | .127 | -.230 | .274 |
| Nur | .202 | -.043 | -.117 | .122 | .176 | -.069 | -.124 | .152 | -.185 | .183 |
| Chg | -.202 | .043 | .117 | -.122 | -.176 | .069 | .124 | -.152 | .185 | -.183 |
| End | -.041 | -.244 | -.209 | -.042 | .014 | -.130 | -.107 | .229 | -.091 | -.097 |
| Het | .041 | .244 | .209 | .042 | -.014 | .130 | .107 | -.229 | .091 | .097 |
| Agg | -.018 | .289 | .153 | -.011 | -.038 | .159 | .230 | -.205 | .173 | -.002 |
| Con | .008 | -.123 | -.016 | .119 | -.041 | -.070 | -.197 | -.044 | .035 | .055 |

Significant r = .512

TABLE 28

EPPS-FATHER PCR INTERCORRELATION MATRIX FOR WOMEN FROM DISRUPTED HOMES
(N = 15)

| EPPS Scale | PCR Subtest | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Pro | Pun S-L | Rej | Cas | Rew S-L | Dem | Pun D-O | Lov | Neg | Rew D-O |
| Ach | -.066 | .165 | -.061 | -.291 | .036 | .111 | .322 | .049 | .044 | -.373 |
| Def | .066 | -.165 | .061 | .291 | -.036 | -.111 | -.322 | -.049 | -.044 | .373 |
| Ord | -.518 | -.161 | .116 | -.441 | -.002 | .185 | .103 | .032 | .081 | -.174 |
| Exh | .518 | .161 | -.116 | .441 | .003 | -.185 | -.103 | -.032 | -.081 | .174 |
| Aut | -.064 | .127 | .285 | -.100 | -.104 | .048 | .382 | -.309 | .409 | -.274 |
| Aff | .064 | -.127 | -.285 | .100 | .104 | -.048 | -.382 | .309 | -.409 | .274 |
| Int | -.281 | -.121 | .068 | -.294 | -.242 | -.195 | -.084 | -.037 | -.038 | -.095 |
| Suc | .281 | .121 | -.068 | .294 | .242 | .195 | .084 | .037 | .038 | .095 |
| Dom | .157 | .452 | .376 | .367 | -.424 | .416 | .038 | -.172 | .040 | -.067 |
| Aba | -.157 | -.452 | -.376 | -.367 | .424 | -.416 | -.038 | .172 | -.040 | .067 |
| Nur | .578 | -.300 | -.406 | .342 | .346 | -.204 | -.435 | .024 | -.254 | .671 |
| Chg | -.578 | .300 | .406 | -.342 | -.346 | .204 | .435 | -.024 | .254 | -.671 |
| End | -.285 | -.387 | -.476 | -.412 | .278 | -.496 | .147 | .391 | -.277 | -.190 |
| Het | .285 | .387 | .476 | .412 | -.278 | .497 | -.147 | -.391 | .277 | .190 |
| Agg | -.109 | .141 | .058 | .506 | -.328 | -.103 | -.192 | .042 | .043 | -.283 |
| Con | -.122 | -.149 | -.022 | .146 | -.129 | -.475 | -.309 | -.278 | .099 | .362 |

Significant r = .895

These three hypotheses were based on this researcher's counseling experience using the EPPS with a collegiate population. Young men and women who had problems in their school adjustment frequently had elevated Aba needs. A number of these counselees were in conflict with their parents. Three of the negative PCR subtests were selected to determine if high Aba needs were related to any of these perceived negative parental environments, and thus to non-person occupational choice.

There were no significant differences in the mean scores for the person, non-person dichotomy for either of the categories. An examination of the PCR-EPPS intercorrelation matrices revealed only slight positive correlations between Neg, Rej, and Dem PCR subtests and Aba for women from intact or father-absent homes. Hypotheses twenty, twenty-one, and twenty-two were not supported.

The differences between the means were in the expected direction: women who responded to EPPS items indicative of Aba needs tended to choose non-person occupations. However, Aba needs were not significantly related to a perceived Neg, Rej, or Dem home environment. The highest positive coefficients of correlation between Aba and the PCR subtests for all the categories were: Aba - Pro $r = .180$ (intact family, women-mothers); Aba - Neg $r = .151$ (disrupted family, women-mothers); and Aba - Rew D-O $r = .274$ (intact family, women-fathers).

Hypothesis Twenty-Three

The twenty-third hypothesis stated that freshmen college women who responded to EPPS items indicative of Achievement needs should choose non-person-oriented occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy. The Median $X^2$ tests showed that there were no significant differences among the categories. Therefore, hypothesis twenty-three was not confirmed.

The differences between the means were in the expected direction: the non-person means were greater than the person means. Women who responded to EPPS items indicative of Ach needs tended to choose non-person occupations.

Hypothesis Twenty-Four

The twenty-fourth hypothesis stated that freshmen college women who responded to EPPS items indicative of Autonomy needs should choose non-person occupations.

There were no significant differences between the mean scores for the person, non-person dichotomy. The Median $X^2$ tests showed that there were no significant differences between women from intact or father-absent families. Therefore, the twenty-fourth hypothesis was not confirmed.

The differences between the means were in the expected direction: the non-person means were greater than the person means. Women who responded to EPPS items indicative of Aut needs tended to choose non-person occupations.

Hypothesis Twenty-Five

The twenty-fifth hypothesis stated that freshmen college women who responded to EPPS items indicative of Dominance needs should choose person-oriented occupations.

There were no significant differences in the mean scores for the person, non-person dichotomy. The Median $X^2$ tests showed that there were no significant differences between the categories. Therefore, hypothesis twenty-five was not supported.

The differences between the means were in the expected direction: the person means were greater than the non-person means. Women who responded to EPPS items indicative of Dom needs tended to choose person occupations.

Hypothesis Twenty-Six

The twenty-sixth hypothesis stated that freshmen college women who responded to EPPS items indicative of Deference needs should choose person-oriented occupations.

There were no significant differences in the mean scores for the person, non-person dichotomy. The Median $X^2$ tests showed that there were no significant differences between the categories. Therefore, hypothesis twenty-six was not supported.

The differences between the means were in the expected direction: the person means were greater than the non-person means. Women who responded to EPPS items indicative of Def needs tended to choose person occupations.

Hypothesis Twenty-Seven

The twenty-seventh hypothesis stated that freshmen college women who responded to EPPS items indicative of Order needs should choose non-person-oriented occupations.

There were no significant differences in the mean scores for the person, non-person dichotomy. The Median $X^2$ tests showed that there were no significant differences between the categories. Therefore, hypothesis twenty-seven was not supported.

The differences between the means were in the expected direction: the non-person means were greater than the person means. Women who responded to EPPS items indicative of Ord needs tended to choose non-person occupations.

Hypothesis Twenty-Eight

The twenty-eighth hypothesis stated that freshmen college women who responded to EPPS items indicative of Change needs should choose person-oriented occupations.

There were no significant differences in the means scores for the person, non-person dichotomy. The Median $X^2$ tests showed that there were no significant differences between the categories. Therefore, hypothesis twenty-eight was not confirmed.

The differences between the means were not in the expected direction: the non-person means were greater than the person means. The format of the EPPS may offer a partial explanation. In order to minimize the factor of social desirability, Edwards developed a forced-choice format. The effect of this was made graphically clear by a

perusal of the intercorrelation matrices (Tables 24, 25, 26, and 27). Each EPPS scale was inversely related to another scale. The forced-choice format, in fact, accepts one response while rejecting another. Chg is inversely related to Nur. Nur has been shown to be related to person-oriented occupations. Chg needs also seem empirically related to person-oriented occupations. However, the EPPS does not permit the selection of both of these scales as person-oriented. This, of course, is a drawback to the forced-choice format.

Hypothesis Twenty-Nine

The twenty-ninth hypothesis stated that freshmen college women who responded to EPPS items indicative of Heterosexuality needs should choose person-oriented occupations.

There was a significant mean difference for the person, non-person dichotomy for the father-absent category (person mean = 16.850, non-person mean = 12.904). There was no significant difference in the mean scores for women from intact families. The Median $X^2$ tests showed that there were significant differences between the observed and the expected frequencies of person occupational choice for women from intact homes ($X^2$ = 9.242) and women from father-absent homes ($X^2$ = 6.074). This significant $X^2$ supported the more sensitive $t$ test for women from father-absent homes. Hypothesis twenty-nine was confirmed.

The differences between the means were in the expected direction: the person means were greater than the non-person means. Women who responded to EPPS items indicative of Het needs tended to choose person

occupations. This need for a meaningful relationship with the opposite sex may have acted as an unconscious motivator for women from father-absent homes. During the personal interviews, a number of women responded to the vocational choice question: "Do you mean if I don't get married, what would I like to do?" One young woman from a father-absent family environment returned for an interpretation of the EPPS. She had been in the freshman honors program and indicated "What I really want to do is to get married and have a happy family life." These findings would tend to confirm the Hoyt and Kennedy conclusion that homemaking-motivated women scored higher than career-motivated women on Het.[23]

Hypothesis Thirty

The thirtieth hypothesis stated that freshmen college women who responded to EPPS items indicative of Endurance needs should choose non-person-oriented occupations.

There was a significant difference for the person, non-person dichotomy for the father-absent category (non-person mean = 15.095, person mean = 11.137). There was no significant mean difference in the scores for the women from intact homes. The Median $X^2$ tests showed that there was a significant difference between the observed and the expected frequencies in the father-absent category ($X^2$ = 4.647). The $X^2$ for women from intact homes approached significance. The significant $X^2$ confirmed the $t$ test for the father-absent category. Hypothesis thirty was supported for the father-absent category.

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[23]Hoyt and Kennedy, Journal of Counseling Psychology, V, No. 1 (1958), 44-47.

The differences between the means were in the expected direction: the non-person means were greater than the person means. Women who responded to EPPS items indicative of End needs tended to choose non-person-oriented occupations.

This finding supported the Suziedelis and Steimel study in which they related inventoried interests to manifest needs.[24] They found that End needs were related to interests in biological and physical sciences, which are non-person occupations according to Roe's classification.

Hypothesis Thirty-One

The thirty-first hypothesis stated that freshmen college women who responded to EPPS items indicative of Aggression needs should choose non-person-oriented occupations.

There were no significant differences in the mean scores for the person, non-person dichotomy for women from intact or father-absent homes. The Median $X^2$ tests showed that there were no significant differences between the observed or expected frequencies in either of the categories. Therefore, hypothesis thirty-one was not supported.

The difference between the means was in the expected direction for the father-absent category: the non-person mean was greater than the person mean. The difference between the means was not in the expected direction for the intact family category: the person mean was greater than the non-person mean.

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[24]Suziedelis and Steimel, The Personnel and Guidance Journal, XLII, No. 4 (1963), 393-396.

In developing the hypotheses for this study, it was difficult to place this scale (Agg) within the person, non-person rationale. That Agg may be a strong motivator in human behavior is clear: however, how Agg affects occupational choice needs further study.

## Statistical Results Concerning Interrelation of Specific PCR Subtests and EPPS Scales

The literature suggested that the PCR subtest Pro should be positively related to Def needs, and negatively related to Aut needs. Roe concluded that in the "overprotecting home, belongingness, love, and esteem are often made conditional upon dependence."[25] This conclusion was supported by the Bernardin and Jessor study which found a relationship between the Def and Aut scales of the EPPS and performance in experimental situations devised to reflect dependent and independent behavior. Subjects who scored high on Def and low on Aut performed in a more dependent fashion than did subjects who showed the opposite pattern on these scales.[26] Moldovan correlated questionnaire responses about recalled parental behavior with EPPS scales for 112 men and 31 women undergraduate students at Cornell University (all from intact families). He found no significant correlation for the women-mothers relationships, but found that in the women-fathers relationships Def was positively correlated with physical punishment,[27] social isolation,

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[25]Roe, Journal of Counseling Psychology, IV, No. 3 (1957), 212.

[26]A. C. Bernardin and R. Jessor, "A Construct Validation of the EPPS with Respect to Dependence," Journal of Consulting Psychology, XXI (1957), 63-67.

[27]The description for this behavior is similar to Pun D-O.

and expressive rejection. In the women-fathers configuration it was a recalled punitive rather than protecting relationship which provided significant correlation with Def needs.[28] This finding was not in accord with the results of the Bernardin and Jessor study. Since Moldovan grouped his subjects into four social class levels, some of the categories contained eight or fewer women. His results for the women in his study would therefore be tenuous.[29]

Intercorrelational data were computed (Tables 24, 25, 26, and 27) to determine if there were statistically significant correlations between PCR subtests and EPPS scales in the current study.

Hypothesis Thirty-Two

The thirty-second hypothesis stated that a Protecting home environment should be positively related to Deference needs.

The PCR-EPPS intercorrelation matrices for women from intact and father-absent families revealed small, positive, though not statistically significant correlations between Def and Pro: intact family mother r = .177; intact family father r = .218; disrupted family, father-absent r = .080. None of these correlations approached statistical significance. Therefore, hypothesis thirty-two was not supported.

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[28] Stanley Moldovan, "Some Familial Antecedents of Personality Needs," British Maritime Psychological Association, XII (Spring, 1963), 22-40.

[29] Other EPPS scales which Moldovan found positively correlated with parental behaviors similar to those measured by the PCR were: Int-Expressive Rejection (Rej); Nur-Affective Reward (Rew D-O); Agg-Expressive Rejection (Rej). In the current study a low positive correlation was obtained between Agg and Rej (r = .140).

Hypothesis Thirty-Three

The thirty-third hypothesis stated that a Protecting home environment should be negatively related to Autonomy needs.

The intercorrelation matrices revealed small, negative, though not statistically significant correlations between Aut and Pro: intact family mother r = -.180; intact family father r = -.238; and disrupted family, father absent r = -.139.

None of these correlations approached statistical significance. Therefore, hypothesis thirty-three was not confirmed.

## Summary

Chapter IV established the acceptability of using the parametric statistics t and F. Means, ranges, standard deviations, Tryon reliabilities, inter-parent correlations, and PCR-EPPS intercorrelations were computed. Data pertaining to specific hypotheses were treated statistically and the results discussed.

No statistically significant differences were found between the person, non-person occupational orientation of women from intact families and those from father-absent homes, for the hypotheses concerning disruption in the family environment. Disruption in the family environment when the mother was the remaining parent in the home did not affect the person, non-person occupational choices of these freshmen college women. There was no discussion of the mother-absent category because of the small sample size.

Minimal support was obtained for Roe's theory for the hypotheses concerning parent-child relationships. Two parent-child relationships

were statistically significant using the $X^2$ tests. Freshmen women who came from intact family environments and recalled a Pun S-L relationship with their mothers oriented toward non-person occupations. Freshmen women from intact families who recalled a Rew S-L relationship with their fathers oriented toward person occupations. The PCR subtests Lov, Pro, and Cas were combined to form a positive constellation of recalled parental behaviors. The PCR subtests Dem, Rej, and Neg were combined to form a negative constellation of recalled parental behaviors. These combinations failed to support Roe's theory.

Limited support was obtained for the hypotheses concerning manifest needs. Four EPPS scales provided statistically significant differences between the person, non-person dichotomy. Women from intact families who responded to EPPS items indicative of Int and Het needs, oriented toward person occupations. Women from father-absent homes who responded to EPPS items indicative of Suc and End needs, oriented toward non-person occupations. Freshmen women from father-absent homes who responded to EPPS items indicative of Het needs, oriented toward person occupations. Women from intact families who responded to EPPS items indicative of Suc needs, oriented toward non-person occupations.

No statistically significant correlations between the PCR subtests and the EPPS scales were found. However, there was evidence that several PCR subtests correlated positively (or negatively) with EPPS scales, as expected in terms of the hypotheses.

Chapter V will present the conclusions and implications of this research.

# CHAPTER V

## CONCLUSIONS AND IMPLICATIONS

Chapter V is divided into four sections. The first three sections are related to the major purposes of the study; the final section is concerned with the implications of the research.

### Parental Influence and Vocational Choice

#### Roe's Theory

The present study provided limited support for Roe's general theory. Only two parent-child relationships showed statistical significance for the freshmen college women under study. Women from intact families reacted as hypothesized, e. g., toward person occupations when recalling a Reward Symbolic-Love relationship with their fathers, and toward non-person occupations when recalling a Punishment Symbolic-Love relationship with their mothers. None of the other PCR subtests were significant. Combining the subtests into positive and negative parental relationships failed to provide statistical support for Roe's theory that an individual is predisposed toward work predominantly person-oriented or non-person-oriented, as a direct result of the parent-child relationship experienced within the family environment.

Although the results of this study failed to support Roe's theory, the person, non-person rationale is psychologically sound.

Further studies of college-age students, adults of both sexes, and longitudinal studies are required. These studies should concentrate upon:

1. The age levels when parental influence may be especially significant in the vocational choice process.
2. The recalled parent-child relationship as a primary motivator in occupational choice.
3. The interaction of both parents as an influence upon occupational choice.
4. The father influence upon occupational choice of girls, and the mother influence upon occupational choice of boys, in terms of psychoanalytic theory.

The following conclusions were drawn concerning Roe's theory, as a result of the current research:

1. The present study minimally supported Roe's hypothesis that the parent-child relationship is a determinant of an individual's occupational choice.
2. Freshmen college women's occupational choices did not tend to be influenced by either a positive or a negative parent-child relationship with either parent.
3. Partial support for the theory was obtained using a second instrument, purporting to measure needs as fundamental motivators.

## Roe's Classification Schema

Roe's occupational classification consists of eight major groups (see Appendix VI). These groups were dichotomized as to person, non-

person orientation. It appeared that this dichotomy was too restricing for purposes of testing Roe's theory. Further, this classification may not be discrete. For example, a physician may be a surgeon, a researcher, a psychiatrist, or a teacher. The first two specialties appear non-person-oriented, the latter two person-oriented. Grigg,[1] and Green and Parker[2] specifically questionned Roe's classification of nurses. A number of women in this study selected nursing as their occupation. If Roe's classification of nurses (non-person) is not precise, the results of this study would be significantly different. The critical issue may be an individual's perception of an occupation as being person or non-person in its orientation.

The PCR Questionnaire

The use of the present PCR as a predictive instrument is questionable. The results of this study did not support the assumption that the PCR subtests are valid. Content validity was obtained by Roe through inter-judge agreement on the subtest items. The validity must be improved, and the need for additional validity research is apparent.

The factor of socially desirable responses may reduce the validity of instruments like the PCR. Most people, for example, would prefer to be loved rather than rejected. This preference affects the candor with which responses are made to questionnaire items.

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[1]Grigg, Journal of Counseling Psychology, VI, No. 2 (Summer, 1959), 153-155.

[2]Green and Parker, Journal of Counseling Psychology, XII, No. 4 (1965), 379-383.

A primary weakness of the PCR is the assumption that behavior is always indicative of attitude. Statements on the PCR were designed to elicit the subjects' recollection of parental behavior. From these reports, parental attitudes were inferred. Attitude and behavior are not always synonymous. Further, a young adult may have difficulty recalling the parental relationship before the age of twelve. Since unpleasant experiences tend to be repressed, this factor also could affect the validity of the instrument.

Finally, before the PCR would be useful to a counselor, an improvement would be needed in the hand-scoring procedure. At present this is a laborious chore, conducive to errors.

## Psychological Needs and Vocational Choice

### Roe's Theory

The use of a second instrument measuring manifest needs provided limited support for Roe's theory. Four EPPS scales showed statistical significance for the women under study. Women from intact families reacted as hypothesized, e. g., toward person occupations when responding to EPPS items indicative of Intraception and Heterosexuality needs, and toward non-person occupations when responding to EPPS items indicative of Succorance needs. Women from father-absent homes reacted as hypothesized, e. g., toward person occupations when responding to EPPS items indicative of Heterosexuality needs, toward non-person occupations when responding to EPPS items indicative of Succorance and Endurance needs. None of the remaining EPPS scales were significant.

There is evidence that the PCR and EPPS are measuring similar phenomena. However, before similar studies are made, both the PCR and the EPPS require further validation.

## The EPPS

The EPPS employs a forced-choice format, making the variables interdependent. This was a disadvantage in the current study, since there was a need to use scales independently. Buros indicated that with correlational evidence, interpretation is obscured by the effects of the forced-choice format.[3] Edwards has also been criticized for failure to follow up his 1959 revision of the EPPS with validation studies.[4] Super and Crites suggested that the instrument was used for prediction before there was proof of the relationship between the variables.[5]

The EPPS, as indicated in the Manual, is useful for stimulating discussions concerning the degree and kind of interpersonal relations desired in social contacts and in occupations.[6] College students and adults may begin to verbalize some of their problems after an interpretation of the variables. As Goldman pointed out, "the counselor may use the information to establish rapport without defensiveness on the part

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[3]Buros, Sixth Mental Measurement . . ., p. 88.

[4]Ibid., p. 89.

[5]Donald E. Super and J. O. Crites, Appraising Vocational Fitness. (New York: Harper and Row, Publishers, 1962), p. 473.

[6]Edwards, EPPS Manual, p. 10.

of the counselee."[7] However, interpretations must be cautious until further validation studies of the EPPS are completed.

## Disruption in the Family Environment and Vocational Choice

Studies reported in the literature were not conclusive or consistent about the effects of disruption in the family environment. Disruption in the family environment in our society usually means that the mother is the remaining parent in the home. The present study followed this pattern, with the majority of the women from disrupted families coming from father-absent homes. There were no statistical differences between the person, non-person occupational orientation of women from intact families and women from father-absent families in the present study. There were statistically significant differences within the mother-absent category, which were not discussed because of the small sample size.

This researcher attempted to determine differences between the women-mothers relationships in the intact and the father-absent homes, and relate these differences to vocational choice. Results would indicate that the absence of the father does not significantly influence the vocational choice of freshmen college women. However, Moldovan[8] found that the father relationship affected the psychological needs (as

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[7]Leo Goldman, Using Tests in Counseling (New York: Appleton-Century-Crofts, Inc., 1961), p. 387.

[8]Moldovan, British Maritime Psychological Association, XII (Spring, 1963), 22-40.

measured by the EPPS) of the female subjects in his study to a greater extent than did the mother relationship.

Further studies on the implications of disruption in the family environment are warranted. Such studies should concentrate upon:

1. The use of another psychological instrument to measure the significance of the disruption factor upon the vocational choice of young adults.
2. The employment of an adequate sample of men and women from mother-absent homes to ascertain significant differences within this category which affect vocational choices.
3. The employment of an adequate sample of men and women from homes where the remaining parent has remarried, to ascertain significant differences when there is a father or mother surrogate.
4. The control of the factor of marital discord within the family unit. Persistent conflict may be more serious than the actual divorce or separation.

## Implications

The present study posed the question: Are there significant differences between the vocational choices of young women who come from intact family environments and those who come from one-parent homes. Evidence leading to a partial resolution of this question was obtained.

The significance of all etiological factors as they relate to vocational choice must be considered in the perspective of the society

in which we live. In our mobile, urban society there appears to be less family involvement in the affairs of the young persons. Perhaps individuals from both intact and disrupted environments turn to their peer groups to obtain satisfaction of the basic needs which Roe hypothesized became unconscious motivators in vocational choice.

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# APPENDIX I

## DEFINITIONS

Disrupted family -- Only one parent in the home due to death, divorce, separation, institutionalization, prolonged hospitalization, of the other parent.

Intact family -- Father and mother both in the home during development of child. Both are theoretically a continuing influence on the personality development of the child.

Mother-Absent Family -- Father is the remaining parent in the home.

Father-Absent Family -- Mother is the remaining parent in the home.

# APPENDIX II

## THE PARENT-CHILD RELATIONSHIP QUESTIONNAIRE

A reproduction of this questionnaire will be found in the pocket in the back cover of the dissertation binding.

# APPENDIX III

## ROE'S CLASSIFICATION OF OCCUPATIONS

Group I Occupations: Service (Person oriented)

The occupations in this group are those which are focused on catering to the personal tastes, needs, and welfare of others.

Social workers
Vocational, educational counselors
Sheriffs
Policemen
Firemen
Hairdressers
Welfare workers
YMCA, YWCA officials
Practical nurses
Armed forces, sergeants

Group II Occupations: Business Contact (Person oriented)

These occupations involve persuasive selling in a direct person-to-person relationship. These are very different from over-the-counter selling.

Promoters
Public relations counselors
Retail and wholesale dealers
Salesmen: auto insruance, real estate
Buyers

Group III Occupations: Organization (Person oriented)

These occupations are those concerned primarily with the organization and efficient functioning of government and of commercial enterprises.

Top and minor executives, all organizations
High government officials, President, Cabinet members
Officers, ship and armed services
Manufacturers, small
Sales clerks
Stenographers
Typists
File clerks
Owners, catering, dry cleaning, etc.

APPENDIX III -- Continued

Group IV Occupations: Technology (Non-person oriented)

This group includes all the modern industrial occupations, other than managerial, clerical, and sales. They are concerned with the production, maintenance, and transportation of commodities and utilities, and the technology of transportation and communication; included are the physical sciences and engineering.

Applied scientists
Engineers
Electricians
Aviators
Contractors, building, carpentry, plumbing
Small factory managers
Bricklayers
Designers
Mechanics, plane and auto
Repairmen, most varieties

Group V Occupations: Outdoor (Non-person oriented)

This group includes occupations in agriculture, animal husbandry, fisheries, forestry, and mining. They are occupations by which our natural resources are cultivated, gathered, or otherwise accumulated. A considerable degree of physical activity is characteristic of most of these occupations.

Landowners
Wildlife specialists
Poultrymen
Forest rangers
Farmers
Oil well drillers
Teamsters
Cowpunchers
Dairy hands
Surveyors

APPENDIX III -- Continued

Group VI Occupations: The Sciences (Non-person oriented)

This group comprises those occupations concerned with the development of science and its application in all non-technical situations. It includes all research scientists, university and college science faculties, and those where professions are based on the application of scientific principles, except in technology.

| | |
|---|---|
| Mathematician | University and college faculties |
| Scientists | Veterinarians |
| Dentists | Laboratory technicians |
| Nurses | Medical technicians |
| Pharmacists | Technical assistants |

Group VII Occupations: General Culture (person oriented)

The occupations in this group are closely related to those in Group I because of the personal interest factor, and to those in Group VIII because of the cultural aspect.

| | |
|---|---|
| Editors | Teachers |
| Educational administrators | Librarians |
| Clergymen | Reporters |
| Judges | Radio announcers |
| Lawyers | University and college faculties |

Group VIII Occupations: Arts and Entertainment (Person Oriented)

This group comprises all those concerned with any of the arts, such as music, painting and dancing; and with entertaining, including athletics.

| | |
|---|---|
| Painters, writers, composers | Interior decorators |
| Performers | Photographers |
| Athletes | Race car drivers |
| Music critics | Illustrators |
| Advertising writers | Designers, stage, jewelry |

# APPENDIX IV

## BASIC NEEDS (MASLOW)

1. Physiological needs (lowest order)
2. Safety needs
3. Need for belongingness and love
4. Need for importance, respect, self-esteem, independence
5. Need for information
6. Need for understanding
7. Need for beauty
8. Need for self-actualization*

*Roe places this need lower in the hierarchy, or considers it a more general need.

# APPENDIX V

## FIFTEEN PERSONALITY VARIABLES MEASURED BY THE EDWARDS PERSONAL PREFERENCE SCHEDULE

| Variable | Manifest Needs Associated with Variable* |
|---|---|
| Achievement | To accomplish successfully tasks of social and personal significance |
| Deference | To conform to convention and follow the leadership of others |
| Order | To stress organization and neatness in one's activities |
| Exhibition | To attract attention to oneself by dress or behavior |
| Autonomy | To act independently of others and of convention |
| Affiliation | To engage in many activities with friends |
| Intraception | To think in terms of motives underlying behavior |
| Succorance | To receive encouragement, sympathy, and affection from others |
| Dominance | To assume leadership roles in relationships with others |
| Abasement | To feel guilty and at fault when things go wrong and generally timid and inferior |
| Nurturance | To provide help, sympathy, and affection for others |
| Change | To seek new experiences and to avoid routine |
| Endurance | To work hard and keep at a task until it is completed |
| Heterosexuality | To engage in social and sexual experiences involving the other sex |
| Aggression | To attack, criticize, or make fun of others |

*Modified from descriptions in EPPS Manual, p. 5.

# APPENDIX VI

## CODING FOR ROE'S OCCUPATIONAL SCHEMA

| Roe's Occupational Classification[a] | Number Assigned for IBM Coding |
|---|---|
| Service | 1 |
| Business Contact | 2 |
| Organization | 3 |
| Technology | 4 |
| Outdoor | 5 |
| Science | 6 |
| General Culture | 7 |
| Arts and Entertainment | 8 |

[a] "Person" occupations are coded as follows: 1, 2, 3, 7, and 8.

"Non-Person" occupations are coded as follows: 4, 5, and 6.

## APPENDIX VII

### FREQUENCY DISTRIBUTIONS OF THOSE PCR SUBTESTS FOR WHICH THE HYPOTHESIS OF NORMALITY WAS REJECTED

| PCR Subtest Configuration | Scores | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| Intact Family: Women-Mothers | | | | | | | | | | | | | | | | | | | | | |
| Loving | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | C | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| Protecting | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 |
| Reward S-L | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 4 | 1 |
| Intact Family: Women-Fathers | | | | | | | | | | | | | | | | | | | | | |
| Neglecting | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 2 | 7 | 11 | 7 | 5 | 9 | 8 | 11 | 5 | 7 | 5 | 5 | 4 |
| Casual | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | D | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 |
| Disrupted Family: Women-Mothers | | | | | | | | | | | | | | | | | | | | | |
| Punishment S-L | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 6 | 2 | 1 | 4 | 7 | 5 | 9 | 8 | 13 | 9 | 6 | 4 |

Table to read from left to right, for each PCR subtest, from first through last page.

APPENDIX VII -- Continued

| PCR Subtest Configuration | Scores | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |
| Intact Family: Women-Mothers | | | | | | | | | | | | | | | | | |
| Loving | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 |
| Protecting | 2 | 0 | 8 | 3 | 1 | 2 | 5 | 9 | 3 | 3 | 10 | 5 | 6 | 9 | 7 | 0 | 2 |
| Reward S-L | 3 | 2 | 4 | 9 | 6 | 9 | 12 | 11 | 12 | 6 | 6 | 9 | 3 | 3 | 2 | 1 | 2 |
| Intact Family: Women-Fathers | | | | | | | | | | | | | | | | | |
| Neglecting | 4 | 1 | 2 | 2 | 1 | 3 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| Casual | 2 | 1 | 2 | 5 | 4 | 5 | 2 | 5 | 3 | 3 | 4 | 9 | 4 | 7 | 7 | 9 | 2 |
| Disrupted Family: Women-Mothers | | | | | | | | | | | | | | | | | |
| Punishment S-L | 6 | 1 | 4 | 2 | 0 | 1 | 3 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 |

APPENDIX VII -- Continued

| PCR Subtest Configuration | Scores | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| Intact Family: Women-Mothers | | | | | | | | | | | | | | | | | |
| Loving | 1 | 2 | 2 | 1 | 0 | 2 | 5 | 6 | 5 | 4 | 7 | 3 | 2 | 4 | 5 | 3 | 3 |
| Protecting | 6 | 4 | 5 | 3 | 4 | 5 | 3 | 3 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| Reward S-L | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Intact Family: Women-Fathers | | | | | | | | | | | | | | | | | |
| Neglecting | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Casual | 6 | 2 | 7 | 4 | 3 | 5 | 2 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| Disrupted Family: Women-Mother | | | | | | | | | | | | | | | | | |
| Punishment S-L | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

APPENDIX VII -- Continued

| PCR Subtest Configuration | Scores | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 |
| Intact Family: Women-Mothers | | | | | | | | | | | | |
| Loving | 1 | 4 | 5 | 5 | 7 | 7 | 5 | 4 | 3 | 6 | 3 | 2 |
| Protecting | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reward S-L | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Intact Family: Women-Fathers | | | | | | | | | | | | |
| Neglecting | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Casual | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Disrupted Family: Women-Mothers | | | | | | | | | | | | |
| Punishment S-L | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## APPENDIX VIII

### FREQUENCY DISTRIBUTION OF THE EPPS SCALE FOR WHICH THE HYPOTHESIS OF NORMALITY WAS REJECTED

| EPPS Scale Configuration | Scores | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Intact Family: Mothers & Fathers | | | | | | | | | | | | | | |
| Endurance | 1 | 2 | 4 | 3 | 4 | 2 | 4 | 11 | 8 | 4 | 6 | 8 | 14 | 8 |

Table to read from left to right, from first through last page.

APPENDIX VIII -- Continued

| EPPS Scale Configuration | Scores | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Intact Family: Mothers & Fathers | | | | | | | | | | | | | | |
| Endurance | 10 | 5 | 6 | 3 | 4 | 4 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |

APPENDIX II

(PCR for father the same as mother except for items 24, 26, 31, 54, 61, 64, 74, 81, 91, 113, 122)

## PARENT-CHILD RELATIONSHIP QUESTIONNAIRE

(Reprinted with Permission of Anne Roe, Ph.D., Harvard University)

In this booklet are a number of statements which describe different ways that mothers act toward their children. Read each statement carefully and think how well it describes how your mother acted while you were growing up. Think especially about the time before you were 12.

After each statement, there are 5 (five) responses which are labeled VERY UNTRUE, TENDS TO BE UNTRUE, SOMETIMES UNTRUE-SOMETIMES TRUE, TENDS TO BE TRUE, and VERY TRUE. You are to select the response that you feel describes how YOUR Mother acted toward YOU. This response should then be indicated on the separate answer sheet by blackening between the lines which lie below the response you have selected.

For instance, if your memory is that your mother always objected if you were late for meals, you mark your response for that item as VERY TRUE (see Example). YOU MUST ANSWER ALL ITEMS. DO NOT LEAVE ANY ITEMS BLANK. Be sure that you mark only one response to a statement. In marking your answers on the answer sheet, be sure that the number of the response agrees with the number of the statement. Make your marks heavy and black. Erase completely any answer you wish to change. DO NOT MAKE ANY MARKS IN THIS BOOKLET.

| EXAMPLE: | Very Untrue | Tends to Be Untrue | Sometimes Untrue Sometimes True | Tends to be True | Very True |
|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| MY MOTHER: Objected when I was late for meals | | | | | |

RESPONSE ON ANSWER SHEET

| Very Untrue | Tends to Be Untrue | Sometimes Untrue Sometimes True | Tends to Be True | Very True |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| \|\| | \|\| | \|\| | \|\| | ▮ |

| MY MOTHER | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| 1. tried to get me everything I wanted. | | | | | |
| 2. complained about me to others when I did not listen to her. | | | | | |
| 3. made no concessions for my age. | | | | | |
| 4. let me spend my allowance any way I liked. | | | | | |
| 5. discussed what was good about my behavior and helped to make clear the desirable consequences of my actions. | | | | | |
| 6. punished me hard enough when I misbehaved to make sure I wouldn't do it again. | | | | | |
| 7. took away my toys or playthings when I was bad. | | | | | |
| 8. was genuinely interested in my affairs. | | | | | |
| 9. kept forgetting things she was supposed to do for me. | | | | | |
| 10. took me places (trips, shows, etc.) as a reward. | | | | | |
| 11. spoiled me. | | | | | |
| 12. made me feel ashamed or guilty when I misbehaved. | | | | | |
| 13. let me know I wasn't wanted. | | | | | |
| 14. set very few rules for me. | | | | | |
| 15. compared me favorably with other children when I did well. | | | | | |
| 16. made it clear that she was boss. | | | | | |
| 17. slapped or struck me when I was improper. | | | | | |
| 18. made me feel wanted and needed. | | | | | |

| MY MOTHER | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| 19. was too busy to answer my questions. | | | | | |
| 20. relaxed rules and regulations as a reward. | | | | | |
| 21. was very careful about protecting me from accidents. | | | | | |
| 22. nagged or scolded me when I was bad. | | | | | |
| 23. thought it was my own fault if I got into trouble. | | | | | |
| 24. let me dress in any way I pleased. | | | | | |
| 25. told me how proud she was of me when I was good. | | | | | |
| 26. thought I should always be doing something. | | | | | |
| 27. took away or reduced my allowance as punishment. | | | | | |
| 28. made me feel what I did was important. | | | | | |
| 29. did not care if I got into trouble. | | | | | |
| 30. gave me new books or records as rewards. | | | | | |
| 31. couldn't bring herself to punish me. | | | | | |
| 32. punished me by ignoring me. | | | | | |
| 33. did not spend any more time with me than necessary. | | | | | |
| 34. let me off easy when I did something wrong. | | | | | |
| 35. treated me more like a grown-up when I behaved well. | | | | | |
| 36. pushed me to excel in everything I did. | | | | | |

| MY MOTHER | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| 37. wouldn't let me play with other children when I was bad. | | | | | |
| 38. encouraged me to do things on my own. | | | | | |
| 39. paid no attention to what I was doing in school. | | | | | |
| 40. let me stay up longer as a reward. | | | | | |
| 41. protected me from teasing or bullying by other children. | | | | | |
| 42. made me feel I wasn't loved any more if I misbehaved. | | | | | |
| 43. did not want me to bring friends home. | | | | | |
| 44. gave me the choice of what to do whenever it was possible. | | | | | |
| 45. praised me before my playmates. | | | | | |
| 46. told me how to spend my free time. | | | | | |
| 47. spanked or whipped me as punishment. | | | | | |
| 48. talked to me in a warm and affectionate way. | | | | | |
| 49. did not take me into consideration in making plans. | | | | | |
| 50. rewarded me by letting me off some of my regular chores. | | | | | |
| 51. did not want me to play rough outdoor games for fear I might be hurt. | | | | | |
| 52. shamed me before my playmates when I misbehaved. | | | | | |
| 53. disapproved of my friends. | | | | | |

| | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| MY MOTHER | | | | | |
| 54. let me eat what I wanted to. | | | | | |
| 55. expressed greater love for me when I was good. | | | | | |
| 56. punished me without any thought or hesitation when I misbehaved. | | | | | |
| 57. gave me extra chores as punishment. | | | | | |
| 58. tried to help me when I was scared or upset. | | | | | |
| 59. did not care whether I got the right kind of food. | | | | | |
| 60. gave me candy or ice cream or fixed my favorite foods for me as a reward. | | | | | |
| 61. taught me not to fight under any circumstances. | | | | | |
| 62. frightened or threatened me when I did wrong. | | | | | |
| 63. went out of the way to hurt my feelings. | | | | | |
| 64. let me do as I liked with my time after school. | | | | | |
| 65. gave me special attention as a reward. | | | | | |
| 66. demanded unquestioning respect and deference. | | | | | |
| 67. punished me by sending me out of the room or to bed. | | | | | |
| 68. did not try to tell me everything, but encouraged me to find things out for myself. | | | | | |
| 69. left my care to someone else (e.g. nurse or relative). | | | | | |
| 70. let me go to parties or play with others more than usual as a reward. | | | | | |

| MY MOTHER | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| 71. taught me to go for help to my parents or teacher rather than to fight. | | | | | |
| 72. told me how ashamed she was when I misbehaved. | | | | | |
| 73. ridiculed and made fun of me. | | | | | |
| 74. let me choose my own friends. | | | | | |
| 75. praised me when I deserved it. | | | | | |
| 76. always told me exactly how to do my work. | | | | | |
| 77. took away my books or records as punishment. | | | | | |
| 78. respected my point of view and encouraged me to express it. | | | | | |
| 79. acted as if I didn't exist. | | | | | |
| 80. rewarded me by giving me money or increasing my allowance. | | | | | |
| 81. preferred to have me play at home rather than to visit other children. | | | | | |
| 82. compared me unfavorably with other children when I misbehaved. | | | | | |
| 83. complained about me. | | | | | |
| 84. let me work by myself. | | | | | |
| 85. made me feel proud when I did well. | | | | | |
| 86. pushed me to do well in school. | | | | | |
| 87. punished me by being more strict about rules and regulations. | | | | | |
| 88. let me do things I thought were important, even if it were inconvenient for her. | | | | | |
| 89. paid no attention to me. | | | | | |
| 90. hugged me, kissed me, petted me when I was good. | | | | | |

| MY MOTHER | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| 91. didn't let me go places because something might happen to me. | | | | | |
| 92. reasoned with me and explained possible harmful consequences when I did wrong things. | | | | | |
| 93. compared me unfavorably to other children no matter what I did. | | | | | |
| 94. did not object to my loafing or daydreaming. | | | | | |
| 95. praised me to others. | | | | | |
| 96. would not let me question her reasoning. | | | | | |
| 97. punished me by not taking me on trips or visits etc. that I had been promised. | | | | | |
| 98. tried to help me to learn to live comfortably with myself. | | | | | |
| 99. ignored me as long as I did not do anything to disturb her. | | | | | |
| 100. gave me new things as a reward, such as toys. | | | | | |
| 101. hated to refuse me anything. | | | | | |
| 102. thought that it was bad for a child to be given affection and tenderness. | | | | | |
| 103. did not tell me what time to be home when I was out. | | | | | |
| 104. wanted to have complete control over my actions. | | | | | |
| 105. was willing to discuss regulations with me, and took my point of view into consideration in making them. | | | | | |
| 106. did not care who my friends were. | | | | | |
| 107. worried about me when I was away. | | | | | |

| MY MOTHER | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| 108. did not want me around at all when she had company. | | | | | |
| 109. did not object when I was late for meals. | | | | | |
| 110. taught me that she knew best and that I must accept her decisions. | | | | | |
| 111. encouraged me to bring friends home, and tried to make things pleasant for them. | | | | | |
| 112. left me alone when I was upset. | | | | | |
| 113. would not let me try things if there were any chance I would fail. | | | | | |
| 114. expected children to misbehave if they were not watched. | | | | | |
| 115. was easy with me. | | | | | |
| 116. expected prompt and unquestioning obedience. | | | | | |
| 117. taught me skills I wanted to learn. | | | | | |
| 118. did not try to help me learn things. | | | | | |
| 119. wanted to know all about all my experiences. | | | | | |
| 120. believed a child should be seen and not heard. | | | | | |
| 121. did not bother much about enforcing rules. | | | | | |
| 122. kept the house in order by having a lot of rules and regulations for me. | | | | | |
| 123. made it easy for me to confide in her. | | | | | |
| 124. forgot my birthday. | | | | | |

| | Very Untrue 1 | Tends To Be Untrue 2 | Sometimes Untrue Sometimes True 3 | Tends To Be True 4 | Very True 5 |
|---|---|---|---|---|---|
| MY MOTHER | | | | | |
| 125. did not want me to grow up. | | | | | |
| 126. avoided my company. | | | | | |
| 127. did not check up on whether I did my homework. | | | | | |
| 128. allowed me to make only minor decisions. | | | | | |
| 129. said nice things about me. | | | | | |
| 130. did not care whether I had the same kind of clothes as the other children. | | | | | |