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A REVISION OF THE PARENT-CHILD RELATIONS QUESTIONNAIRE TO INVESTIGATE ROE'S OCCUPATIONAL CHOICE THEORY WITH ADOLESCENT GIRLS

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THEORY WITH ADOLESCENT GIRLS

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CHAPTER I

INTRODUCTION

Statement of the Problem

The purpose of this study was to produce a revision of the Parent-Child Relations Questionnaire (PCR) in order to obtain a more refined device to assess influences of parent-child relations upon occupational choices. The problem was to test Roe's[1] hypothesis of occupational choice by measuring the parent-child relationship with the modified instrument.

"The Parent-Child Relations Questionnaire (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."[2]

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[1]Anne Roe, The Psychology of Occupations (New York: John Wiley and Sons, 1956), pp. 33-34.

[2]Anne Roe and Marvin Siegelman, "A Parent-Child Relations Questionnaire," Child Development, XXXIV (1963), 355-369.

The theory of occupational choice formulated by Roe suggests that an individual is predisposed towards work either person oriented or non-person oriented as the result of the parent-child relationship experienced within the family environment. To Roe, the occupation is the source of satisfaction of many needs of the individual and she accepts Maslow's[3] concept of a hierarchy of needs.[4]

The family environment influences occupational choice in Roe's theory. She states:

> Person directed attention may refer to other persons or to the self, and it may be a resultant of excessive thwarting from persons, or of major satisfactions connected with persons. There is a differentiation between person-directed attention and non-person directed attention. And I think that this differentiation is probably fixed, for all practical purposes . . . by kindergarten age. . . .[5]

The present study was an attempt to modify the PCR and to determine by use of a refined device the extent of influence of parent-child relations upon an adolescent's occupational choice.

Background and Need for the Study

The critical need to assess occupational choice earlier in the child's educational experience is noted in the literature.

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

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

[5] Anne Roe, "The Implications of Vocational Interest Theory for Vocational Counseling," (unpublished manuscript), 1958.

Roe states:

> In our culture, social and economic status depend upon the occupation more than upon anything else. Occupations as a source of need satisfaction are of extreme importance in our culture . . . . in order to understand the role of the occupation in the life of the individual, we must first have some understanding of the individual and his needs.[6]

Other theories of occupational choice indicate that there is a need to assess the occupational choice of the individual earlier in the child's educational experience. Forer says "Occupational choices are explained largely in the personality and the emotional needs of the individual, often operating unconsciously."[7] Tyler states "The process of choosing an occupation is a process of establishing identity."[8] Hoppock contends that ". . . occupations are chosen to meet needs."[9] According to Hollingshead

> . . . the family sets the stage upon which the adolescent is expected, if not compelled, by subtle processes and techniques, to play out his roles in the developmental task he faces in the transition from child to adult. As he moves into the community, he carries his family's station in the prestige structure with him. He is identified by his family name, and its heritage is his.[10]

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[6]Roe, The Psychology of . . ., p. 33.

[7]R. B. Forer, "Personality Factors in Occupational Choice," Educational and Psychological Measurement (Autumn, 1953), 361.

[8]L. E. Tyler, "The Future of Vocational Guidance," Vocational Counseling: A Reappraisal in Honor of Donald G. Paterson, M. S. Viteles, A. H. Brayfield, and L. E. Tyler (Minneapolis: The University of Minnesota Press, 1961), p. 101.

[9]Robert Hoppock, Occupational Information (New York: McGraw-Hill Book Company, Inc., 1963), pp. 83-115.

[10]August B. Hollingshead, Elmtown's Youth (New York: John Wiley and Sons, Inc., 1951), p. 159.

It was this rationale which prompted measurement of the PCR with the first version administered to a sample of twenty-six male New York University students as part of a pilot study. A revised form was used with other college students and with male and female adults, as part of the study of the origin of interests.[11]

The PCR consists of ten subtests, six of fifteen items each, for behavior characterized as Loving (Lov), Protecting (Pro), Demanding (Dem), Rejecting (Rej), Neglecting (Neg), and Casual (Cas). There are four subtests with ten items each for Symbolic-Love Reward (Rew S-L), Direct-Object Reward (Rew D-O), Symbolic-Love Punishment (Pun S-L), and Direct-Object Punishment (Pun D-O). The first six of these categories fit a theoretical model suggested by Roe[12] and the remaining categories follow the work of Sears, Maccoby, and Levin.[13] There are separate forms for mothers and fathers, although they differ on only eleven items.

The questionnaire items refer to specific behaviors and not to attitudes. This was for the purpose of reducing some of the difficulties resulting from the use of retrospective data.[14]

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[11] Anne Roe and Marvin Siegelman, "The Origin of Interests," APA Inquiry Studies, No. 1 (Washington, D. C.: American Personnel and Guidance Association, 1964).

[12] Roe and Siegelman, Child Development, XXXIV (1963), 356.

[13] Ibid.

[14] Ibid.

Other studies which evaluate parental behavior in retrospect are Slater,[15] Schutz,[16] Schaefer,[17] and Kinnane and Bannon.[18]

The review of the literature (Chapter II) supports the need for the study and is focused upon parent-child influence in all areas, upon occupational choice, and the PCR as a device to evaluate occupational choice. The literature cites instances where youth are making occupational choices at an early period in life, stressing that adolescents should be and can be doing this. A report by MacCurdy[19] states that thirty-seven of seventy-five Science Talent Search winners had decided to become scientists when they were in elementary school.

There has been wide recognition of the theoretical importance of the child's perception of his parents for understanding personality

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[15] P. Slater, "Parental Behavior and the Personality of the Child," (mimeographed).

[16] W. C. Schutz, A Three-Dimensional Theory of Interpersonal Behavior (New York: Holt, Rinehart, and Winston, 1960).

[17] E. S. Schaefer, "Multivariate Measurement and Factorial Structure of Children's Perception of Maternal and Paternal Behavior," (mimeographed).

[18] John Kinnane and Margaret Bannon, "Perceived Parental Influences and Work-Value Orientation," Personnel and Guidance Journal, XLIII(November, 1964), 273-279.

[19] R. D. MacCurdy, "Characteristics of Superior Science Students," Science Education, XL, No. 1 (February, 1956), 3.

development in the works of Ausubel, et al.,[20] Glidewell,[21] Kagan,[22] Hoffman and Lippitt,[23] and Sears, Maccoby, and Levin.[24] Parent behavior ". . . effects the child's ego development only to the extent and in the form in which he perceives it."[25]

A study by Steinke and Kackowski[26] gives evidence that parents are significant figures in the vocational choice process of adolescents. Sears, Maccoby, and Levin found

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[20] D. P. Ausubel, Eee Balthazar, Irene Rosenthal, L. S. Blackman, S. H. Schpoont, and Joan Welkowitz, "Perceived Parent Attitudes as Determinants of Children's Ego Structure," Child Development, XXV (1954), 173-184.

[21] J. C. Glidewell, Parental Attitudes and Child Behavior (Springfield, Illinois: Charles C. Thomas, 1961).

[22] J. Kagan and Judith Lemkin, "The Child's Differential Perception of Parental Attributes," Journal of Abnormal Psychology, LXI (1960), 440-447.

[23] Lois W. Hoffman and R. Lippitt, "The Measurement of Family Life Variables," Handbook of Research Methods in Child Development, ed. P. H. Mussen (New York: John Wiley and Sons, 1960), pp. 945-1013.

[24] Robert R. Sears, Eleanor E. Maccoby, and Harry Levin, Patterns of Child Rearing (New York: Row, Peterson and Company, 1957), p. 461.

[25] Ausubel, et al., Child Development, XXV (1954), 173-184.

[26] Betty K. Steinke and Henry R. Kackowski, "Parents Influence the Occupational Choice of Ninth Grade Girls," Vocational Guidance Quarterly, IX, No. 2 (Winter, 1960-61), 101-103.

> Every mother has her own temperament, her own attitudes, her own methods of rewarding and punishing. It is these ways of behaving that her child learns to want. If she is warm and loquacious, he will treasure demonstrativeness; if she is reserved, he will seek her normal reserved expressions toward him.[27]

A report by Rothney[28] relates that factors such as parental occupations or attitudes, geographic location, health and countless other factors were of more significance in planning their future by high school students, than was test performance.

To date, the devices used in these studies to measure parent-child relations, attitudes or influences are not sufficiently reliable or useful in all educational settings or grade levels. Hence, there is a need to refine, develop, and establish the Parent-Child Relations Questionnaire to meet acceptable psychometric and counseling criteria.

Hypotheses

An evaluation of the studies made with the PCR by Roe and Siegelman,[29] Green and Parker,[30] and Siegelman[31] indicated that modification and refinement could be made in the PCR. Two hypotheses

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[27] Sears, Maccoby, and Levin, Patterns of . . ., p. 461.

[28] John W. Rothney, Guidance Practices and Results (New York: Harper and Brothers, 1958).

[29] Roe and Siegelman, Child Development, XXXIV (1963), 355-369.

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

[31] Marvin Siegelman, unpublished material.

followed directly from the modification and refinement of the instrument. These are:

Hypothesis One: The Lambert-Parker Revision of the PCR (detailed discussion of this revision will be found in Chapter III) should reveal more item-total correlation than the items in the original PCR, and higher reliabilities.

Hypothesis Two: The Lambert-Parker Revision of the PCR (L-P PCR) should substantiate Roe's theory of occupational choice to the effect that an individual is predisposed towards work predominately person oriented,[32] or towards work predominately non-person oriented, as a direct result of the parent-child relationship experienced within the family environment.

Other specific hypotheses will be tested and are stated and discussed in Chapter III.

Summary

The problem for this investigation has been presented in Chapter I, and the background and the need for the study were also discussed. Two hypotheses to be tested through this investigation were stated.

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[32]The terms "Towards person" and "Towards non-person" occupations, as used by Roe, will be employed throughout this dissertation.

CHAPTER II

A REVIEW OF THE LITERATURE

Parental Influence upon Adolescents

Some factors that influence the kind of person the young child is to become consist of those attitudes, expectations, and feelings which parents express toward a particular child, as distinguished from their expectations for children in general. In the American culture, children are expected to show a considerable degree of independence of thought and action at a fairly early age, as compared with other cultures, and this expectation applies with greatest emphasis to boys. The different attitudes expressed toward children of the two sexes may contribute to the personality differences between men and women.

The differences in personality between first-born children and their siblings have also attracted considerable attention from psychologists (McArthur[1] and Dreikurs[2]). In a review of research relating to

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[1]C. McArthur, "Personalities of First and Second Children," Psychiatry, XIX (1956), 47-54.

[2]R. Dreikurs, The Challenge of Parenthood (New York: Duell, Sloan, and Pearce, 1948).

the relationship between order of birth and success, Jones[3] found that the number of successful individuals who were first-born in their families considerably exceeded chance expectations. In his study he found that sixty-five per cent of individuals from two-child families listed in Who's Who in America were first-born, whereas the expectation according to chance would be only fifty per cent.

First-born individuals also appeared in disproportionately large numbers among gifted children studied by Terman and others,[4] and persons listed in American Men of Science by Cattell.[5]

Although Jones was unable to explain these findings to his own satisfaction, it seems likely the differing expectations that parents have for the oldest child in the family have much to do with his tendency to behave differently from his siblings. McArthur found that oldest children tended to be more adult-oriented, their behavior being characterized by such adjectives as sensitive, good, conscientious, serious, fearful, and studious; whereas second-born children tended to be peer-oriented, being characterized as not studious, cheerful, placid, and easy-going. When parents were asked if they had changed their methods of handling children between the first and second child,

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[3]H. E. Jones, "The Environment and Mental Development," Manual of Child Psychology, ed. L. Carmichael (New York: Wiley, 1954).

[4]L. M. Terman, et al., Genetic Studies of Genius, Vol. I of The Mental and Physical Traits of a Thousand Gifted Children (Stanford: Stanford University Press, 1925).

[5]J. McK. Cattell, American Men of Science (Garrison, New York: Science Press, 1927).

sixty-five per cent stated that they had "relaxed" more with the second, and only three per cent said they were more strict.[6]

The viewpoint of psychologists has been strengthened by a number of studies exploring various relationships between the behavior of children and their treatment by adults. Watson[7] set out to compare the behavior of fifty children from "strict" homes and fifty from "permissive" homes. When Watson studied the behavior of children from the two types of homes, using psychological tests in a clinical setting, he found that children from permissive homes were:

1. More self-reliant and independent, and more inclined to display initiative.
2. More socialized and cooperative, and less negative or overcompliant.
3. More able to persist in the face of frustration when assigned tasks of increasing difficulty.
4. More inclined to express positive feelings towards others and less inclined to express hostility.
5. More likely to be highly creative, imaginative, spontaneous, and original in their thinking and general behavior.

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[6] McArthur, Psychiatry, XIX (1956), 47-54.

[7] G. Watson, "Some Personality Differences in Children Related to Strict or Permissive Parental Discipline," Journal of Psychology, XXXXIV (1957), 227-249.

He found no differences between the groups with respect to self-control, anxiety, passivity, and happiness.

In general, studies comparing democratic and permissive child rearing methods with methods that are restrictive and autocratic seem to come to similar conclusions. Children from strict families are likely to be conforming and obedient, but are handicapped when it comes to self-reliance, sociability, and originality. Extreme strictness may also produce a sizeable minority of children who are chronic rebels and non-conformists. According to Lindgren and Byrne[8] democratic and permissive treatment seem to develop children who are both aggressive and perhaps competitive, but at the same time more popular and more considerate of others. Such children seem to be more creative, original, self-reliant, and spontaneous.

It is the belief of Maslow[9] that the child needs an organized world rather than an unorganized or unstructured one. He states that young children seem to thrive better under a system that has at least a skeletal outline or rigidity, in which there is a schedule of a kind, some sort of routine. He further says that child psychologists, teachers, and psychotherapists have found that permissiveness within

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[8]Henry C. Lindgren and Donn Byrne, Psychology: An Introduction to the Study of Human Behavior (New York: John Wiley and Sons, Inc., 1961).

[9]A. H. Maslow, Motivation and Personality (New York: Harper and Brothers, 1954), pp. 86-87.

limits, rather than unrestricted permissiveness, is preferred as well as needed by children.

Sears et al. refer to child rearing as a non-technical term with precise significance. "It refers generally to all the interactions between parents and their children."[10] The parents' expressions of attitudes, values, interests, and beliefs are included in these interactions as well as the caretaking and training behavior of the child. These authors found in their study of child rearing that the mother's warmth proved to be pervasive in its effects on the child and that maternal coldness contributed to aggression. This study found the following eight factors that appeared to underlie a wide variety of discrete parental behaviors: (1) permissiveness-restrictiveness, (2) general family adjustment, (3) warmth of mother-child relationship, (4) responsible child-training orientation, (5) aggressiveness and punitiveness, (6) perception of husband, (7) orientation towards child's physical well-being, and (8) the pattern of control or discipline used by mother. (Reported by McCandless.[11])

Sewell, Mussen, and Harris[12] studied child-rearing practices by using methods similar to those of Sears, Maccoby, and Levin. The

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[10]Sears et al., Patterns of Child . . . , pp. 314-315.

[11]Boyd R. McCandless, Children and Adolescents: Behavior and Development (New York: Holt, Rinehart and Winston, 1961), pp. 65-66.

[12]W. H. Sewell, P. H. Mussen, and C. W. Harris, "Relationships among Child-Training Practices," American Sociological Review, XX (1955), 137-148.

biggest overlap of the two studies was the degree of permissiveness or strictness shown to children by the mother.

A study by McCandless, Bilous, and Balsbaugh[13] found that, by pre-school years, children who are most dependent upon adults are least popular with their age-mates.

Child rearing practices are thought to be of crucial importance in human development. One dimension of child rearing behavior is that of strictness as opposed to permissiveness. Strict discipline does not seem to justify the confidence that is often placed on it.

Parental Influences upon Occupational Choices

Writers from various disciplines have noted the close relationship between parental stimuli and the behavior of children. Bergstein states, "In their texts, such authorities as Riesman, Symonds, and Cole describe various aspects of the close relationship between parents' behavior and that of their children."[14] Reports of studies and researches appearing in journals of various disciplines delineate the relationship between child and parent behavior. Significant work in this area has been reported by Handford,[15] and by Becker and his

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[13]B. R. McCandless, Carolyn Bilous, and B. R. Balsbaugh, "The Relations between Peer-Popularity and Dependence on Adults in Pre-School-Age Socialization," Child Development, VII (1960), 44-63.

[14]Harry B. Bergstein, "The Parent and the School Counselor: An Emerging Relationship," Vocational Guidance Quarterly, XIII, No. 4 (Summer, 1965), 243.

[15]Norah P. Handford, "Mothers of Adolescent Girls," Smith College Studies in Social Work, XXIV (1954), 9-34.

associates.[16] One of the more impressive studies is that of Baldwin, Kalhorn, and Breese,[17] who defined three behavior syndromes of parents, namely democratic, indulgent, and accepting. The authors concluded that children who come from homes where parents are democratic and accepting show an accelerated intellectual development. On the other hand, they found that children whose parents are overly indulgent or highly restrictive tend toward less intellectual growth.

Samson and Stefflre[18] found, in the area of vocational development, a significant relationship between students' first choices of occupations and their fathers' occupations. Weigand,[19] who was interested in identifying factors related to educational achievement, compared the parents of successful college students with those of unsuccessful classmates. In his study he found that students who were adaptive both with academic work and with their personal problems had parents who displayed interest, encouragement, and democratic supervision. On the other hand, he found that unsuccessful students had

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[16] W. C. Becker, D. R. Peterson, L. A. Hellmer, D. J. Shoemaker, and H. C. Quay, "Factors in Parental Behavior and Personality as Related to Problem Behavior in Children," Journal of Consulting Psychology, XXIII (1959), 107-117.

[17] A. L. Baldwin, J. Kalhorn, and F. H. Breese, "Patterns of Parent Behavior," Psychological Monographs, LVIII, No. 268 (1945).

[18] Ruth Samson and B. Stefflre, "Like Father . . . Like Son?" Personnel and Guidance Journal, XXXI (1952), 35-59.

[19] G. Weigand, "Adaptiveness and the Role of Parents in Academic Success," Personnel and Guidance Journal, XXXV (1957), 518-522.

parents whose supervision was poor, who were generally dissatisfied with their offsprings' work, and who exerted undue pressure on the student in his choice of an occupation.

Krippner[20] studied seventh and eighth grade students in the Chicago area, with regard to educational plans and preferences. His study revealed that of 351 upper-middle class pupils, most of them indicated that they were expected to attend college. This expectancy was apparently so strong that pupil dislike of school and poor academic achievement did not deter most boys and girls from agreeing with their parents that higher education should be given high priority among their plans for the future.

Another study by Krippner,[21] and one by Lee and King[22] involved junior high students from the upper-middle class homes and ninth grade girls in a technical high school from a low socio-economic level. These studies revealed that the occupational status of the father (based on Roe's occupational classification scale) is a factor affecting the choice of occupation by the adolescent.

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[20]Stanley Krippner, "The Educational Plans and Preferences of Upper-Middle Class Junior High School Pupils," Vocational Guidance Quarterly, XIII, No. 4 (Summer, 1965), 257-260.

[21]Stanley Krippner, "Junior High School Students' Vocational Preferences and Their Parents' Occupational Level," Personnel and Guidance Journal, XLI (1963), 590-595.

[23]Billie Louise Lee and Paul King, "Vocational Choice of Ninth Grade Girls and Their Parents' Occupational Levels," Vocational Guidance Quarterly, XII (1964), 163-167.

Patterning a study of 142 ninth grade girls from a small, rural, midwestern community with a low-middle class socioeconomic level on the basic plan of the two previously mentioned studies, Hanson[23] found:

1. Pupils' preferences were significantly higher than their fathers' vocations.
2. Pupils' preferences were significantly higher than their mothers' vocations.
3. The fathers' suggested vocations were significantly higher than their own vocations.
4. Mothers' suggested vocations were significantly higher than fathers' vocations.
5. There was no significant difference between fathers' and mothers' vocations when both were employed.
6. Fathers' and mothers' suggestions were not significantly different from daughters' preferences.

Kinnane and Pable[24] found evidence that suggests that parents represent significant figures in the adolescents' vocational choice process. Tiedeman and Pandit made a study on ego-identity with senior high school students and found that the parents' estimate of

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[23]Jerrold T. Hanson, "Ninth Grade Girls' Vocational Choices and Their Parents' Occupational Level," Vocational Guidance Quarterly, XIII, No. 4 (1965), 261-264.

[24]John F. Kinnane and Martin W. Pable, "Family Background and Work Value Orientation," Journal of Counseling Psychology, IX, No. 4 (Winter, 1962), 320-325.

the subject was closest to the subject's own concept of himself. They found that ". . . the level of occupational aspiration definitely depends on the identity an adolescent perceives himself to have attained in the social system of relevance to him."[25]

Super[26] also found that occupational choice is, to a certain extent, a way of implementing a self-concept. Tyler implies this self-concept when she says,

> The individual who is restless when he is cooped up within four walls, has in effect made a choice that eliminates indoor jobs. The individual who is very "security conscious" has in effect eliminated occupations, like selling, characterized by a variable income.[27]

The study of Super and Overstreet[28] points to the fact that young people need help early in life for exploring, examining, and analyzing all the factors which lead to a wise vocational choice.

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[25]David W. Tiedeman and Jirval Lal Pandit, "On Identity and Level of Occupational Aspiration," Harvard Studies in Career Development, No. 9 (Cambridge, Massachusetts: Harvard Graduate School of Education, Harvard University, December, 1958, mimeographed).

[26]Donald E. Super, Psychology of Careers (New York: Harper and Brothers, 1957), pp. 85-95.

[27]L. E. Tyler, "Toward a Workable Psychology of Individuality," American Psychologist, XIV (1959), 75-81.

[28]Donald Super and Phoebe L. Overstreet, The Vocational Maturity of Ninth Grade Boys (New York: Teachers College, Columbia University, Bureau of Publications, 1960).

The way a person feels toward his family when growing up was found to be indicative of the influence the family relationship has in regard to satisfactory work adjustment in adulthood (Friend and Haggard.[29])

Rosenberg[30] found that students from families in upper economic brackets were more likely to select business and the "free professions" (medicine and law), whereas students from lower economic levels were more inclined to choose the salaried professions of engineering, teaching, social work, and science. The part that religious background may play in occupational choice is shown by the tendency of Catholics and the members of the more "fundamentalist" Protestant sects to choose occupations outside the field of science (Roe.[31])

Most students have made some kind of a vocational choice before they enter college. Work occupies an extremely important position in our middle-class system of values. One reason for the importance of work is that an occupation contributes a large proportion of the self-concept; it is an important role that one plays, and it constitutes a classification that communicates a good deal about the person.

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[29]Jeannette G. Friend and E. A. Haggard, "Work Adjustment in Relation to Family Background," Applied Psychological Monograph, No. 16 (June, 1948).

[30]M. Rosenberg, Occupations and Values (Glencoe, Illinois: Free Press, 1957).

[31]Anne Roe, The Psychology of . . . , pp. 33-34.

In the American culture, occupation is perhaps the best single indicator of social status (Kornhauser.[32])

Investigations Using the Parent-Child Relations Questionnaire and Roe's Theory to Evaluate Occupational Choice

The PCR was used by Roe and Siegelman on a sample of 142 male Harvard University seniors, and with two adult samples of forty-four social workers (twenty-two male and twenty-two female), and forty-four engineers (twenty-two male and twenty-two female). For the two adult groups (social workers and engineers) only Loving and Rejecting for father, and Reward Direct-Object for mother were significant. For the two male groups (Harvard and adult males) only Loving and Rejecting for father, and Casual for mother were significant. The conclusion of Roe was that, "occupational choice, so far as these two occupations go [engineering and social work], does seem to be a fair indication of personality pattern, as related to person-orientation, ... It is, however, much less accurate as an indication of past experience [of parent-child relationship]."[33] Also reported was, ". . . the major difficulty with this design is the use of retrospective reports."[34]

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[32] R. R. Kornhauser, "The Warner Approach to Social Stratification," Class, Status and Power, ed. Bendix and Lipset (Glencoe, Illinois: Free Press, 1953).

[33] Roe and Siegelman, APA Inquiry Studies, No. 1, p. 29.

[34] Ibid.

Other studies of Roe's theory by use of the PCR have demanded retrospective recall by the subject of the parent-child relationship and all of these studies resulted, generally, in a failure to support Roe's theory.

Switzer, et al.[35] questioned a group of 120 undergraduate and graduate male subjects. Forty chemistry students represented the non-person orientation, forty ministerial students represented the person orientation, and forty graduate theology students were selected to provide for any change occurring following an increase in age and additional training. A two-scale questionnaire was constructed to measure the parental attitudes overdemanding and rejecting. Although differences were found between the perceived attitudes of fathers and of mothers, the results of the study failed to support Roe's hypothesis.

A group of male graduates was used for subjects in the study by Hagen. This group had been studied at Harvard University from 1938 to 1942, and were used in a follow-up study after World War II. Of the 245 contacted, 113 answered and the results were analyzed in relation to the histories of vocational, social, personal, and medical information collected from 1938 to 1942. When the childhood family environments were related to the subject's present occupation, the results proved to be negative. Hagen states, "the theory may also

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[35] 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), 45-48.

have failed because family atmosphere was inferred inadequately from the retrospective information which was available . . . memories of childhood were used and not the events themselves."[36]

Subjects for the study by Utton included two groups of professional women. Thirty-three social workers and twenty-five occupational therapists represented the person orientation. Twenty-eight laboratory technicians and forty-one dietitians represented the non-person orientation. In order to measure "warmth" and to assist and structure the retrospective thinking of the subjects, The Childhood Experience Rating Scales were designed. To measure "ignoring" and "possessive," The Parent Attitude Survey was constructed. There were no significant differences found between the two groups to support Roe's theory, although the results showed that the person oriented subjects displayed greater altruism. Utton also noted that, "the limitations of the retrospective rather than a current approach were apparent from the beginning."[37]

Twenty-four registered female nurses who had returned to graduate school, and twenty graduate female students from the departments of chemistry, physics, and mathematics who indicated a desire for

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

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

research were selected by Grigg for his study.[38] A questionnaire of fifteen items, constructed to reflect parental reactions when the subject was a child, was administered. No significant differences were found between the person oriented nurses and the non-person oriented research students. An implication that there was a weakness in the retrospective technique was given in Grigg's statement, "it may be that a more sensitive test of Roe's hypothesis would be to obtain the responses from the parents rather than from individuals . . . ."[39]

Roe and Siegelman did a factor analysis for each group in their study and extracted three factors for each group. These factors were: LR for Loving-Rejecting; CD for Casual-Demanding; and O for Overt Concern for the child. In their report they stated that similarities of these factors to other studies reported in literature of Slater, Schutz, and Schaefer could be found.[40]

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[38] Grigg classified nurses as person oriented, even though Roe's classification of nurses was as non-person oriented.

[39] 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.

[40] Roe and Siegelman, Child Development, XXXIV, (1963), 360-369.

In a recent study by Green,[41] the following conclusions were drawn:

1. The study supports Roe's hypothesis that the parent-child relationship is a determinant of the child's occupational choice. However, these data did not confirm the hypothesis that the parent-child relationship is the determinant.

2. Adolescent boys tended to select a towards person occupation if the dominant parent-child relationship, either mother's or father's, was positive in satisfying the son's needs.

3. Adolescent boys appeared to be capable of successfully internalizing and compensating for a negative parent-child relationship as it related to occupational orientation. Boys did not seem to react to stressful interpersonal relationships with parents as Roe hypothesized.

4. Adolescent girls tended to select a towards non-person occupation if the dominant parental relationship was a dynamically negative one with the father. They also tended towards a non-person occupation if the mother was perceived as presenting a strong concentration of negative behavior. This conclusion is based upon the explicit assumption that denial of needs is a psychologically uncomfortable experience for the individual.

5. Adolescent girls' occupational orientation did not tend to be influenced by a positive parent-child relationship with either parent.

Green[42] found in his study of seventh grade boys and girls that specific parent-child relationships seemed to influence the occupational orientation of the adolescents. These relationships appeared to affect boys and girls differently. Boys tended to

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[41] Laurence Burton Green, "Relationship with Parents as an Influence upon Vocational Choice of Adolescents: An Investigation of Roe's Theory," Ph.D. Dissertation, The University of Oklahoma, Norman, Oklahoma, 1964.

[42] Ibid., pp. 93-99.

select a towards person occupation when perceiving the positive parental behaviors of Protecting, Casual, and Reward Direct-Object. However, these relations did not appear to have as strong an effect on occupational orientation as Roe hypothesized.

> Girls tended to select a towards non-person occupation when perceiving the father-daughter negative relationships of Rejecting and Demanding. These dynamic behaviors seemed to be more powerful in influencing girls' occupational orientation than the passive behavior of paternal neglect. Girls reacted towards non-person occupations when the mother-daughter relationship was strongly negative.[43]

The literature revealed that only a few studies have been made to test Roe's hypothesis. The most recent one, by Green and Parker,[44] used a modified PCR. The Green and Parker study is the only one which did not use retrospective recall, but it failed to confirm Roe's hypothesis in its entirety.

Measurement at Critical Periods of Adolescence

Research in the areas of human development and occupational life have offered new vistas of understanding about vocational guidance. The older approach attempted to match human traits and job requirements as a means of helping persons to choose, enter, and

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[43] Ibid., pp. 91-93.

[44] 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 (Winter, 1965), 379-383.

adjust to an occupation. This approach is now being transformed into the more complex task of helping individuals to plan how to integrate the work aspects of life with their personalities. Super has defined this process as that "of helping a person to develop and accept an integrated and adequate picture of himself and of his role in the world of work, to test this concept against reality, and to convert it into a reality with satisfaction to himself and benefit to society."[45]

Zapoleon[46] has dealt with the special problems of vocational guidance for women, in regard to the problem of relating homemaking to career.

Innumerable studies have indicated that the socio-economic status and occupation of parents are significant determiners of occupations entered by individuals (Berdie,[47] Allen,[48] and Thomas[49]).

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[45] Super, The Psychology . . . , 85-95.

[46] Marguerite W. Zapoleon, Occupational Planning for Women (New York: Harper and Row, Publishers, 1961).

[47] Ralph R. Berdie, "Why Don't They Go to College?" The Personnel and Guidance Journal, XXXI (1953), 352-356.

[48] P. J. Allen, "Childhood Backgrounds and Success in a Profession," American Journal of Sociology, XX (1955), 186-190.

[49] Lawrence G. Thomas, The Occupational Structure and Education (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1956), p. 402.

Vocational maturity is a basic assumption by Super[50] denoting that vocational behavior changes systematically with increasing age, becoming more goal-directed, more realistic, and more independent.

Super[51] has recommended, as a result of his continuing longitudinal study, that for the ninth-grade boys in his group the vocational guidance problem was one of assistance in vocational exploration rather than in vocational choice or selection.

A research reported by Hulslander[52] suggests that certain significant relationships may exist between growth-in-age units, including physical and other personality growth factors, and occupational interests in children.

Samler,[53] in a critique of occupational information, points out its psycho-social limitations and makes a plea for attention to the psychological man as well as the economic man.

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[50]Donald E. Super, "Dimensions and Measurement of Vocational Maturity," Teachers College Record, LVII (1955), 151-163.

[51]Donald E. Super, "The Critical Ninth Grade: Vocational Choice or Vocational Exploration," The Personnel and Guidance Journal, XXXIX (October, 1960), 106-109.

[52]S. C. Hulslander, "Aspects of Physical Growth and Evaluation of Occupational Interests," The Personnel and Guidance Journal, XXXVI, No. 4 (May, 1956), 610-615.

[53]Joseph Samler, "Psycho-Social Aspects of Work: A Critique of Occupational Information," The Personnel and Guidance Journal, XXXIX (February, 1961), 458-465.

Roe[54] has summarized numerous studies, some of which indicate influences of family background and social inheritance. Hammond[55] identified four groups of motives that appeared to be related to the vocational choices of a group of college freshmen: a materialistic economic-status need; a competitive personal-status need; a technical or structure need involving a desire for system, definiteness, and security in detail in work; and a humanitarian acceptance need of service and belonging.

O'Hara and Tiedeman[56] found, in a study of vocational self-concepts of a group of adolescent boys of above-average scholastic aptitude, that there was increased congruence of self-estimates and test-estimates, interpreted as indicating increasing clarification of self-interests, work values, aptitudes, and general values. Congruence in the social-class area did not increase materially in these grades. Their data indicated that the primary differentiation of work values may have occurred before grade nine.

Lifton[57] explored with classes of elementary school teachers the extent of their awareness of the interest of young children in the

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[54]Roe, The Psychology of . . . , pp. 103-132.

[55]Marjorie Hammond, "Motives Related to Vocational Choices of College Freshmen," Journal of Counseling Psychology, III (Winter, 1956), 257-261.

[56]Robert P. O'Hara and David V. Tiedeman, "Vocational Self Concept in Adolescence," Journal of Counseling Psychology, VI (Winter, 1959), 292-301.

[57]Walter M. Lifton, "Vocational Guidance in the Elementary School," The Vocational Guidance Quarterly, VIII (Winter, 1959), 79-81.

world of work and the degree to which they were helping children to gain a realistic picture of existing jobs. The results indicated a serious lack, both in teacher understanding, and in suitable materials for children below the junior high school level.

Comparisons have been made between early and recent studies of realism in vocational choice. These studies have suggested that there may be greater realism than formerly, judged from the standards of occupational structure and of individual fitness for chosen work. In one study, Stephenson[58] reported that the students clearly distinguish between aspirations and actual plans.

Schutz and Blocher[59] made a study to test Bordin's[60] theory that vocational preferences are related to occupational stereotypes accepted as self-descriptions. They compared the expressed vocational preferences of a group of high school boys with their choices, as most self-descriptive, and short character sketches designed to correspond to major occupational groups into which their preferences were fitted. They found a significantly consistent relation between the vocational preferences and the self-descriptive choices. These researchers have also presented tentative findings suggesting a rela-

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[58]Richard M. Stephenson, "Realism of Vocational Choice: A Critique and An Example," The Personnel and Guidance Journal, XXXV (April, 1957), 482-488.

[59]Edward A. Schutz and Donald H. Blocher, "Self-Concepts and Stereotypes of Vocational Preferences," The Vocational Guidance Quarterly, VII (Summer, 1960), 241-244.

[60]E. S. Bordin, "A Theory of Vocational Interest as Dynamic Phenomena," Educational and Psychological Measurement, III (1943), 49-65.

tionship between a person's level of occupational choice and aspirations and his evaluation of himself, his feeling of personal worth, and his satisfaction with himself -- a theory propounded by Holland.[61]

A basic axiom for effective learning is to begin with the pupil at his own level. Where are the junior high school pupils with respect to career choice? Caplan, Ruble, and Segal[62] studied a group of junior high school students and found that their career choices tended to be unrealistic, in terms of their abilities. Based on this study of junior high school pupils, Super and Overstreet[63] concluded that forty-five per cent of the junior high school youths showed no relationship between interests as measured by The Kuder Preference Record, and career choice. These and similar findings led Super and Overstreet to conclude that there was neither wisdom nor consistency in the vocational preferences of ninth grade students.

Summary

Research has contributed to the understanding of the nature and of the processes involved in vocational choice and adjustment.

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[61] J. L. Holland, "A Theory of Vocational Choice," Journal of Counseling Psychology, VI (1959), 35-44.

[62] Stanley Caplan, Ronald A. Ruble, and David Segel, "A Theory of Educational and Vocational Choice in Junior High School," The Personnel and Guidance Journal, XXXVII (October, 1958).

[63] Super and Overstreet, The Vocational Maturity of . . . .

Research has also demonstrated many of the values inherent in vocational guidance. However, continuing experimental research is needed to improve and expand these services. It is upon such research conclusions that the present study is founded.

CHAPTER III

METHOD AND PROCEDURE

Revision of the PCR

It was essential to proceed with the refinement of the PCR, so that measurement of occupational choice in adolescents could be considered. Specifically, it was necessary to evaluate all studies (Roe and Siegelman,[1] Green and Parker,[2] and Siegelman[3]) in terms of the item response and performance by the differing groups. Rationale for selection of the one-hundred item questionnaire was based upon analysis of items from several samples (see Appendix I). All studies were used where item-total correlations from these several samples revealed the items which did not suggest high, or optimal item-total correlations. This meant that homogeneity of these items to the scale was lacking, and such items were rejected for use in the Lambert-Parker revision of the PCR (see Table VII). As a result of the analysis of all studies, five items were removed from each of the six

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[1]Roe and Siegelman, Child Development, XXXIV, No. 2 (1963), 357.

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

[3]Marvin Siegelman, Unpublished material included in Appendix II.

subtests Protecting, Rejecting, Casual, Demanding, Loving, and Neglecting. A correlation coefficient of .450 was used as the point of deletion. One item on the Punishment S-L scale (number 92) was reworded.

Correspondence with Dr. Anne Roe and with Dr. Marvin Siegelman (Appendix II) indicated that it would be advisable to maintain the original construction of the scale and to avoid creation of additional items which might reflect different experimental variables. Accordingly, in an endeavor to achieve greater reliability, the decision was made to reduce the questionnaire to scales of ten items each. The reduction was based upon item-total correlations from the several samples. The L-P PCR thus had a total of one hundred items, taken from the original one hundred thirty items on the PCR.

The analysis of all studies with the PCR showed that certain items remained consistently and uniformly low in item-total correlation. This was particulary the case with the original fifteen item scales. In each of these scales, at least three items were below .40 and consistently around .20 - .30. These were viewed as items to be rejected for purposes of this study. Fortunately the ten item scales in samples reviewed showed no seriously low item to be rejected, with the only exception being item ninety-two, which was slightly modified in syntax and retained. (See Appendix III for definitions of the ten behavioral constructs of these ten scales).[4]

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[4]Roe and Siegelman, Child Development, XXXIV, No. 2 (1963), 357.

Statistical Treatment of the L-P PCR

Validity

Content validity on the original PCR was obtained by Roe from inter-judge agreement on items.[5] Some of the items in the original PCR were specifically constructed to fit the ten categories. A large number of items were culled or adapted from the literature. The items constructed and adapted were submitted to her colleagues by Roe, with descriptions of the categories.[6] Each judge then assigned an item to a category, or discarded it. The same items were originally assigned for both parents, and had been previously accepted by each judge.

After a pilot form was given to twenty-six male students of New York University, a computation of reliabilities and an item analysis led to a modification. Eleven items thus differed for the two parents (items 24, 26, 31, 54, 61, 64, 74, 81, 113, and 122).

Questions 3, 4, 8, 11, 13, 23, 29, 31, 36, 38, 44, 53, 56, 59, 68, 69, 76, 84, 86, 88, 94, 111, 112, 113, 114, 119, 125, 127, 128, and 130 on the original instrument were rejected for the L-P PCR. Since the remaining items were part of the original scales, they were renumbered in the L-P PCR. (For the positioning and renumbering of items, see Appendix XV).

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[5] Ibid., p. 356.

[6] The judges were: Isidore Chein, Barbara Dohrenwend, Murray Horowitz, and Claire Selltiz.

Reliability

The reliability of each subtest of Roe's original questionnaire is shown in Table 1.[7]

TABLE 1

PCR SUBTEST RELIABILITIES FOUND BY ROE

PCR Subtest	Harvard Sample	
	Mother	Father
Loving	872[a]	896
Protecting	761	780
Casual	800	810
Rejecting	759	850
Neglecting	745	868
Demanding	836	826
Reward S-L	708	757
Reward D-O	798	783
Punishment S-L	759	687
Punishment D-O	769	788

[a]Decimal points omitted.

The reliability of each subtest in each of the four configurations (Boys-Mothers, Boys-Fathers, Girls-Mothers, Girls-Fathers) was

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

computed for both the pilot study and the present study by using an item analysis technique of Tryon.[8] The specific formula is labeled Variance Form,[9] and is shown as:

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

n = number of items

S_i^2 = variance of each item

S_x^2 = between subject variance

$$S_x^2 = \frac{\Sigma x^2 - \frac{(\Sigma x)^2}{N}}{N}$$, where N is the number of subjects

Scoring of the L-P PCR

The L-P PCR was scored by Roe's system. In this system, each item on each completed questionnaire scoring sheet was noted and a summation was noted (see Appendix VI), one sheet for fathers and one sheet for mothers. Each item received a score of one to five, depending on the response to the question.[10] All scores carried a positive value. A high total score for any one subtest indicated a subject did

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[8]R. C. Tryon, "Reliability and Behavior Domain Validity: Reformulation and Historical Critique," Psychological Bulletin, LIV, No. 3 (1959), 229-249. See also: "Cronbach's Alpha," Psychometric Methods, J. P. Guilford (New York: McGraw-Hill, 1954), p. 385.

[9]Tryon, Psychological Bulletin, LIV, No. 3 (1959), 232.

[10]Roe and Siegelman, APA Inquiry Studies, No. 1, p. 12.

perceive that parent-behavioral relationship to a marked degree. A low total score for any one subtest indicated a subject did not perceive that parent-behavioral relationship.

Pilot Study

It was recognized that a pilot study was needed to bring about a test of the refined L-P PCR, and to determine if further revision was warranted. Therefore, one hundred twenty students of the Star-Spencer Junior-Senior High School of Oklahoma City, Oklahoma were administered the one hundred item L-P PCR. The sample for this pilot study consisted of sixty students in the seventh grade and sixty students in the ninth grade. Results were analyzed for reliability and other supportive statistics (Table 2, Table 3, and Table 4). These data are not presented here, but will be utilized in this study as a base for the discussion of the dissertation sample.

Pilot Study Data

The possible range of scores for any one person on each of the subtests was from ten to fifty. A scoring sheet (see Appendix VI) was made, classifying each subject's occupational choice according to Roe's schema (see Appendix VII).[11]

Data for each of the one hundred twenty subjects in the pilot study were tabulated on IBM cards. Each card was coded to show sex, total score attained on each of the ten subtests for father and on each of the ten subtests for mother, and occupational choice. These

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[11] A description and some examples of occupations for each classification are given in Appendix V.

cards were used in an IBM 1410 computer for statistical analysis of the data. Each subject's individual score on each item was tabulated on another set of IBM cards, four cards for each subject.

Reliability of Pilot Study Data

An item analysis technique of Tryon[12] using the Variance Form[13] was used to compute reliability. Results for each L-P PCR subtest in each of the four configurations (Boys-Mothers, Boys-Fathers, Girls-Mothers, Girls-Fathers) are contained in Table 2.

TABLE 2

L-P PCR SUBTEST RELIABILITIES FOR THE PILOT STUDY

L-P PCR Subtest	Boys		Girls	
	Mothers	Fathers	Mothers	Fathers
Loving	919[a]	956	895	921
Protecting	570	681	570	686
Casual	528	651	538	633
Rejecting	835	882	807	869
Neglecting	755	843	777	850
Demanding	574	685	601	625
Reward S-L	729	839	715	805
Reward D-O	749	784	766	816
Punishment S-L	624	700	587	643
Punishment D-O	717	829	678	793

[a]Decimal points omitted.

[12]Tryon, Psychological Bulletin, LIV, No. 3 (1959), 229-249.

[13]Ibid.

The range of reliabilities was from .528 to .959. All of the reliabilities compared favorably with those reported by Roe[14] (see Table 1) and were considered to be sufficiently high for purposes of this study. The subtests Protecting, Casual, Demanding, and Punishment S-L displayed reliabilities below .700. These were the same subtests that Green[15] found to be below .700 in reliability (see Appendix I).

L-P PCR Subtest Means, Variances, and Standard Deviations for the Pilot Study

A comparison between the L-P PCR subtests was necessary. To assist in this comparison and for descriptive purposes, means, variances, and standard deviations were computed for each L-P PCR subtest in each of the four configurations (Boys-Mothers, Boys-Fathers, Girls-Mothers, and Girls-Fathers). These are presented in Table 3 and Table 4.

L-P PCR Inter-Parent Correlation of the Pilot Study

To determine the degree to which boys and girls in the pilot study perceived their parents as separate entities, two inter-parent correlations (one for boys and one for girls) were computed for each L-P PCR subtest. Correlations were sought to determine if the subjects of the pilot study showed an equal or a greater degree of "halo effect" in their perceptions of parents than did Roe's Harvard sample.

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[14]Roe and Siegelman, Child Development, XXXIV, No. 2 (1963), 6.

[15]Green, "Relationship with Parents . . .," Ph.D. Dissertation, University of Oklahoma, Norman, Oklahoma, 1964, p. 51.

TABLE 3

L-P PCR MEANS AND STANDARD DEVIATIONS FOR THE PILOT STUDY

L-P PCR Subtest	Statistic	Boys (n = 60)		Girls (n = 60)	
		Mothers	Fathers	Mothers	Fathers
Pro	Mean	31.666	28.733	33.600	30.183
	S.D.	5.426	5.724	5.848	6.349
Pun S-L	Mean	26.083	26.566	26.916	25.983
	S.D.	5.156	6.402	5.932	6.649
Rej	Mean	19.833	20.866	18.183	20.250
	S.D.	5.418	6.936	7.238	8.502
Cas	Mean	28.716	28.100	28.500	27.283
	S.D.	6.292	6.072	5.564	6.314
Rew S-L	Mean	34.100	32.133	34.500	31.466
	S.D.	6.329	6.738	6,531	7.683
Dem	Mean	32.533	34.850	31.383	32.516
	S.D.	6.168	6.286	6.084	6.118
Pun D-O	Mean	24.283	26.033	22.483	23.016
	S.D.	5.396	6.449	6.515	7.962
Lov	Mean	38.083	36.516	39.000	37.833
	S.D.	7.330	8.522	9.092	10.506
Neg	Mean	17.866	21.033	17.533	20.016
	S.D.	5.640	8.461	6.140	8.337
Rew D-O	Mean	28.900	28.200	27.700	26.650
	S.D.	7.198	8.335	7.026	7.633

TABLE 4

MEANS AND VARIANCES OF EACH L-P PCR SUBTEST IN EACH CONFIGURATION FOR SUBJECTS IN PILOT STUDY

L-P PCR Subtest	Boys				Girls			
	Mothers		Fathers		Mothers		Fathers	
	$\bar{X}$	s^2	$\bar{X}$	s^2	$\bar{X}$	s^2	$\bar{X}$	s^2
Protecting	31.666	29.446	28.733	32.775	33.600	34.210	30.183	40.321
Punishment S-L	26.083	26.586	26.566	40.995	26.916	35.196	25.983	44.220
Rejecting	19.883	29.361	20.866	48.117	18.183	53.711	20.250	72.292
Casual	28.716	39.596	28.100	36.871	28.500	30.966	27.283	39.867
Reward S-L	34.100	40.057	32.133	45.405	34.500	42.661	31.466	59.032
Demanding	32.533	38.049	34.850	39.159	31.383	37.020	32.516	41.203
Punishment D-O	24.283	29.121	26.033	41.592	22.483	42.457	23.016	63.406
Loving	38.083	53.738	36.516	72.629	39.000	82.677	37.833	110.378
Neglecting	17.866	31.812	21.033	71.592	17.533	37.710	20.016	69.508
Reward D-O	28.900	51.820	28.200	69.484	27.700	49.336	26.650	58.265

In Roe's study of Harvard seniors, it was noted that the inter-parent correlations of that group ran higher than did those of her adult samples. She stated that this could be the result of perceiving parents as a unit ("halo effect"). Inter-parent correlations of the L-P PCR for the pilot study and for the Harvard sample are given in Table 5. The same coefficient of correlation formula was used for both samples.

TABLE 5

PCR AND L-P PCR INTER-PARENT CORRELATIONS[a]

Subtest	Harvard Sample[b] (n = 142)	Pilot Study	
		Boys (n = 60)	Girls (n = 60)
Loving	495[c]	454	473
Protecting	568	360	377
Demanding	398	518	520
Rejecting	569	435	430
Neglecting	546	359	531
Casual	425	673	396
Reward S-L	550	629	530
Reward D-O	677	599	582
Punishment S-L	530	355	271
Punishment D-O	639	784	642

[a] All correlations significant at less than the .01 level.

[b] Roe and Siegelman, Child Development, XXIV, No. 2 (1963), 7.

[c] Decimal points omitted.

A Study of a Sample of Adolescent Girls

Selection of the Sample

The sample for this study was selected from eighth grade students attending a typical junior high school in the Oklahoma City, Oklahoma metropolitan area. (This judgment was supported by officials of the Oklahoma City Public Schools). The population included students from varying socio-economic and cultural levels. The students answered the same questions in regard to family size, occupation of parents, adults in the family, and occupational choice as those answered for the pilot study (see Appendix IV). The sample included only girls, and specifically differentiated adolescents living with natural parents and those living with step-parents, grandparents, guardians, etc. These strict procedures were utilized to exclude the latter students from this study, since absence of a parent could affect the results of this study.

A review of the literature indicated that there is a pressing need for studies at the eighth grade level, since only a few studies have been done with elementary pupils and then with seventh and ninth grade students.[16] These studies provide testimony for the observation

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[16]Donald A. Davis, Nellie Hagen, and Judee Strong, "Occupational Choice of Twelve Year Olds," Personnel and Guidance Journal, XL, No. 7 (Spring, 1961), 99-103.

Janet Kay, "Fourth Graders Meet Up with Occupations," Vocational Guidance Quarterly, VIII, No. 3 (Spring, 1960), 150-152.

Robert Hoppock, "Occupational Information in the Elementary School," Vocational Guidance Quarterly, XII, No. 2 (Winter, 1963-64), 77-84.

that children are, and should be, making vocational observations and choices earlier in life.[17] One study of eighth grade students made by Peters and Van Atta states this grade level student ". . . clearly demonstrates [that] the vocational interests patterns are rather stable during the adolescent period."[18]

According to Ginzberg[19] the eighth grader has moved from the "fantasy" stage to the "tentative stage" wherein he makes an ordered transition to occupational choice. (This tentative period includes the ages eleven to seventeen). Ginzberg stated that the child in this tentative period chooses his occupation ". . . almost exclusively in terms of such subjective factors as his interests [which are dominant early in this period], capacities, and values."[20] The literature

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[17]Steinke and Kackowski, Vocational Guidance Quarterly, IX, No. 2 (Winter, 1960-61), 101-103.

Super, Personnel and Guidance Journal, XXXIX, No. 2 (October, 1960), 106-109.

Super and Overstreet, The Vocational Maturity of . . . .

[18]Herman J. Peters and R. F. Van Atta, "The Shaping of Interests," Vocational Guidance Quarterly, IX, No. 1 (Autumn, 1960), 20.

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

[20]Eli Ginzberg, "Toward a Theory of Occupational Choice," Occupations, XXX, No. 7 (April, 1952), 492.

suggests that during this period in the life of the adolescent, the needs and interests of the individual may merge and help the student focus his attention in the direction of a meaningful occupation. Arbuckle[21] speculates that the occupational dreams of the young child may not be as fantastic as the occupational future the adults are planning for him.

An analysis of these studies cited indicated that the eighth grade student is at a critical period and a vital stage in his maturation, and that there is need for investigation of the occupational choice phenomenon and the relevant influences upon the adolescent.

Finally, an eighth grade population was selected because studies using the PCR have been made by Green and Parker[22] on seventh grade students. Siegelman[23] has utilized both seventh and ninth grade populations for his researches.

Statistical Treatment of the Sample

In the sample population of eighth grade girls, the scores of each individual on each item for mother and for father, plus each individual's total score on each of the L-P PCR subtests for mother and for father were used for statistical analysis. Using Roe's

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[21]Dugald Arbuckle, "Occupational Information in the Elementary School," Vocational Guidance Quarterly, XII, No. 2 (Winter, 1963-64), 83.

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

[23]Siegelman, Unpublished materials . . . Appendix II.

occupational coding, a dichotomy of all subjects on choice of occupation as having either towards person orientation or towards non-person orientation was used in the analysis of the L-P PCR (see Appendix VII.)

Hypotheses

The first two hypotheses, presented in Chapter I, concern the L-P PCR. The remaining hypotheses, three through twelve, concern the scales and the predictive significance. An analysis of Roe's theory and those parent-child relationships tested by the PCR suggest some hypotheses about early home experiences and the vocational orientation of the child. These same hypotheses can be generated by the Lambert-Parker Revision of the PCR, and from the subtests of this revision.

Statement of Hypotheses

Hypothesis One: The Lambert-Parker Revision of the PCR should reveal greater item-total correlations than the items in the original PCR, and higher reliabilities.

Hypothesis Two: The Lambert-Parker Revision of the PCR should substantiate Roe's theory of occupational choice to the effect that an individual is predisposed towards work predominately person oriented, or towards work predominately non-person oriented as a direct result of the parent-child relationship experienced within the family environment.

Hypothesis Three: Girls experiencing a Protecting relationship in the home should orient towards a person occupation, i.e., service, business contact, general culture, arts and entertainment, and organization.[24]

Hypothesis Four: Girls experiencing a Casual relationship in the home should orient towards a person occupation.

Hypothesis Five: Girls experiencing a Loving relationship in the home should orient towards a person occupation.

Hypothesis Six: Girls experiencing a Reward Symbolic-Love relationship in the home should orient towards a person occupation.

Hypothesis Seven: Girls experiencing a Reward Direct-Object relationship in the home should orient towards a person occupation.

Hypothesis Eight: Girls experiencing a Rejecting relationship in the home should orient towards a non-person occupation, i.e., technology, science, outdoors.

Hypothesis Nine: Girls experiencing a Demanding relationship in the home should orient towards a non-person occupation.

Hypothesis Ten: Girls experiencing a Neglecting relationship in the home should orient towards a non-person occupation.

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[24] See Appendix V for definitions and examples of those occupations in the person classification and in the non-person classification.

Hypothesis Eleven: Girls experiencing a Punishment Symbolic-Love relationship in the home should orient towards a non-person occupation.

Hypothesis Twelve: Girls experiencing a Punishment Direct-Object relationship in the home should orient towards a non-person occupation.

Statistical Tests of the Hypotheses

Test for Normality of Distribution

A Chi Square (X^2) test for normality, using the .05 level of significance, was computed for each of the L-P PCR subtests in each of the two configurations (Girls-Mothers and Girls-Fathers). The criterion for expected cases in each class interval along the distribution curve was established from Carnahan, et al., i.e., the value $X^2 = \frac{(f_o - f_e)^2}{fe}$ "... is only approximately distributed as X^2; however, it is almost exactly distributed as X^2 if every expected frequency is greater than twenty."[25] The number of girls in the present study permitted acceptance of this criterion.

Frequency distributions were made for those L-P PCR subtests for which the hypothesis of normality was rejected by the X^2 test. Frequency distributions were inspected to determine if the data met Guilford's criteria for the use of parametric statistics,[26] i.e.,

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[25] Brice Carnahan, H. A. Luther, and James O. Wilkes, Applied Numerical Methods, preliminary edition, Volume II (New York: John Wiley and Sons, 1964), p. 698.

[26] J. P. Guilford, Fundamental Statistics in Psychology and Education, 4th edition (New York: McGraw-Hill, 1965), p. 243.

distributions should not be abnormally skewed, distributions should be fairly symmetrical, and distributions should be unimodal.

Insuring twenty-one expected cases for each class interval for an n of eighty-six was accomplished as follows:

1. An n of eighty-six, with at least twenty-one cases per class interval demanded at most four class intervals.
2. That value of eighty-six cases which provided for at least twenty-one cases was .242 or .24.
3. From a table of standard z scores, that value of z was determined which encompasses .24 of the area of the curve from the mean. Four class intervals were determined. The constant z values were: $\pm$ .67.
4. Significance was determined using degrees of freedom equal to the number of class intervals minus three: 4 - 3 = 1 d.f.

Additionally, a Chi Square (X^2) test for normality was used by placing all the scores in a frequency distribution with the class intervals at five in order to cross-check the above X^2 tests used.[27]

L-P PCR Subtest Intercorrelation

To determine the extent to which the L-P PCR subtests were measuring discrete behaviors, two Pearson product-moment inter-correlational matrices were computed (Girls-Mothers, Girls-Fathers).

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[27] Guilford, Fundamental Statistics . . . , pp. 243-247.

Additionally, these matrices provided statistical information for analyzing and discussing hypotheses six, seven, eleven, and twelve.

An unbiased form of the basic formula for a Pearson product moment coefficient of correlation was employed:[28]

$$r_{xy} = \frac{\sum_{i=1}^{N} (X_1 - \bar{X})(Y_1 - \bar{Y})}{(N-1)(s_x s_y)} = \frac{\sum_{i=1}^{N} (X_i Y_i - N \bar{X} \bar{Y})}{(N-1) s_x s_y}$$

N = total number of scores

s_x and s_y = standard deviation of distributions x and y

X_1 and Y_1 = any one score in X and Y distributions

$\bar{X}$ and $\bar{Y}$ = means of X and Y distributions

Statistical Tests for Hypotheses Three through Twelve

Roe's theory would gain support if the mean score of those subjects selecting towards non-person occupations was significantly higher on those L-P PCR subtests defined as non-person oriented relationships, than those subjects selecting towards person occupations, i.e., Rejecting, Neglecting, Demanding, Punishment Direct-Object, and Punishment Symbolic-Love. Also, Roe's theory would obtain support if the mean score of those subjects selecting towards person occupations was significantly higher on those L-P PCR subtests defined as person oriented relationships than those subjects selecting towards non-

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[28] W. W. Cooley and Paul Lohnes, Multivariate Procedures in Behavioral Sciences (New York: John Wiley, 1962), p. 241.

person occupations,i.e., on Protecting, Casual, Loving, Reward Direct-Object, and Reward Symbolic-Love.

To determine if significant differences existed between mean scores on all L-P PCR subtests, two techniques were employed: the t test of significance (hereinafter referred to as t), and the F test for homogeneity of variance (hereinafter referred to as F). To determine the appropriateness of the t test and the F test, two techniques were applied to these data. To test for the appropriateness of the t test, an analysis of variance was made. Homogeneity of the variances on each L-P PCR subtest in the two configurations (Girls-Mothers and Girls-Fathers) of those subjects indicating person occupations and those subjects indicating non-person occupations was tested by the F test:[29]

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

s_1^2 = larger variance

s_2^2 = smaller variance

Unbiased variance[30] was computed for use in the F test:

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[29]Helen W. Walker and Joseph Lev, Statistical Inference (New York: Holt, Rinehart, and Winston, 1953), p. 140.

[30]Ibid., p. 119.

$$s^2 = \left(\frac{1}{n-1}\right) \sum_{i=1}^{n} (X_i - \bar{X})^2 = \frac{\sum_{i=1}^{n} X_i^2 - n\bar{X}^2}{n-1}$$

X_i = individual scores

$\bar{X}$ = mean

n = number of scores

If the F test was not significant, t was computed by the following formula:[31]

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

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

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

If the F test was significant, t was computed by the following formula for uncorrelated means:[32]

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

with: $\frac{1}{d.f.} = \frac{c^2}{d.f._1} + \frac{(1-c)^2}{d.f._2}$

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[31] A. Hald, Statistical Theory with Engineering Applications (New York: John Wiley, 1952), pp. 397-398.

[32] Ibid., pp. 397-398.

$$C = \frac{\frac{s_1^2}{n_1}}{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}$$

$\bar{X}$ = mean

s^2 = variance

d.f. = degrees of freedom

n = number of subjects

A median chi square test was computed to determine if the subjects actually dichotomized on selection of a towards person occupation to a greater degree than could be expected by chance.

The subjects were dichotomized on both occupational selection and score on the L-P PCR subtests. A two-by-two contingency table for the towards person and towards non-person occupations was developed, showing scores above and below the median.

Summary

This chapter discussed the L-P PCR revisions of the PCR, the pilot study and its selection, the selection of the sample of adolescent girls for the investigation, the L-P PCR and its use, and the statistical treatment of the derived data.

Chapter IV will present an analysis of all the data obtained, to either support or reject the hypotheses formulated in Chapter I and in Chapter III.

CHAPTER IV

RESULTS

L-P PCR Subtest Ranges, Means, and Standard Deviations

For assistance in comparing the L-P PCR subtests, and for descriptive purposes, ranges, means, and standard deviations were computed for each L-P PCR subtest in each of the two configurations (Girls-Mothers and Girls-Fathers). Table 6 lists these values. No comparisons can be made to these statistics because no ten item scale studies exist.

Justification of the Parametric Statistics Used

Appendix IX contains the frequency distributions of the L-P PCR for all subtests. Inspection of the frequency distribution in Appendix IX revealed that the distributions approximated Guilford's[1] criteria for use of the parametric statistics, although the distribution appeared to be skewed.

Nine of the twenty L-P PCR subtests were not statistically significant according to the tests of normality of distributions (see Chapter III, page 48). The hypothesis of normality was accepted

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[1]Guilford, Fundamental Statistics . . . , pp. 243-247.

TABLE 6

L-P PCR RANGES, MEANS, AND STANDARD DEVIATIONS

L-P PCR Subtest	Statistic	Girls-Mothers n=86	Girls-Fathers n=86
Pro	Range	12 - 44	15 - 41
	Mean	29.604	28.325
	S.D.	5.825	5.214
Pun S-L	Range	10 - 44	11 - 44
	Mean	24.918	24.197
	S.D.	6.400	6.127
Rej	Range	10 - 44	10 - 34
	Mean	16.372	16.325
	S.D.	6.735	5.227
Cas	Range	10 - 50	15 - 49
	Mean	25.767	26.034
	S.D.	7.121	6.393
Rew S-L	Range	10 - 45	14 - 44
	Mean	33.011	32.220
	S.D.	5.445	5.975
Dem	Range	12 - 44	14 - 44
	Mean	31.058	31.965
	S.D.	6.161	5.923
Pun D-O	Range	10 - 45	10 - 41
	Mean	21.069	20.348
	S.D.	7.333	6.333
Lov	Range	10 - 50	11 - 50
	Mean	40.151	39.325
	S.D.	8.195	7.974
Neg	Range	10 - 46	10 - 39
	Mean	15.500	15.755
	S.D.	6.073	5.696
Rew D-O	Range	10 - 45	10 - 44
	Mean	24.255	23.325
	S.D.	7.417	6.165

for these nine tests. Table 7 gives the cumulative X^2 of normality. The computational data used to determine these values are contained in Appendix VIII. The additional check of normality through X^2 test (see Chapter III, page 53) yielded no statistically significant difference for each subtest.

TABLE 7

CUMULATIVE CHI SQUARE VALUES[a] FOR EACH L-P PCR SUBTEST IN EACH CONFIGURATION TO DETERMINE DISTRIBUTION NORMALITY

L-P PCR Subtest	Girls-Mothers (n=86)	Girls-Fathers (n=86)
Protecting	2.812	3.525
Punishment S-L	2.230	3.181
Rejecting	15.291[b]	7.618[b]
Casual	9.857[b]	4.632[b]
Reward S-L	7.039[b]	.538
Demanding	4.747[b]	1.600
Punishment D-O	6.325[b]	.745
Loving	4.526[b]	3.152
Neglecting	21.950[b]	8.425[b]
Reward D-O	1.987	4.106[b]

[a] X^2 = 3.841 (.05 level); d.f. = 1

[b] Statistical null hypothesis of no difference between normalities rejected.

Those L-P PCR subtests for which the hypothesis of normality was rejected at the .05 level of significance are listed in Table 8, by parent-child pairings (Girls-Mothers and Girls-Fathers).

TABLE 8

L-P PCR SUBTESTS FOR WHICH THE HYPOTHESIS OF NORMALITY WAS REJECTED AT THE .05 LEVEL

Girls - Mothers	Girls - Fathers
Rejecting	Rejecting
Casual	Casual
Reward S-L	Reward D-O
Demanding	Neglecting
Punishment D-O	
Loving	
Neglecting	

The subjects were dichotomized on each L-P PCR subtest in each configuration (Girls-Mothers and Girls-Fathers). The dichotomy was determined by the subject's selection of either a towards person occupation or a towards non-person occupation. A greater number of girls selected towards person occupations (P = 66, NP = 20).

By use of the dichotomy, mean scores and variances were computed for each of the two groups, on each L-P PCR subtest in each of the two configurations. Table 9 contains the values of these means and variances.

TABLE 9

MEANS AND VARIANCES FOR EACH L-P PCR SUBTEST IN EACH CONFIGURATION FOR SUBJECTS SELECTING TOWARDS PERSON AND TOWARDS NON-PERSON OCCUPATIONS

L-P PCR Subtest	Towards Person[1] or Towards Non-Person[2] Occupations	Mothers		Fathers	
		$\bar{X}$	s^2	$\bar{X}$	s^2
Protecting	P	29.772	35.593	24.503	30.253
	NP	29.050	22.786	27.650	17.592
Punishment S-L	P	24.818	33.689	24.091	38.483
	NP	25.250	67.881	24.550	36.155
Rejecting	P	16.272	47.555	16.515	29.238
	NP	16.700	40.115	15.700	21.694
Casual	P	26.469	54.160	26.651	45.092
	NP	23.450	34.260	24.000	22.947
Reward S-L	P	32.696	28.306	31.287	36.023
	NP	34.050	34.365	35.300	23.484
Demanding	P	30.378	34.423	31.818	37.043
	NP	33.300	45.168	32.450	29.944
Punishment D-O	P	20.621	52.915	20.561	45.542
	NP	22.550	56.576	19.650	22.976
Loving	P	39.803	65.299	38.166	64.048
	NP	41.300	75.273	43.150	45.292
Neglecting	P	15.878	36.354	16.378	37.346
	NP	14.250	38.513	13.700	11.589
Reward D-O	P	24.818	56.181	23.454	37.082
	NP	22.400	49.200	22.900	42.936

[1]Person N = 66

[2]Non-Person N = 20

In order to determine if differences existed between the towards person and towards non-person groups, a *t* test and an F ratio were employed.

An F ratio to establish the appropriateness of the *t* test was computed by use of the variances. The appropriate *t* test was used to determine if any statistically significant differences existed between the means for the two groups.

Table 10 contains these values of *t* and F associated with each L-P PCR subtest. These values were used to accept or reject the statistical null hypothesis of no difference existing between the variances or means of the two groups under study, i.e., the towards person occupation group and the towards non-person occupation group. The .05 level was used to establish the significance of F's and *t*'s.

Reliability of the L-P PCR

An item analysis technique of Tryon,[2] using the Variance Form[3] was used to compute reliability. Results for each L-P PCR subtest in each of the two configurations (Girls-Mothers and Girls-Fathers) are contained in Table 11.

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

[3]Ibid.

TABLE 10

VALUE OF t AND F IN EACH CONFIGURATION FOR SUBJECTS SELECTING TOWARDS PERSON AND TOWARDS NON-PERSON OCCUPATIONS
(n = 86)[a]

L-P PCR Subtest	Mothers		Fathers	
	t[b]	F[c]	t[b]	F[c]
Protecting	.484	1.649	.659	1.723
Punishment S-L	-.263[d]	2.015	-.292	1.064
Rejecting	-.247	1.185	.607	1.348
Casual	1.679	1.581	1.641	1.965
Reward S-L	-.973	1.214	-2.728	1.533
Demanding	-1.885	1.312	-.416	1.237
Punishment D-O	-1.031	1.069	.561	1.982
Loving	-.714	1.153	-2.525	1.414
Neglecting	1.051	1.059	1.869	3.222
Reward D-O	1.282	1.142	.351	1.158

[a] 66 girls selected person occupations; 20 selected non-person occupations.

[b] Significant t at .05 level with 84 d.f. = 1.989

[c] When the variance of those selecting person occupations is greater than the variance of those selecting non-person occupations, the value of F which is significant at the .05 level = 1.931. When the reverse situation exists, i.e., non-person variance greater than person variance, F = 1.728.

[d] All negative value t's indicate non-person mean greater than person mean.

TABLE 11

L-P PCR SUBTEST RELIABILITIES

L-P PCR Subtest	Girls - Mothers (n = 86)	Girls - Fathers (n = 86)
Protecting	.584	.528
Punishment S-L	.706	.694
Rejecting	.837	.709
Casual	.789	.711
Reward S-L	.641	.678
Demanding	.664	.665
Punishment D-O	.797	.730
Loving	.893	.875
Neglecting	.860	.794
Reward D-O	.836	.727

The range of reliabilities was from .528 to .893. All of the reliabilities, with the exception of the subtest Protecting, compared favorably with those reported by Roe[4] (see Table 1) and of the pilot study (see Table 2). The present study found greater reliability than Green[5] and Siegelman[6] found for Girls-Mothers' subtests:

[4] Roe and Siegelman, Child Development, XXXIV, No. 2 (1963), 6.

[5] Green, "Relationship with Parents . . .," Ph.D. Dissertation, University of Oklahoma, Norman, Oklahoma, 1964, p. 51.

[6] Siegelman, Unpublished material included in Appendix II.

Punishment S-L, Rejecting, Casual, Loving, Neglecting, and Reward D-O. The present study found greater reliability than the two studies cited above found for Girls-Fathers' subtest Punishment S-L. The subtests above also showed greater reliability than those of the pilot study. The present study showed higher reliability than Siegelman[7] found in his study of adults for the Girls-Mothers' subtests: Rejecting, Punishment D-O, Loving, Neglecting, and Reward D-O; and for the Girls-Fathers' subtest Punishment S-L.

The reliabilities were considered to be sufficiently high for purposes of this study. Since the present study is an observation of only girls, a comparison to Roe's original study with Harvard University seniors is impractical. However, the pilot study indicated favorable results with male subjects. (See Appendix X and Appendix XI for comparison of all studies cited). On the basis of a short instrument with ten items per scale, these reliabilities would appear to be useful with further samples.

Statistical Results Related to Hypotheses

Hypothesis One

The first hypothesis stated that the Lambert-Parker Revision of the PCR should reveal greater item-total correlations than the items on the original PCR, and higher reliabilities. Table 12 and Table 13 show the item-total correlations for the L-P PCR. Comparison of the of the L-P PCR with the item-total correlations of previous studies

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[7] Ibid.

TABLE 12

ITEM-TOTAL CORRELATIONS FOR L-P PCR LISTING
QUESTION NUMBERS AND SUBTESTS
GIRLS-MOTHERS[1]
N = 86

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 449	2. 569	3. 523	4. 645	5. 450	6. 482	7. 622	8. 717	9. 625	10. 742
11. 335	12. 612	13. 712	14. 696	15. 442	16. 461	17. 671	18. 770	19. 798	20. 491
21. 537	22. 490	23. 640	24. 555	25. 576	26. 397	27. 481	28. 773	29. 532	30. 784
31. 483	32. 538	33. 656	34. 633	35. 535	36. 451	37. 640	38. 591	39. 735	40. 648
41. 576	42. 477	43. 493	44. 451	45. 487	46. 553	47. 649	48. 674	49. 727	50. 584
51. 462	52. 607	53. 768	54. 609	55. 277	56. 537	57. 648	58. 784	59. 755	60. 702
61. 454	62. 473	63. 726	64. 711	65. 503	66. 639	67. 590	68. 757	69. 495	70. 687
71. 443	72. 684	73. 613	74. 420	75. 632	76. 593	77. 562	78. 737	79. 810	80. 682
81. 459	82. 590	83. 686	84. 635	85. 480	86. 413	87. 586	88. 645	89. 803	90. 403
91. 413	92. 204	93. 593	94. 544	95. 513	96. 487	97. 485	98. 751	99. 543	100. 689

[1]Decimal points omitted

TABLE 13

ITEM-TOTAL CORRELATIONS FOR L-P PCR LISTING
QUESTION NUMBERS AND SUBTESTS
GIRLS-FATHERS[1]
N = 86

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Rej	Rew D-O
1. 299	2. 370	3. 387	4. 405	5. 608	6. 520	7. 613	8. 774	9. 410	10. 508
11. 581	12. 411	13. 452	14. 641	15. 455	16. 596	17. 515	18. 636	19. 672	20. 268
21. 538	22. 594	23. 415	24. 646	25. 629	26. 493	27. 415	28. 621	29. 634	30. 653
31. 315	32. 440	33. 598	34. 677	35. 481	36. 346	37. 642	38. 533	39. 563	40. 492
41. 548	42. 635	43. 492	44. 482	45. 469	46. 382	47. 468	48. 736	49. 672	50. 581
51. 419	52. 564	53. 578	54. 032	55. 428	56. 578	57. 489	58. 792	59. 584	60. 621
61. 381	62. 583	63. 553	64. 572	65. 511	66. 677	67. 568	68. 794	69. 445	70. 530
71. 289	72. 697	73. 690	74. 566	75. 573	76. 587	77. 570	78. 731	79. 809	80. 557
81. 558	82. 660	83. 649	84. 564	85. 572	86. 411	87. 669	88. 585	89. 614	90. 516
91. 440	92. 192	93. 436	94. 642	95. 362	96. 412	97. 508	98. 664	99. 657	100. 677

[1]Decimal points omitted

using the original PCR (see Appendix X and Appendix XI) indicated that the L-P PCR contained improved item-total correlations.

Range comparison for the six revised subtests of the L-P PCR and the original six subtests having fifteen items (PCR) showed higher correlations at the minimum level and the maximum level for five of the six subtests for Fathers; and for all six of the subtests for Mothers. The subtest Casual was the only one which did not show greater improvement in two or more of the three studies used for comparisons.

With respect to the subtests Rejecting, Casual, Demanding, Loving, and Neglecting higher ranges were found for the L-P PCR than were found on the three other studies for the Mother portion of the PCR. Protecting showed a higher value when compared to two of the three studies on the Mother portion of the L-P PCR.

On the Father portion of the L-P PCR, Rejecting and Neglecting had higher values than the other three studies; while Protecting, Demanding, and Loving had higher values than two of the three comparison studies.

One item (number 92) on the Punishment S-L scale of the original PCR was reworded. This resulted in a subtest range which was higher than all three comparison studies for Fathers, and for two of the three comparison studies for Mothers.

Four items (7, 37, 77, and 97) of the subtest Punishment D-O were reworded after the pilot study was made. The resulting range of correlations on the Mother portion was higher than two of the three studies used in comparison (see Appendix XII).

Items were deleted from the original PCR to form the L-P PCR. This revision was made on the basis of item-total correlations, with the .450 coefficient being used as the point of deletion.

The Mother portion of the L-P PCR revealed subtests Rejecting, Loving, Neglecting, and Punishment D-O to have no items below the .450 point of deletion. One item below .450 was found on the subtest Casual, and two items below .450 were found on the subtest Demanding. The subtest Protecting produced four items below .450. The item-total correlations for all six of the subtests on the Mother questionnaire were higher than comparison studies.

Improvement on the Father questionnaire was also found. All subtests, with the exception of Rejecting and Protecting, indicated some improvement. The item-total correlations of four of the six subtests on the Father questionnaire showed higher figures than found in the comparison studies.

These data indicate that the L-P PCR contains improved item-total correlations, and therefore the first hypothesis was supported.

Hypothesis Two

The second hypothesis stated that the Lambert-Parker Revision of the PCR should substantiate Roe's theory of occupational choice to the effect that an individual is predisposed towards work predominately person oriented, or towards work predominately non-person oriented as a direct result of the parent-child relationship experienced within the family environment.

The present study produced only two subtests (Reward S-L and Loving, both on the Father portion of the L-P PCR) which showed significant differences at the .05 level.

It is interesting that the two subtests which showed significant differences in the present study had negative values for *t* (see Table 10). This indicated that the towards non-person mean was greater than the towards person mean. According to Roe's theory, these subtests should indicate that such a parent-child environment (Lov and Rew S-L) would orient the subject towards a person occupation.

No other statistically significant differences at the .05 level were found to support the theory that an individual is predisposed towards work predominately person oriented, or towards work predominately non-person oriented as a direct result of the parent-child relationship experienced within the family environment.

Statistical data failed to support hypothesis two.

Hypothesis Three

The third hypothesis stated that girls experiencing a Protecting relationship in the home should orient towards a person occupation.

There were no significant mean differences found for either of the parent-child pairings (Girls-Mothers and Girls-Fathers). However, the *t* and F values were comparable to those found by Green.[8]

The third hypothesis was not confirmed.

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[8]Green, "Relationship with Parents . . . ," Ph.D. Dissertation, University of Oklahoma, Norman, Oklahoma, 1964, p. 56.

Hypothesis Four

The fourth hypothesis stated that girls experiencing a Casual relationship in the home should orient towards a person occupation.

There were no significant mean differences found for the fourth hypothesis, and it was not confirmed.

Hypothesis Five

The fifth hypothesis stated that girls experiencing a Loving relationship in the home should orient towards a person occupation.

There was a significant mean difference found for the Girls-Fathers relationship (person mean = 38.166; non-person mean = 43.150; $\underline{t}$ = -2.525). There was no significant mean difference found for the Girls-Mothers relationship.

Negative $\underline{t}$ values were found for relationships with both parents, indicating higher mean differences for non-person occupations than for person occupations. This is the opposite of what would be expected and was hypothesized.

The fifth hypothesis was not supported for the girls' relationship with fathers, nor with mothers.

Hypothesis Six

The sixth hypothesis stated that girls experiencing a Reward Symbolic-Love relationship in the home should orient towards a person occupation.

There was a significant mean difference found for the Girls-Fathers relationship (person mean = 31.287; non-person mean = 35.300; $\underline{t}$ = -2.728). There was no significant mean difference found for the Girls-Mothers relationship.

The Reward S-L *t* scores were negative, denoting a greater mean for non-person occupations than for person occupations. Green[9] also found the Girls-Mothers relationship failed to show the correct orientation. The failure to differentiate in the desired direction may be attributable to the child reporting his parents as praising his efforts, even if in reality there was no praise.

The sixth hypothesis was not supported for the girls' relationship with fathers, nor with mothers.

Hypothesis Seven

The seventh hypothesis stated that girls experiencing a Reward Direct-Object relationship in the home should orient towards a person occupation.

The Girls-Mothers relationship showed a more definite orientation towards person occupations than did the Girls-Fathers relationship. It might be inferred that girls seem to be in a generally neutral state of mind regarding material possessions. As an explanation, it would appear that our materialistic society encourages tangible demonstrations of approval which may tend to influence the Girls-Mothers relationship to a somewhat greater extent than the Girls-Fathers relationship.

There were, however, no significant mean differences found for Girls-Mothers or for Girls-Fathers. Therefore, the seventh hypothesis was not supported.

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[9] Green, "Relationship with Parents . . . ," Ph.D. Dissertation, University of Oklahoma, Norman, Oklahoma, 1964, p. 56.

Hypothesis Eight

The eighth hypothesis stated that girls experiencing a Rejecting relationship in the home should orient towards a non-person occupation.

The *t* score for Girls-Fathers was positive, denoting a greater person than non-person mean. This result, as well as the results for the Girls-Fathers relationships on the Loving and Reward S-L scales are perplexing.

There was no significant mean difference found for either configuration (Girls-Mothers and Girls-Fathers). The eighth hypothesis was not supported.

Hypothesis Nine

The ninth hypothesis stated that girls experiencing a Demanding relationship in the home should orient towards a non-person occupation.

There were no significant mean differences found for either the Girls-Mothers or the Girls-Fathers relationships. The *t* score for the Girls-Mothers relationship would be significant at the .10 level, if such levels were useful. Those girls selecting non-person occupations scored higher on Demanding than did those selecting person occupations. Both parental relationships (Girls-Mothers and Girls-Fathers) oriented towards non-person occupations (see Appendix VII).

The ninth hypothesis was not confirmed.

Hypothesis Ten

The tenth hypothesis stated that girls experiencing a Neglecting relationship in the home should orient towards a non-person occupation.

There were no significant mean differences found for either of the parent-child pairings (Girls-Mothers and Girls-Fathers). Both relationships showed orientation towards person occupations to be greater than towards non-person occupations. One explanation of these results may be: as frequently stated in the literature, today's society creates the conditions for parents to spend less and less time with their children. It may be speculated, therefore, that the adolescent of today is conditioned to accept "neglect" from parents and thus seeks relationships of others in person oriented occupations.

Statistical data, however, did not confirm the tenth hypothesis.

Hypothesis Eleven

The eleventh hypothesis stated that girls experiencing a Punishment Symbolic-Love relationship in the home should orient towards a non-person occupation.

There were no significant mean differences found for any of the parent-child pairings. Therefore, the eleventh hypothesis was not confirmed.

Hypothesis Twelve

The twelfth hypothesis stated that girls experiencing a Punishment Direct-Object relationship in the home should orient towards a non-person occupation.

There were no significant mean differences found for either of the two parent-child pairings (Girls-Mothers and Girls-Fathers). The Girls-Fathers relationship for Punishment Direct-Object displayed only slight orientation towards person occupations. The differences are not supportive of inference. The Girls-Mothers relationship for

Punishment D-O showed a greater mean difference, though not statistically significant (person mean = 20.621; non-person mean = 22.550; $t = -1.031$). This might suggest that girls are more influenced by punishment administered by mothers and thus seek satisfaction for the basic need for security outside the home, and possibly in non-person occupations.

Hypothesis twelve was not confirmed by statistical data.

L-P PCR Inter-Parent Correlations

An analysis of the inter-parent correlations for the L-P PCR was made with the eighth grade sample. Comparison of all previous studies made with the PCR for inter-parent correlations is given in Table 14. Casual was the only subtest which showed higher coefficients of correlation between parents. On the pilot study group, Demanding, Casual, Reward S-L, and Punishment D-O were the subtests which showed higher coefficients of correlations for parents of the boys as compared with the original Harvard sample. Green's[10] study found higher coefficients of correlation in every subtest, which supported his hypothesis that seventh grade children should exhibit more "halo effect" in perceiving their parents than do male college seniors. The present study does not support the "halo effect." The intercorrelational data suggest that the L-P PCR revealed the distinctions subjects make between parental behaviors to a somewhat better degree than previous studies.

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[10] Green, "Relationship with Parents . . . ," Ph.D. Dissertation, University of Oklahoma, Norman, Oklahoma, 1964, p. 88.

TABLE 14

PCR AND L-P PCR INTER-PARENT CORRELATIONS[a]

PCR and L-P PCR Subtest	Harvard Sample[b] Seniors (n=142)	Green-Parker Sample[c] Grade 7 Boys (n=205)	Green-Parker Sample[c] Grade 7 Girls (n=150)	Pilot Study Sample Grades 9 & 7 Boys (n=60)	Pilot Study Sample Grades 9 & 7 Girls (n=60)	Present Sample Grade 8 Girls (n=86)
Lov	495[d]	738	680	455	473	393
Pro	568	592	685	361	377	459
Dem	398	653	594	518	521	484
Rej	569	750	690	435	430	499
Neg	546	649	669	360	532	581
Cas	425	623	512	674	396	652
Rew S-L	550	694	706	629	530	486
Rew D-O	677	769	791	599	582	759
Pun S-L	530	540	588	355	272	593
Pun D-O	639	689	690	784	642	614

[a] All correlations significant at less than the .01 level.

[b] Roe and Siegelman, Child Development, XXXIV, No. 2 (1963), 7.

[c] The chance expectation of all ten coefficients of correlation being greater than the Harvard sample is less than .001.

[d] Decimal points omitted.

L-P PCR Subtest Intercorrelations

Table 15 shows correlation coefficients for all the subtests. Rejecting and Neglecting displayed the highest intercorrelations for the L-P PCR, at about the .70 level for both parents.

An examination of items in each subtest would suggest that the subjects in the sample regarded these subtest items as essentially from the same constellation of parental behavior. Moderate intercorrelation presumes the subject agreed to the presence of behavior in parents with essentially the same magnitude of feeling.

Median Chi Square Data

The median chi square data did not reveal statistical independence of the individual subtests and person, non-person classifications. Only two subtests (Lov and Rew S-L) revealed statistically significant independence, and this was in a negative direction. (See Appendix XVI for contingency table).

The use of the median chi square statistic was primarily as a check against the significance of the disproportionality of the distribution of the sample in the person and the non-person categories.

Summary

In this chapter, means, ranges, standard deviations, and reliabilities were presented. The acceptability of using parametric statistics t and F was established. Data pertaining to the hypotheses were treated statistically and the results were discussed. Only the first hypothesis was completely supported. Hypothesis Five and Hypothesis six showed support for the Girls-Fathers relationship, but

TABLE 15

L-P PCR SUBTEST INTERCORRELATIONS FOR SAMPLE[1]
N = 86

L-P PCR Subtest	Mother Father	L-P PCR Subtest									
		Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
Protecting	M	1000	153	-207	-006	391	336	072	372	-307	317
	F	1000	195	-215	246	420	218	107	323	-183	494
Punishment S-L	M		1000	417	-150	117	492	585	-325	211	031
	F		1000	413	-091	166	475	588	-278	226	152
Rejecting	M			1000	096	-208	199	398	-713	762	-155
	F			1000	123	-393	197	386	-692	696	-060
Casual	M				1000	-121	-408	-407	-150	316	123
	F				1000	-042	-362	-217	-174	376	166
Reward S-L	M					1000	293	172	468	-316	295
	F					1000	141	-037	514	-436	394
Demanding	M						1000	540	025	-069	079
	F						1000	400	-105	-048	132
Punishment D-O	M							1000	-241	191	164
	F							1000	-219	175	173
Loving	M								1000	-794	171
	F								1000	-709	234
Neglecting	M									1000	-105
	F									1000	-151
Reward D-O	M										1000
	F										1000

[1]Decimal points omitted

in opposite direction to Roe's theory. An analysis of inter-parent correlations in this study did not support the theory of "halo effect" for eighth grade girls.

The results which proved significant at the .05 level did not show a definite pattern. The father appeared as the stronger influence. However, the results indicated that his influence through Loving and Reward S-L behaviors caused the girls to choose a non-person occupation, which is in an opposite direction to Roe's theory.

Chapter V will present the conclusions and implications drawn from the present research.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

Introduction

The purpose of this study was to produce a revision of the Parent-Child Relations Questionnaire in order to obtain a more refined instrument to assess influences of parent-child relations upon occupational choices. Additionally, the problem was to test Roe's occupational choice theory by measuring the parent-child relationship with this revised instrument.

Conclusions

As a result of the research the following conclusions were drawn:

1. The present study found the revised instrument to be as reliable in its shortened form as the original PCR. The L-P PCR also had higher item-total correlations, as well as other correlational data, than did the original PCR.
2. The present study did not confirm Roe's hypothesis that the parent-child relationship, as measured by the L-P PCR, is the prime determinant of the child's occupational choice.

3. In assessing the girls-mothers relationships, it was noted that subtests which were non-person oriented (Neg, Dem, Rej, Pun S-L, and Pun D-O) were dominant. Thus it could be inferred that girls living in cold, rejecting, demanding environments (in regard to mothers) tended to be oriented towards non-person occupations. This tendency was not measured with statistical significance, but was apparent.
4. Adolescent girls tended to select a towards non-person occupation if the dominant father relationship was a Loving and Rewarding one. This is in opposition to Roe's theory.
5. Girls tended to select a towards person occupation when the parental attitude of the mother or father was recorded as Casual. This tendency was not measured with statistical significance.
6. Adolescent girls' occupational orientation did not tend to be influenced by a positive mother relationship.
7. The negative father relationships (Rej, Pun D-O, and Neg) tended to cause girls to select a towards person occupation. This is in opposition to Roe's theory. Again, such a tendency was not measured with statistical significance.

Implications for Further Study

Care must be exercised if conclusions and generalizations are to be drawn from cross-sectional studies. The data in the current study does not support the general hypothesis that the occupational orientation of adolescent girls was in consonance with Roe's stated theory.

However, a recent study by Brunkan and Crites[1] failed to support the view that "family press" shapes the occupational concepts of youth. Additional studies should be made to either reject or accept the view that family influences occupational choices.

The dichotomy of towards person occupation and towards non-person occupation, based on Roe's occupational classification, appears to be too restrictive and gross for purposes of testing hypotheses two through twelve in this study. Further, Roe's occupational classification is not too discrete. Disagreement may, therefore, arise in assigning occupations to each group (person oriented or non-person oriented).

An illustration of such disagreement may be seen in Roe's classification of nursing as a non-person occupation. Ten of the subjects in the present study, who chose a towards non-person occupation, selected nursing. Many descriptions of job characteristics refer to nursing as a career which requires a genuine liking for people and a sincere desire to help others. Nursing is often described as a "service" which always has had and always will have the special appeal of service to others. Nursing is a career that will place one in stimulating contact with a busy world of interesting people. Students and young people, therefore, appear to receive

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[1]R. J. Brunkan and J. O. Crites, "An Inventory to Measure the Parental Attitude Variables in Roe's Theory of Occupational Choice," Journal of Counseling Psychology, XI (1964), 3-12.

a different perception of nursing than the classification given to it by Roe. Grigg[2] has also questioned this classification. Is Roe correct in classifying nurses as scientists, and thus non-person oriented? If not, in the present study ten of the twenty girls who chose non-person occupations would be reclassified in to the person occupation group, thus perhaps giving different statistical results.

Green and Parker[3] also discussed the classification schema presented by Roe. They concluded that the results obtained in their study were influenced by limitations inherent in the Roe classification system. It would seem that the results of the current study were also markedly influenced by the classification scheme, which may have affected the lack of support for Roe's general theory.

The foregoing discussion raises this question: Should Roe's classification schema be revised? Perhaps future studies will provide such a revision and result in a more definite support for Roe's occupational choice theory.

Studies by Harrod and Griswold[4] and by Matthews[5] conclude that girls are more people-oriented than boys. The current study suggested

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

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

[4]G. Harrod and Norma Griswold, "Occupational Values and Counseling," Vocational Guidance Quarterly, IX (1960), 60-66.

[5]Esther Matthews, "Career Development of Girls," Vocational Guidance Quarterly, XI (1963), 273-278.

this only in the number of girls selecting towards person occupations. Further studies, employing larger samples, might give a more definitive support to such a conclusion.

Implications for Counseling

Counselors could conceivably use these findings operationally with some restraint, namely the limitations implicit in the Roe classification system. However, the findings in this study should be used only as supportive data for the construction of a complete case history for a person.

The use of the L-P PCR questionnaire as a predictive instrument is questionable. Until the L-P PCR is studied further, especially with larger samples and with other sex groups, school counselors should be cautious in using the instrument as a predictor. In its present form, the L-P PCR could be used to assist in discovering additional information useful in educational, occupational, and personal counseling.

Summary

An analysis of these data found in the study showed the Lambert-Parker Revision of the PCR to be as reliable as the original PCR. It also had better item-total correlations than the original PCR. This study raised questions about Roe's classification system. Data indicated that a re-classification of certain occupations should be made.

Results of the present study have been perplexing, particularly the results showing the opposite of predicted direction in occupational orientation. Specifically, two subtest configurations (Girls-

Fathers, Rew S-L and Girls-Fathers, Lov) resulted in towards non-person occupational orientation. This finding was in opposition to Roe's theory that such configurations would orient towards person occupations.

This study suggested that the L-P PCR is an instrument which can be used by counselors as an additional tool in helping students assess their attitudes and values in educational, occupational, and personal counseling. However, the L-P PCR should not be accepted as the predictor of occupational choice without further investigation.

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Correspondence

Letter from Dr. Anne Roe, August 13, 1965.

Letter from Dr. Marvin Siegelman, September 8, 1965.

APPENDIX I - A

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE MOTHERS (MALE)[1]
GREEN - PARKER: 7th GRADERS; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 415	2. 459	3. 312	4. 379	5. 338	6. 350	7. 511	8. 372	9. 482	10. 556
11. 239	12. 485	13. 244	14. 383	15. 548	16. 480	17. 532	18. 529	19. 519	20. 482
21. 301	22. 522	23. 380	24. 528	25. 596	26. 386	27. 464	28. 550	29. 342	30. 556
31. 406	32. 243	33. 520	34. 520	35. 586	36. 462	37. 550	38. 432	39. 403	40. 541
41. 395	42. 534	43. 513	44. 261	45. 524	46. 440	47. 509	48. 644	49. 483	50. 580
51. 582	52. 517	53. 474	54. 520	55. 556	56. 363	57. 493	58. 583	59. 525	60. 547
61. 412	62. 476	63. 490	64. 423	65. 558	66. 389	67. 526	68. 410	69. 463	70. 591
71. 363	72. 451	73. 489	74. 150	75. 550	76. 365	77. 456	78. 563	79. 587	80. 659
81. 417	82. 459	83. 526	84. 278	85. 557	86. 316	87. 376	88. 387	89. 706	90. 539
91. 423	92. 071	93. 610	94. 340	95. 556	96. 400	97. 441	98. 604	99. 585	100. 648
101. 507		102. 581	103. 422		104. 479		105. 607	106. 465	
107. 422		108. 502	109. 359		110. 307		111. 372	112. 236	
113. 383		114. 454	115. 397		116. 416		117. 637	118. 597	
119. 193		120. 572	121. 429		122. 470		123. 637	124. 495	
125. 327		126. 669	127. 376		128. 336		129. 651	130. 494	

[1]Decimal points omitted.

TOT	.60		.76	.58		.62		.82	.77	

	Pro	.50	Rej	Cas	.72	Dem	.64	Lov	Neg	.79
		Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - B

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE FATHERS (MALE)
GREEN - PARKER: 7th GRADERS; ITEM ANALYSIS (ITEM TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 455	2. 606	3. 384	4. 388	5. 448	6. 437	7. 615	8. 625	9. 500	10. 584
11. 312	12. 397	13. 399	14. 439	15. 565	16. 425	17. 641	18. 573	19. 534	20. 621
21. 435	22. 605	23. 424	24. 557	25. 587	26. 212	27. 672	28. 613	29. 535	30. 618
31. 337	32. 440	33. 604	34. 403	35. 581	36. 477	37. 577	38. 532	39. 577	40. 497
41. 492	42. 453	43. 516	44. 111	45. 524	46. 359	47. 527	48. 672	49. 500	50. 656
51. 467	52. 607	53. 495	54. 135	55. 536	56. 300	57. 522	58. 670	59. 600	60. 616
61. 380	62. 549	63. 621	64. 566	65. 627	66. 487	67. 588	68. 462	69. 474	70. 438
71. 512	72. 560	73. 504	74. 489	75. 675	76. 299	77. 575	78. 538	79. 646	80. 642
81. 477	82. 503	83. 590	84. 197	85. 650	86. 316	87. 548	88. 418	89. 645	90. 545
91. 301	92. 029	93. 632	94. 305	95. 507	96. 317	97. 620	98. 530	99. 572	100. 667
101. 489		102. 578	103. 465		104. 462		105. 703	106. 411	
107. 391		108. 534	109. 363		110. 439		111. 459	112. 285	
113. 412		114. 488	115. 507		116. 524		117. 582	118. 587	
119. 375		120. 460	121. 529		122. 349		123. 676	124. 544	
125. 155		126. 621	127. 338		128. 395		129. 556	130. 446	

TOT .61		.80	.64		.64		.82	.81	
Pro	.53	Rej	Cas	.75	Dem	.67	Lov	Neg	.80
	Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - C

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE MOTHERS (FEMALE)
GREEN - PARKER: 7th GRADERS; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 377	2. 523	3. 512	4. 260	5. 369	6. 202	7. 553	8. 543	9. 511	10. 536
11. 303	12. 483	13. 436	14. 389	15. 451	16. 497	17. 380	18. 583	19. 516	20. 553
21. 388	22. 525	23. 475	24. 579	25. 570	26. 413	27. 546	28. 565	29. 378	30. 519
31. 378	32. 499	33. 569	34. 373	35. 517	36. 386	37. 551	38. 412	39. 578	40. 578
41. 372	42. 530	43. 492	44. 251	45. 563	46. 228	47. 425	48. 626	49. 520	50. 554
51. 456	52. 663	53. 369	54. 488	55. 457	56. 357	57. 466	58. 542	59. 513	60. 653
61. 471	62. 603	63. 583	64. 527	65. 454	66. 541	67. 573	68. 343	69. 340	70. 639
71. 278	72. 578	73. 463	74. 248	75. 592	76. 347	77. 529	78. 648	79. 660	80. 637
81. 395	82. 530	83. 573	84. 302	85. 557	86. 412	87. 479	88. 345	89. 570	90. 506
91. 355	92. 091	93. 664	94. 379	95. 495	96. 402	97. 367	98. 591	99. 592	100. 584
101. 382		102. 544	103. 402		104. 469		105.716	106. 482	
107. 483		108. 489	109. 331		110. 586		111.609	112. 467	
113. 367		114. 345	115. 259		116. 501		117.658	118. 604	
119. 320		120. 472	121. 503		122. 469		123.650	124. 352	
125. 295		126. 537	127. 381		128. 307		129.618	130. 409	

TOT .63		.81	.59		.59		.85	.81	
Pro	.63	Rej	Cas	.77	Dem	.79	Lov	Neg	.79
	Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - D

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE RATHERS (FEMALE)
GREEN - PARKER: 7th GRADERS; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 493	2. 570	3. 493	4. 504	5. 519	6. 560	7. 659	8. 580	9. 484	10. 501
11. 322	12. 454	13. 363	14. 462	15. 586	16. 525	17. 451	18. 609	19. 721	20. 490
21. 397	22. 684	23. 308	24. 645	25. 649	26. 426	27. 612	28. 603	29. 559	30. 600
31. 361	32. 436	33. 601	34. 375	35. 566	36. 369	37. 593	38. 646	39. 711	40. 608
41. 356	42. 555	43. 620	44. 220	45. 489	46. 282	47. 518	48. 620	49. 647	50. 636
51. 538	52. 623	53. 538	54. 170	55. 500	56. 416	57. 614	58. 540	59. 528	60. 640
61. 121	62. 617	63. 651	64. 518	65. 561	66. 582	67. 606	68. 456	69. 389	70. 572
71. 366	72. 558	73. 654	74. 500	75. 592	76. 304	77. 575	78. 747	79. 663	80. 707
81. 389	82. 617	83. 496	84. 359	85. 547	86. 432	87. 439	88. 458	89. 588	90. 366
91. 426	92. 097	93. 637	94. 408	95. 545	96. 397	97. 549	98. 521	99. 526	100. 658
101. 545		102. 584	103. 361		104. 325		105. 727	106. 349	
107. 540		108. 653	109. 316		110. 483		111. 556	112. 329	
113. 443		114. 546	115. 616		116. 589		117. 640	118. 736	
119. 399		120. 519	121. 448		122. 375		123. 640	124. 540	
125. 276		126. 649	127. 255		128. 358		129. 599	130. 344	

TOT .64		.83	.62		.59		.88	.86	
Pro	.69	Rej	Cas	.80	Dem	.80	Lov	Neg	.80
	Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - E

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE MOTHERS (MALE)
SIEGELMAN: ED. 32; N = 58; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 473	2. 637	3. 500	4. 453	5. 463	6. 492	7. 639	8. 768	9. 515	10. 559
11. 568	12. 609	13. 633	14. 629	15. 793	16. 792	17. 502	18. 625	19. 697	20. 607
21. 571	22. 641	23. 455	24. 701	25. 793	26. 391	27. 670	28. 735	29. 471	30. 615
31. 213	32. 445	33. 625	34. 609	35. 428	36. 403	37. 455	38. 561	39. 647	40. 546
41. 594	42. 509	43. 674	44. 331	45. 559	46. 563	47. 433	48. 678	49. 528	50. 584
51. 514	52. 625	53. 436	54. 530	55. 298	56. 378	57. 531	58. 631	59. 519	60. 580
61. 526	62. 621	63. 469	64. 622	65. 497	66. 632	67. 659	68. 496	69. 379	70. 401
71. 567	72. 662	73. 618	74. 357	75. 616	76. 617	77. 595	78. 804	79. 615	80. 701
81. 410	82. 754	83. 761	84. 320	85. 561	86. 539	87. 737	88. 645	89. 712	90. 524
91. 500	92. 126	93. 468	94. 518	95. 491	96. 521	97. 623	98. 697	99. 658	100. 679
101. 445		102. 487	103. 552		104. 573		105. 831	106. 573	
107. 357		108. 432	109. 456		110. 508		111. 579	112. 343	
113. 268		114. 467	115. 667		116. 620		117. 515	118. 609	
119. 063		120. 621	121. 715		122. 703		123. 729	124. 581	
125. 371		126. 580	127. 473		128. 502		129. 419	130. 348	

TRYON	TOT	.6812		.8290	.8268		.8493		.9018	.8128
REL.		Pro	.7510	Rej	Cas	.7944	Dem	.7699	Lov	Neg	.9188
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - F

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE FATHERS (MALE)
SIEGELMAN: ED. 32; N = 53; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 507	2. 547	3. 674	4. 550	5. 523	6. 413	7. 631	8. 734	9. 564	10. 768
11. 745	12. 598	13. 696	14. 649	15. 809	16. 666	17. 593	18. 663	19. 664	20. 783
21. 472	22. 637	23. 357	24. 771	25. 754	26. 578	27. 682	28. 691	29. 490	30. 704
31. 421	32. 415	33. 513	34. 564	35. 500	36. 296	37. 731	38. 583	39. 731	40. 756
41. 652	42. 589	43. 475	44. 411	45. 623	46. 594	47. 581	48. 553	49. 746	50. 658
51. 516	52. 606	53. 584	54. 378	55. 548	56. 387	57. 609	58. 629	59. 740	60. 827
61. 457	62. 708	63. 627	64. 651	65. 632	66. 669	67. 721	68. 454	69. 627	70. 493
71. 416	72. 609	73. 584	74. 618	75. 765	76. 647	77. 505	78. 559	79. 520	80. 771
81. 584	82. 719	83. 773	84. 158	85. 675	86. 314	87. 684	88. 578	89. 893	90. 571
91. 654	92.-040	93. 525	94. 268	95. 566	96. 487	97. 469	98. 650	99. 800	100. 850
101. 571		102. 588	103. 632		104. 657		105. 557	106. 546	
107. 664		108. 480	109. 665		110. 771		111. 598	112. 104	
113. 562		114. 521	115. 638		116. 696		117. 429	118. 672	
119. 289		120. 447	121. 599		122. 523		123. 555	124. 576	
125. 336		126. 750	127. 465		128. 504		129. 613	130. 529	

TRYON	TOT	.8161		.8729	.8397		.8236		.8846	.8610
REL.		Pro	.7755	Rej	Cas	.8455	Dem	.8021	Lov	Neg	.8999
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - G

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE MOTHERS (FEMALE)
SIEGELMAN: ED. 32; N = 98; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 560	2. 706	3. 297	4. 273	5. 362	6. 492	7. 545	8. 484	9. 577	10. 582
11. 485	12. 582	13. 351	14. 631	15. 299	16. 494	17. 468	18. 540	19. 623	20. 589
21. 563	22. 554	23. 592	24. 596	25. 482	26. 370	27. 435	28. 592	29. 255	30. 591
31. 361	32. 431	33. 554	34. 175	35. 427	36. 512	37. 495	38. 362	39. 586	40. 525
41. 549	42. 605	43. 346	44. 502	45. 533	46. 503	47. 476	48. 665	49. 462	50. 571
51. 544	52. 708	53. 435	54. 448	55. 320	56. 524	57. 525	58. 523	59. 424	60. 676
61. 464	62. 619	63. 543	64. 590	65. 329	66. 620	67. 605	68. 442	69. 313	70. 501
71. 347	72. 467	73. 562	74. 230	75. 460	76. 466	77. 474	78. 572	79. 485	80. 671
81. 438	82. 690	83. 610	84. 327	85. 506	86. 421	87. 595	88. 460	89. 609	90. 378
91. 484	92.-192	93. 616	94. 394	95. 577	96. 510	97. 494	98. 550	99. 540	100. 695
101. 532		102. 368	103. 484		104. 555		105. 621	106. 448	
107. 506		108. 254	109. 503		110. 512		111. 417	112. 454	
113. 246		114. 529	115. 610		116. 570		117. 340	118. 386	
119. 325		120. 380	121. 693		122. 533		123. 675	124. 050	
125. 277		126. 485	127. 457		128. 361		129. 361	130. 447	

TRYON	TOT	.7861		.8022	.8308		.7111		.8814	.7775
REL.		Pro	.7821	Rej	Cas	.7655	Dem	.7510	Lov	Neg	.8177
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - H

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE FATHERS (FEMALE)
SIEGELMAN: ED. 32; N = 97; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 529	2. 510	3. 376	4. 459	5. 523	6. 575	7. 605	8. 701	9. 574	10. 643
11. 572	12. 487	13. 614	14. 575	15. 496	16. 602	17. 545	18. 769	19. 538	20. 675
21. 581	22. 487	23. 399	24. 627	25. 667	26. 510	27. 515	28. 729	29. 114	30. 640
31. 440	32. 459	33. 571	34. 620	35. 473	36. 302	37. 519	38. 466	39. 495	40. 620
41. 575	42. 473	43. 541	44. 301	45. 578	46. 424	47. 608	48. 695	49. 509	50. 676
51. 411	52. 617	53. 372	54. 057	55. 328	56. 486	57. 576	58. 638	59. 491	60. 694
61. 301	62. 589	63. 440	64. 554	65. 359	66. 775	67. 695	68. 425	69. 587	70. 630
71. 456	72. 523	73. 544	74. 747	75. 532	76. 290	77. 530	78. 739	79. 739	80. 586
81. 543	82. 520	83. 425	84. 329	85. 593	86. 318	87. 628	88. 550	89. 783	90. 465
91. 531	92.-144	93. 320	94. 496	95. 682	96. 673	97. 501	98. 614	99. 658	100. 605
101. 537		102. 492	103. 454		104. 638		105. 658	106. 527	
107. 543		108. 520	109. 540		110. 648		111. 640	112. 370	
113. 395		114. 426	115. 585		116. 661		117. 605	118. 554	
119. 423		120. 679	121. 657		122. 302		123. 726	124. 499	
125. 232		126. 607	127. 318		128. 500		129. 502	130. 361	

TRYON	TOT	.8578		.8814	.8290		.8814		.9178	.8589	
REL.		Pro	.6788	Rej	Cas	.8355	Dem	.8366	Lov	Neg	.8699
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I-I

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE MOTHERS (MALE)
SIEGELMAN: 9th GRADERS; N = 76; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 392	2. 566	3. 532	4. 250	5. 541	6. 298	7. 497	8. 589	9. 568	10. 569
11. 468	12. 473	13. 622	14. 453	15. 582	16. 471	17. 598	18. 722	19. 390	20. 480
21. 311	22. 461	23. 464	24. 503	25. 674	26. 488	27. 622	28. 647	29. 183	30. 381
31. 354	32. 429	33. 646	34. 482	35. 714	36. 296	37. 577	38. 586	39. 447	40. 589
41. 554	42. 520	43. 524	44. 352	45. 568	46. 443	47. 447	48. 589	49. 616	50. 694
51. 523	52. 600	53. 411	54. 339	55. 234	56. 570	57. 492	58. 467	59. 142	60. 634
61. 158	62. 668	63. 682	64. 528	65. 529	66. 479	67. 546	68. 199	69. 511	70. 669
71. 212	72. 415	73. 696	74. 468	75. 598	76. 552	77. 425	78. 615	79. 695	80. 629
81. 452	82. 533	83. 634	84. -019	85. 644	86. 555	87. 717	88. 364	89. 517	90. 439
91. 552	92. 112	93. 565	94. 505	95. 502	96. 567	97. 487	98. 610	99. 692	100. 483
101. 546		102. 353	103. 424		104. 466		105. 580	106. 490	
107. 337		108. 536	109. 454		110. 443		111. 474	112. 391	
113. 449		114. 519	115. 533		116. 454		117. 575	118. 687	
119. 363		120. 497	121. 533		122. 473		123. 758	124. 363	
125. 385		126. 486	127. 422		128. 422		129. 581	130. 458	

TRYON	TOT	.6402		.8280	.6482		.7474		.8467	.7581
REL.		Pro	.6738	Rej	Cas	.7498	Dem	.7342	Lov	Neg	.7512
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - J

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE FATHERS (MALE)
SIEGELMAN: 9th GRADERS; N = 71; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 571	2. 554	3. 619	4. 533	5. 534	6. 441	7. 747	8. 709	9. 575	10. 606
11. 357	12. 499	13. 576	14. 578	15. 513	16. 446	17. 635	18. 809	19. 638	20. 669
21. 513	22. 655	23. 580	24. 492	25. 797	26. 579	27. 630	28. 744	29. 580	30. 669
31. 523	32. 497	33. 732	34. 641	35. 606	36. 262	37. 737	38. 562	39. 702	40. 612
41. 502	42. 442	43. 708	44. 443	45. 607	46. 586	47. 608	48. 731	49. 649	50. 716
51. 484	52. 684	53. 561	54. 229	55. 479	56. 581	57. 643	58. 725	59. 643	60. 635
61. 141	62. 654	63. 782	64. 651	65. 528	66. 538	67. 705	68. 231	69. 430	70. 629
71. 470	72. 413	73. 652	74. 667	75. 781	76. 392	77. 639	78. 728	79. 811	80. 681
81. 400	82. 573	83. 829	84. 109	85. 707	86. 286	87. 623	88. 689	89. 633	90. 518
91. 413	92. 043	93. 601	94. 554	95. 432	96. 590	97. 614	98. 603	99. 727	100. 621
101. 549		102. 457	103. 697		104. 438		105. 800	106. 495	
107. 657		108. 602	109. 683		110. 431		111. 616	112. 136	
113. 526		114. 444	115. 617		116. 495		117. 737	118. 660	
119. 556		120. 514	121. 532		122. 477		123. 746	124. 682	
125. 212		126. 714	127. 480		128. 487		129. 696	130. 400	

TRYON	TOT	.7626		.8859	.8289		.7696		.9152	.8140	
REL.		Pro	.7387	Rej	Cas	.8139	Dem	.8597	Lov	Neg	.8454
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - K

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE MOTHERS (FEMALE)
SIEGELMAN: 9th GRADERS; N = 71; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 418	2. 631	3. 342	4. 327	5. 624	6. 393	7. 540	8. 581	9. 480	10. 594
11. 450	12. 520	13. 371	14. 551	15. 631	16. 517	17. 540	18. 442	19. 707	20. 659
21. 396	22. 467	23. 465	24. 613	25. 736	26. 367	27. 567	28. 688	29. 569	30. 640
31. 279	32. 335	33. 492	34. 591	35. 673	36. 414	37. 602	38. 228	39. 517	40. 631
41. 528	42. 456	43. 280	44. 387	45. 619	46. 410	47. 495	48. 615	49. 456	50. 572
51. 520	52. 680	53. 310	54. 508	55. 479	56. 398	57. 540	58. 553	59. 530	60. 739
61. 340	62. 519	63. 400	64. 545	65. 590	66. 530	67. 677	68. 050	69. 359	70. 697
71. 503	72. 460	73. 455	74. 368	75. 591	76. 364	77. 549	78. 551	79. 427	80. 657
81. 246	82. 607	83. 520	84. 332	85. 698	86. 261	87. 548	88. 466	89. 517	90. 642
91. 385	92. 026	93. 432	94. 579	95. 728	96. 559	97. 497	98. 505	99. 714	100. 640
101. 493		102. 395	103. 385		104. 389		105. 515	106. 633	
107. 574		108. 566	109. 387		110. 520		111. 371	112. 178	
113. 286		114. 232	115. 623		116. 534		117. 682	118. 707	
119. 408		120. 465	121. 427		122. 510		123. 618	124. 755	
125. 238		126. 350	127. 264		128. 482		129. 459	130. 498	

TRYON	TOT	.7267		.8258	.7323		.7917		.8893	.8544	
REL.		Pro	.6569	Rej	Cas	.8551	Dem	.8078	Lov	Neg	.8341
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX I - L

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE FATHERS (FEMALE)
SIEGELMAN: 9th GRADERS; N = 70; ITEM ANALYSIS (ITEM - TOTAL r's) + TRYON RELIABILITY

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1. 602	2. 479	3. 460	4. 468	5. 530	6. 490	7. 521	8. 490	9. 613	10. 588
11. 495	12. 463	13. 526	14. 522	15. 556	16. 445	17. 534	18. 561	19. 606	20. 677
21. 569	22. 549	23. 493	24. 472	25. 544	26. 512	27. 494	28. 772	29. 743	30. 649
31. 310	32. 450	33. 654	34. 622	35. 662	36. 554	37. 618	38. 457	39. 387	40. 617
41. 572	42. 586	43. 473	44. 254	45. 656	46. 528	47. 688	48. 647	49. 443	50. 734
51. 620	52. 539	53. 542	54. 029	55. 525	56. 528	57. 604	58. 640	59. 280	60. 672
61. 287	62. 561	63. 487	64. 530	65. 635	66. 386	67. 603	68. 148	69. 530	70. 704
71. 529	72. 438	73. 585	74. 592	75. 573	76. 430	77. 403	78. 611	79. 685	80. 609
81. 505	82. 542	83. 568	84. 126	85. 595	86. 432	87. 615	88. 453	89. 509	90. 514
91. 576	92.-059	93. 342	94. 452	95. 531	96. 530	97. 406	98. 522	99. 654	100. 797
101. 688		102. 559	103. 339		104. 135		105. 659	106. 639	
107. 613		108. 582	109. 545		110. 423		111. 557	112. 368	
113. 646		114. 204	115. 571		116. 588		117. 705	118. 644	
119. 435		120. 401	121. 361		122. 483		123. 661	124. 668	
125. 184		126. 635	127. 386		128. 412		129. 522	130. 475	

TRYON	TOT	.8079		.7908	.7454		.7738		.8746	.8337	
REL.		Pro	.6059	Rej	Cas	.7923	Dem	.8037	Lov	Neg	.8870
			Pun S-L			Rew S-L		Pun D-O			Rew D-O

APPENDIX II

CORRESPONDENCE

Box 267, Cuba, N.M.
August 13, 1965
(until Aug. 31)

Miss Geraldine Lambert
Oklahoma City, Oklahoma
P. O. Box 18552

Dear Miss Lambert:

Your letter of August 1 has just reached me, and of course I am pleased that you are interested in doing some work with the PCR. We have not copyrighted this instrument (sheer laziness I guess) and so you are of course at liberty to do what you wish with it. Apart from that legalistic and unimportant detail, I certainly have no objection, -- I have no doubt it can be improved. I would, however, also ask you to write to Dr. Siegelman (Department of Education, City College of N. Y., Amsterdam Ave. at 137th St., N. Y.). He did an item analysis, which has not been reported in detail, but in part in an article in the journal Child Development. I do not have the reference here unfortunately but it was the summer of 62 or 63 I think.

The PCR was constructed originally just to cover the six varieties of parent-child relations posed in my original theory. I don't remember the exact sequence but I guess it was about then that I read Sears, Maccoby, et al, and we decided to add punishment and reward items following their classification. Why only 10? I think that's all we could think of!, and anyway those scales were not so important to us. They enter into the factor analyses in such a way that they contribute with varying degrees, but are not uniquely important.

APPENDIX II - Continued

In fact what I very much wish someone would do (neither of us has the time) is to develop from the present form of the PCR a factor pure instrument, which would have three subscales only, corresponding to the three factors. This would be shorter and I think in the long run as useful if not more so, even though the individual scales do have their own significances. This is largely a technical statistical problem of course, and may not suit your interests (any more than it does mine), but I mention it just in case.

Good luck,

Sincerely yours,

Anne Roe

APPENDIX II - Continued

September 8, 1965

Miss Geraldine Lambert
P. O. Box 18552
Oklahoma City, Oklahoma

Dear Miss Lambert:

I had the pleasure of meeting and talking to Dr. Harry Parker at the APA meeting in Chicago last week. I am pleased that you plan to use the PCR that Dr. Roe and I devised and I will try to help you with it if I can.

The major work that I have done thus far, which isn't much I'm afraid, is an item analysis consisting of item-total correlations, for each of the 10 PCR variables, using in one sample college students, and in a second sample 9th graders. The item-total correlations consist of taking, for example, item one of the 15 items comprising the Protecting variable of the PCR and correlating it with the total score for all 15 items on this variable. In this way you can determine which items are closely related or homogeneous to keep for increased reliability. The item-total correlations for the college sample and the 9th graders, as well as the Tryon reliabilities (at bottom of page) are enclosed. On the basis of these item-total correlations, I selected the best items and reduced the PCR scale to ½ the original number of items. The items selected from the original form are indicated on the final enclosure, with the new numbering for the short form. I am enclosing a copy of this short form also. I have not computed reliabilities for this short form, but I suspect that they will be adequate for research purposes.

I am sending you also a paper on the Bronfenbrenner which I used to collect data for the paper that I presented at APA. This is the instrument I used with the 4th, 5th, and 6th graders.

APPENDIX II - Continued

Please keep me informed of your progress and I will let you know what I am doing with the PCR. Hope material is of some help to you.

Sincerely yours,

Marvin Siegelman, Ph.D.
Assistant Professor

APPENDIX III

DESCRIPTION OF CATEGORIES

Protective -- This category includes parents who give the child's interest first priority. They are very indulgent, provide special privileges, are demonstratively affectionate, may be gushing. They select friends carefully, but will rarely let him visit other homes without them. They protect him from other children, from experiences in which he may suffer disappointment or discomfort or injury. They are highly intrusive and expect to know all about what he is thinking and experiencing. They reward dependency.

Demanding -- Parents in this group set up high standards of accomplishment in particular areas, manners, school, etc. They impose strict regulations and demand unquestionning obedience to them, and they make no exceptions. They expect the child to be busy at all times at some useful activity. They have high punitiveness. They restrict friendships in accord with these standards. They do not try to find out what a child is thinking or feeling, they tell him what to think or feel.

Neglecting -- These parents pay little attention to the child, giving him a minimum of physical care and no affection. They forget promises made to him, forget things for him. They are cold, but are not derogatory nor hostile. They leave him alone, but do not go out of their way to avoid him.

APPENDIX III - Continued

Rejecting -- Parents in this group follow the extremer patterns of the "demanding" group, but this becomes rejecting when their attitude is a rejection of the childishness of the child. They may also reject him as an individual. They are cold and hostile, derogate him and make fun of him and his inadequacies and problems. They may frequently leave him alone and often will not permit other children in the house. They have no regard for the child's point of view. The regulations they establish are not for the sake of training the child, but for protecting the parent from his intrusions.

Casual -- These parents pay more attention to the child and are mildly affectionate when they do. They will be responsive to him if they are not busy about something else. They do not think about him or plan for him very much, but take him as a part of the general situation. They don't worry much about him and make little definite effort to train him. They are easygoing, have few rules, and do not make much effort to enforce those they have.

Loving -- These parents give the child warm and loving attention. They try to help with projects that are important to him, but they are not intrusive. They are more likely to reason with the child than to punish him, but they will punish him. They give praise, but not indiscriminatingly. They try specifically to help him through problems in the best way for him. The child feels able to confide in them and to ask them. They encourage independence and

APPENDIX III - Continued

are willing to let him take chances in order to grow towards it. Distinction between Loving and Casual categories can be difficult. A basic differentiating factor is the amount of thought given to the child's problems.

Symbolic-Love Reward -- The parents using this kind of reward praise their children for approved behavior, give them special attention, and are affectionately demonstrative.

Direct-Object Reward -- These include tangible rewards such as gifts of money or toys, special trips, or relief from chores.

Symbolic-Love Punishment -- Such punishments include shaming the child before others, isolating him, and withdrawing love.

Direct-Object Punishment -- These include physical punishment, taking away playthings, reducing allowance, denying promised trips, and so on.

APPENDIX IV

RELATIONSHIP QUESTIONNAIRE INFORMATION

Birthdate_____ Age_____ Number_____

I live with my natural mother. Yes____ No____

I live with my natural father. Yes____ No____

I live with a step-mother. Yes____ No____

I live with a step-father. Yes____ No____

I live with an aunt. Yes____ No____

I live with an uncle. Yes____ No____

I live with a grand-mother. Yes____ No____

I live with a grand-father. Yes____ No____

Other adults that live with us are _____

My father's occupation is_____

My mother's occupation is_____

When I start earning my own living I want my occupation to be _____

_____

DO NOT MARK BELOW THIS LINE

ROE CLASSIFICATION 1 2 3 4 5 6 7 8

OCCUPATION _____

APPENDIX V

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.

- Firemen
- Sheriffs
- Policemen
- Social Workers
- Vocational Counselors
- Educational Counselors
- Hairdressers
- Welfare Workers
- YMCA Officials
- YWCA Officials
- Practical Nurses
- Armed Forces

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
- Buyers
- Auto Insurance Salesmen
- Real Estate Salesmen
- Public Relations Counselors
- Retail and Wholesale Dealers

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
- Personnel Managers
- Officers, Ship and Armed Services
- Sales Clerks
- Stenographers
- Typists
- File Clerks
- Owners, Catering, Dry Cleaning, etc.
- Manufacturers, Small

APPENDIX V - 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; includes all the physical sciences and engineering.

Applied Scientists
Engineers
Designers
Aviators
Contractors, Building, Carpentry, Plumbing
Small Factory Managers
Mechanics, Plane and Auto
Bricklayers
Electricians
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 V - 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	Pharmacists
Scientists	Veterinarians
University and College Faculties	Laboratory Technicians
Dentists	Medical Technicians
Nurses	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	Lawyers
Educational Administrators	Teachers
University and College Faculties	Librarians
Clergymen	Reporters
Judges	Radio Announcers

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 VI

SCORING SHEET - RELATIONSHIP QUESTIONNAIRE

Number_____

Mothers -- Fathers

Pro	Pun S-L	Rej	Cas	Rew S-L	Dem	Pun D-O	Lov	Neg	Rew D-O
1____	2____	3____	4____	5____	6____	7____	8____	9____	10____
11____	12____	13____	14____	15____	16____	17____	18____	19____	20____
21____	22____	23____	24____	25____	26____	27____	28____	29____	30____
31____	32____	33____	34____	35____	36____	37____	38____	39____	40____
41____	42____	43____	44____	45____	46____	47____	48____	49____	50____
51____	52____	53____	54____	55____	56____	57____	58____	59____	60____
61____	62____	63____	64____	65____	66____	67____	68____	69____	70____
71____	72____	73____	74____	75____	76____	77____	78____	79____	80____
81____	82____	83____	84____	85____	86____	87____	88____	89____	90____
91____	92____	93____	94____	95____	96____	97____	98____	99____	100____

TOT

Pro	Rej	Cas	Dem	Lov	Neg	
	Pun S-L		Rew S-L	Pun D-O		Rew D-O

1. OCCUPATION:

2. ROE CLASSIFICATION: 1 2 3 4 5 6 7 8

APPENDIX VII

CODING OF ROE'S OCCUPATIONAL SCHEMA

Number Assigned	Roe's Occupational Classification	Person Oriented or Non-Person Oriented
1	Service	Person Oriented
2	Business Contact	Person Oriented
3	Organization	Person Oriented
4	Technology	Non-Person Oriented
5	Outdoor	Non-Person Oriented
6	Science	Non-Person Oriented
7	General Culture	Person Oriented
8	Arts and Entertainment	Person Oriented

APPENDIX VIII

EXPECTED FREQUENCIES, OBSERVED FREQUENCIES, AND CHI SQUARE VALUES FOR EACH L - P PCR SUBTEST BY CLASS INTERVALS

L - P PCR Subtest	Class Intervals			
	Girls - Mothers (N = 86)			
Protecting				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	18.000	23.000	27.000	18.000
Chi Squares	.606	.122	1.477	.606
Punishment S-L				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	20.000	23.000	26.000	17.000
Chi Squares	.121	.122	.990	.987
Rejecting				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	17.000	37.000	15.000	17.000
Chi Squares	.987	11.412	1.903	.987
Casual				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	17.000	33.000	14.000	22.000
Chi Squares	.987	6.316	2.547	.006

APPENDIX VIII - Continued

L - P PCR Subtest	Class Intervals			
Reward S-L				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	28.000	18.000	13.000	27.000
Chi Squares	1.882	.534	3.284	1.338
Demanding				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	20.000	29.000	15.000	22.000
Chi Squares	.121	2.716	1.903	.006
Punishment D-O				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	28.000	24.000	12.000	22.000
Chi Squares	1.882	.321	4.114	.006
Loving				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	17.000	23.000	17.000	29.000
Chi Squares	.987	.122	.897	2.518
Neglecting				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	17.000	40.000	13.000	16.000
Chi Squares	.987	16.217	3.284	1.461

APPENDIX VIII - Continued

L - P PCR Subtest	Class Intervals			
Reward D-O				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	23.000	22.000	16.000	25.000
Chi Squares	.088	.018	1.353	.528
	Girls - Fathers (N = 86)			
Protecting				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	20.000	25.000	15.000	26.000
Chi Squares	.121	.613	1.903	.887
Punishment S-L				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	24.000	26.000	15.000	21.000
Chi Squares	.261	.998	1.903	.017
Rejecting				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	20.000	32.000	15.000	19.000
Chi Squares	.121	5.275	1.903	.317
Casual				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	24.000	26.000	13.000	23.000
Chi Squares	.261	.990	3.284	.088

APPENDIX VIII - Continued

L - P PCR Subtest	Class Intervals			
Reward S-L				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	20.000	20.000	24.000	22.000
Chi Squares	.121	.089	.321	.006
Demanding				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	18.000	22.000	20.000	26.000
Chi Squares	.606	.018	.089	.887
Punishment D-O				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	25.000	21.000	20.000	20.000
Chi Squares	.528	.006	.089	.121
Loving				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	17.000	22.000	19.000	28.000
Chi Squares	.987	.018	.264	1.882
Neglecting				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	18.000	33.000	17.000	18.000
Chi Squares	.606	6.316	.897	.606

APPENDIX VIII - Continued

L - P PCR Subtest	Class Intervals			
Reward D-O				
Expected frequencies	21.620	21.379	21.379	21.620
Observed frequencies	26.000	15.000	26.000	19.000
Chi Squares	.887	1.903	.998	.317

APPENDIX IX

FREQUENCY DISTRIBUTIONS OF L - P PCR SUBTESTS[1]

L-P PCR Subtest Configurations	Scores														
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Girls-Mothers															
Protecting	0	0	1	0	0	0	0	0	2	0	0	1	6	5	1
Punishment S-L	1	0	0	1	1	3	2	1	5	3	3	5	8	7	3
Casual	1	1	0	0	0	1	2	2	4	3	3	6	10	5	4
Loving	1	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Neglecting	13	4	21	3	10	6	4	3	3	3	2	2	0	3	3
Demanding	0	0	7	0	0	0	0	0	0	0	2	0	1	3	1
Rejecting	14	3	12	10	10	5	0	4	4	3	4	2	1	2	1
Reward S-L	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2
Punishment D-O	2	4	6	1	6	1	8	2	3	6	6	7	3	4	2
Reward D-O	1	3	2	1	4	3	0	1	7	1	3	4	7	3	5
Girls-Fathers															
Protecting	0	0	0	0	0	1	0	1	0	2	1	3	3	4	5
Punishment S-L	0	1	0	1	0	3	4	0	6	4	5	7	5	8	6
Casual	0	0	0	0	0	2	1	2	2	2	9	6	6	5	7
Neglecting	14	4	12	5	11	5	6	4	2	5	6	1	5	0	0
Rejecting	8	41	11	12	9	2	9	6	8	1	5	3	2	1	1
Reward D-O	1	0	2	0	2	2	5	1	9	4	4	4	7	0	6
Reward S-L	0	0	0	0	1	1	0	0	0	0	0	2	1	1	5
Demanding	0	0	0	0	1	0	0	0	0	2	0	2	1	0	1
Punishment D-O	4	1	3	1	5	5	6	6	3	6	6	9	8	3	0
Loving	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0

[1]Table to read left to right, for each L-P PCR subtest, from first through last page.

APPENDIX IX - Continued

FREQUENCY DISTRIBUTIONS OF L - P PCR SUBTESTS

L-P PCR Subtest Configurations	Scores														
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Girls-Mothers															
Protecting	2	8	3	5	7	8	6	5	8	6	2	0	3	0	2
Punishment S-L	2	5	3	13	3	3	1	5	0	3	1	1	0	1	0
Casual	8	2	3	5	2	2	4	2	3	1	4	4	1	1	0
Loving	1	1	1	1	2	1	1	0	2	2	3	3	4	5	5
Neglecting	0	1	1	1	0	1	0	1	0	0	0	0	0	0	0
Demanding	7	5	6	8	5	6	4	2	7	4	2	2	4	6	3
Rejecting	2	1	1	0	1	2	1	0	1	0	1	0	0	0	0
Punishment D-O	3	3	0	3	2	4	1	3	1	2	0	1	1	0	0
Reward S-L	1	1	3	7	11	5	4	7	2	5	6	2	3	10	4
Reward D-O	4	2	1	3	6	4	8	7	0	2	2	0	0	0	0
Girls-Fathers															
Protecting	3	10	7	5	4	7	4	8	8	2	2	2	0	0	0
Punishment S-L	1	8	3	3	3	6	5	0	1	2	0	0	2	0	0
Casual	2	6	5	2	2	4	7	4	2	3	1	1	1	1	0
Neglecting	1	1	0	0	0	0	1	1	0	1	0	0	0	4	4
Rejecting	0	1	1	1	1	1	0	1	0	1	0	0	0	0	0
Reward D-O	10	6	4	3	4	2	3	1	2	1	0	1	0	1	0
Reward S-L	0	3	4	2	5	6	2	7	9	5	7	3	7	3	3
Demanding	2	2	7	6	5	7	4	8	3	7	2	5	7	2	2
Punishment D-O	5	2	2	4	0	2	1	0	0	1	0	0	0	2	0
Loving	2	1	0	0	1	2	2	2	3	1	4	3	6	4	4

APPENDIX IX - Continued

FREQUENCY DISTRIBUTIONS OF L - P PCR SUBTESTS

L-P PCR Subtest Configurations	Scores										
	40	41	42	43	44	45	46	47	48	49	50
Girls-Mothers											
Protecting	1	1	0	2	1	0	0	0	0	0	0
Punishment S-L	0	0	0	1	1	0	0	0	0	0	0
Casual	0	0	0	0	0	0	0	1	0	0	1
Loving	3	4	2	2	5	4	8	4	6	2	9
Neglecting	0	0	0	0	0	0	0	1	0	0	0
Demanding	1	1	1	1	3	0	0	0	0	0	0
Rejecting	0	0	0	0	1	0	0	0	0	0	0
Reward S-L	3	0	5	1	0	1	0	0	0	0	0
Punishment D-O	0	0	0	0	0	1	0	0	0	0	0
Reward D-O	0	0	0	0	1	1	0	0	0	0	0
Girls-Fathers											
Protecting	3	1	0	0	0	0	0	0	0	0	0
Punishment S-L	1	0	0	0	1	0	0	0	0	0	0
Casual	1	1	0	0	0	0	0	0	0	1	0
Neglecting	2	5	5	3	4	9	5	4	4	2	4
Rejecting	0	0	0	0	0	0	0	0	0	0	0
Reward D-O	0	0	0	0	1	0	0	0	0	0	0
Reward S-L	4	1	2	1	1	0	0	0	0	0	0
Demanding	4	1	2	2	1	0	0	0	0	0	0
Punishment D-O	0	1	0	0	0	0	0	0	0	0	0
Loving	2	5	5	3	4	9	5	4	4	2	4

APPENDIX X

COMPARISON OF TRYON RELIABILITIES
MALE

Subtest	Roe Study Harvard		Siegelman Adults		Siegelman Grade 9		Green-Parker Grade 7		Pilot Study Grades 7 & 9	
	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers
Protecting	.761	.780	.681	.816	.640	.723	.602	.610	.570	.681
Punishment S-L	.759	.687	.751	.775	.674	.739	.501	.529	.624	.700
Rejecting	.759	.850	.830	.873	.828	.886	.761	.798	.835	.882
Casual	.800	.810	.830	.840	.648	.829	.582	.641	.528	.651
Reward S-L	.708	.757	.794	.846	.750	.814	.721	.750	.729	.839
Demanding	.836	.826	.850	.824	.747	.770	.620	.639	.574	.685
Punishment D-O	.769	.788	.770	.802	.734	.860	.639	.669	.717	.829
Loving	.872	.896	.901	.885	.847	.915	.819	.821	.919	.956
Neglecting	.745	.868	.813	.861	.758	.814	.771	.809	.755	.843
Reward D-O	.798	.783	.912	.899	.751	.845	.789	.801	.749	.784

APPENDIX XI

COMPARISON OF TRYON RELIABILITIES
FEMALE

Subtest	Sample Study Grade 8		Siegelman Adults		Siegelman Grade 9		Green-Parker Grade 7		Pilot Study Grades 7 & 9	
	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers
Protecting	.584	.528	.781	.858	.727	.808	.626	.638	.570	.686
Punishment S-L	.706	.694	.782	.679	.657	.606	.629	.678	.587	.643
Rejecting	.837	.709	.802	.881	.826	.791	.807	.826	.807	.869
Casual	.789	.711	.830	.830	.732	.745	.593	.620	.538	.633
Reward S-L	.641	.678	.766	.836	.855	.792	.769	.803	.715	.805
Demanding	.664	.665	.711	.881	.792	.774	.589	.587	.601	.625
Punishment D-O	.797	.730	.751	.837	.808	.804	.790	.797	.678	.793
Loving	.893	.875	.881	.918	.890	.875	.853	.876	.895	.921
Neglecting	.860	.794	.776	.859	.854	.834	.809	.863	.777	.850
Reward D-O	.836	.727	.818	.870	.834	.887	.789	.796	.766	.816

APPENDIX XII

RANGES OF ITEM - TOTAL CORRELATIONS

Subtest	Green Study Grade 7	Siegelman Grade 9	Siegelman Adults	L-P PCR Grade 8
		Fathers		
Protecting	.121 - .545	.184 - .688	.232 - .581	.299 - .581
Punishment S-L	.097 - .684	-.059 - .586	-.144 - .617	.192 - .697
Rejecting	.308 - .653	.204 - .654	.320 - .679	.387 - .690
Casual	.170 - .645	.029 - .622	.057 - .747	.032 - .677
Reward S-L	.489 - .649	.525 - .662	.328 - .682	.362 - .629
Demanding	.282 - .589	.135 - .588	.302 - .775	.346 - .677
Punishment D-O	.439 - .659	.403 - .688	.501 - .695	.415 - .669
Loving	.456 - .747	.148 - .772	.425 - .769	.533 - .794
Neglecting	.329 - .736	.280 - .743	.114 - .783	.410 - .809
Reward D-O	.366 - .707	.514 - .797	.465 - .694	.268 - .677
		Mothers		
Protecting	.278 - .483	.238 - .574	.277 - .563	.335 - .576
Punishment S-L	.019 - .663	.026 - .680	-.192 - .798	.204 - .684
Rejecting	.345 - .664	.232 - .520	.297 - .616	.493 - .768
Casual	.248 - .579	.264 - .623	.175 - .693	.420 - .711
Reward S-L	.369 - .592	.479 - .736	.299 - .577	.277 - .632
Demanding	.202 - .586	.261 - .559	.361 - .620	.413 - .639
Punishment D-O	.367 - .573	.495 - .677	.435 - .605	.481 - .671
Loving	.345 - .716	-.050 - .688	.340 - .675	.591 - .784
Neglecting	.340 - .660	.178 - .755	.050 - .623	.532 - .810
Reward D-O	.506 - .653	.572 - .739	.378 - .695	.403 - .784

APPENDIX XIII

ITEM - TOTAL CORRELATIONS BELOW .450

Subtest	Green Study Grade 7	Siegelman Grade 9	Siegelman Adult	L - P PCR Grade 8
		Fathers		
Protecting	11 of 15	4 of 15	6 of 15	6 of 10
Punishment S-L	2 of 10	3 of 10	1 of 10	4 of 10
Rejecting	2 of 15	3 of 15	7 of 15	3 of 10
Casual	9 of 15	6 of 15	4 of 15	2 of 10
Reward S-L	0 of 10	0 of 10	2 of 10	2 of 10
Demanding	9 of 15	7 of 15	5 of 15	4 of 10
Punishment D-O	1 of 10	1 of 10	0 of 10	1 of 10
Loving	0 of 15	1 of 15	1 of 15	0 of 10
Neglecting	4 of 15	4 of 15	3 of 15	2 of 10
Reward D-O	1 of 10	0 of 10	0 of 10	1 of 10
		Mothers		
Protecting	12 of 15	10 of 15	6 of 15	4 of 10
Punishment S-L	1 of 10	2 of 10	2 of 10	1 of 10
Rejecting	3 of 15	9 of 15	7 of 15	0 of 10
Casual	11 of 15	8 of 15	7 of 15	1 of 10
Reward S-L	1 of 10	0 of 10	5 of 10	2 of 10
Demanding	9 of 15	8 of 15	3 of 15	2 of 10
Punishment D-O	3 of 10	0 of 10	1 of 10	0 of 10
Loving	3 of 15	4 of 15	5 of 15	0 of 10
Neglecting	4 of 15	3 of 15	7 of 15	0 of 10
Reward D-O	0 of 10	0 of 10	1 of 10	1 of 10

APPENDIX XIV

QUESTION CHANGE IN LAMBERT-PARKER PARENT-CHILD RELATIONS QUESTIONNAIRE BY ITEM NUMBER FOR BOTH MOTHER AND FATHER QUESTIONNAIRE

Item Number	Roe's Questionnaire	Lambert-Parker Modification
7	Takes away my toys or playthings when I am bad.	Takes away my personal possessions when I am bad.
37	Won't let me play with other children when I am bad.	Won't let me be with my friends when I am bad.
77	Takes away my books or records as punishment.	Takes away my personal possessions (books, records, etc.) as punishment.
97	Punishes me by not taking me on trips, visits, etc., that I have been promised.	Punishes me by not taking me places (trips, visits, etc.) that I have been promised.
92	Reasons with me and explains the possible harmful results when I do wrong things.	Gets unhappy with me when I do wrong things but tries to explain the possible harm to me.

APPENDIX XV

POSITIONING AND RENUMBERING OF PCR QUESTIONS ON THE L-P PCR

PCR Number	L-P PCR Number
101	11
107	31
102	3
108	13
120	23
126	53
103	4
109	44
115	84
121	94
104	36
110	56
116	76
122	86
105	8
117	38
123	68
129	88
106	29
118	59
124	69

APPENDIX XVI

MEDIAN X^2 TEST TO DETERMINE INDEPENDENCE WITH ROE CLASSIFICATION, 2 x 2 CONTINGENCY TABLE

L-P PCR Subtest	Mother	Father
Protecting	.5	.7
Punishment S-L	.3	.05
Rejecting	.2	.15
Casual	3.7	2.8
Reward S-L	.0	8.4**
Demanding	2.8	2.7
Punishment D-O	2.1	.13
Loving	1.0	11.7**
Neglecting	2.6	.0
Reward D-O	2.4	.75

** 1 d.f.; .05 level = 3.814.