

~~/~~PARENT EDUCATION TO INCREASE THE SELF-CONFIDENCE OF NEW PARENTS/
A PEDIATRIC NURSE'S PROGRAM IN A HOSPITAL SETTING

by

GAYLE ELIZABETH CONNET

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MASTER OF SCIENCE

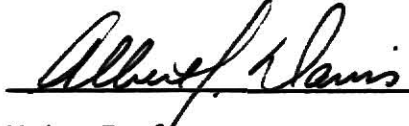
Department of Family and Child Development

Kansas State University

Manhattan, Kansas

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Approved by:


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TABLE OF CONTENTS

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	PAGE
ACKNOWLEDGEMENTS	iv
LIST OF TABLES AND FIGURES	v
Chapter	
1. INTRODUCTION.	1
2. REVIEW OF LITERATURE.	3
Parent Education - Adolescents	4
Parent Education - Elementary School Age Children. .	5
Parent Education - New/Expectant Parents	10
Parental Self-Confidence	14
Present Study.	17
3. METHODS	18
Sample and Design.	18
Subjects	18
Class Structure.	20
Class Content and Format	22
Assessment of Parental Confidence.	26
Class Evaluation	29
4. RESULTS	30
Pre-test Scores.	30
Post-test Scores	30
Change Scores.	30
Class Evaluation	35
5. DISCUSSION.	39
Program Content.	40
Methods of Class Presentation.	41
Program Problems	42

	PAGE
Recommendations.	43
Nursing Implications	44
Conclusions.	44
REFERENCES.	45
APPENDICES.	48
A. Program Handouts	48
B. Program Evaluation	50

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LIST OF TABLES AND FIGURES

TABLE		PAGE
1.	Demographic Characteristics of Sample	19
2.	Informational/Experiential Background of Parents in Child Development and Parenting Skills.	21
3.	Methods of Class Presentation	27
4.	Methods of Class Presentation	28
5.	Pre-test Parenting Self-Confidence Scores - Males and Females Means and Standard Deviations.	31
6.	t-test Comparisons Between Class and Control Groups on Self-Confidence (Pre-test).	32
7.	Post-test Parenting Self-Confidence Scores - Males and Females Means and Standard Deviations.	33
8.	Self-Confidence Change Scores and Group Comparisons	34

FIGURE

1.	Changes in Total Self-Confidence Scores from Pre-test to Post-test for Class and Control Group Females . . .	36
2.	Changes in Health Care Self-Confidence Scores from Pre-test to Post-test for Class and Control Group Females.	37

INTRODUCTION

Through my experiences as a pediatric nurse, I have become aware of the growing need for parent education, and in particular, for prenatal parenting classes for expectant mothers and fathers. The available literature in this area corroborates my judgement. Polling highly educated graduates of her prenatal classes, Williams (1977) found that 82% of the couples believed that a small discussion group concerning problems with a new baby would have helped them, including information on the physical care of the baby (bathing and feeding), as well as the rehearsal of changes in family life, marital and extended family relationships. In a younger, less educated sample of mainly single mothers, Jarrett (1982) found a need for parent education in the area of child development. These new mothers expected their children to sit alone, walk without support, have bowel and bladder control, and know the difference between right and wrong much earlier than the norms for these activities. They felt the earlier their children accomplished these tasks, the better.

The relationships between expectations of expectant parents, their caregiving practices, and infant development were examined in Snyder, Eyres, and Barnard's (1979) two-year longitudinal study of 193 families, beginning in the seventh to eighth month of pregnancy. Only 13% of the sample were aware of newborns' capabilities at birth, 51% of the mothers thought their babies would be aware of their environments at about 2 months of age; while 36% reported awareness would occur after 2 months of age. The mothers who held later developmental expectations had fewer years of formal education, lower family incomes, less physical and emotional support during pregnancy, and more perinatal complications. In terms of caregiving characteristics, mothers with later expectations provided significantly less stimulating and responsive caregiving environments to their infants at 4, 8, and 12 months of age (HOME Inventory) than the mothers with early developmental expectations. Furthermore, although

the Brazelton Neonatal Behavior Examination revealed no differences between the infants at 2 days of age, the Bayley mental and psychomotor scores at 12 and 24 months of age were lower for the children of mothers with late expectations.

There is a need, therefore, for parent education for expectant and new parents.

In terms of timing such a program, Sumner and Fritsch (1977) had the nurses on an obstetrical unit record all the calls they received pertaining to infants up to six weeks of age. Phone calls were most frequent in the first two weeks of life and then dropped off sharply at six weeks. Of the 270 phone calls they received over a one month period, 62% were from primiparas and 38% were from multiparas. The highest percentage of questions were about feeding (31%), followed by gastrointestinal inquiries mainly dealing with colic (21%). These results suggest that the postnatal needs of parents from delivery to the first routine physician visit at 4 to 6 weeks postpartum remain largely unmet. The new parents in the Williams (1977) study also recommended two to four weeks post-delivery as the optimum time for intervention. Thus, it is apparent that both first-time and experienced parents of newborns are in need of intervention before the routine 4 to 6 week checkup.

New parents actively seek the advice of their pediatrician, as well as make use of child rearing books during this period. Pediatric nurses, on the other hand, represent a generally underutilized professional resource in the domain of parent education (Hollen, 1982). This is unfortunate given the knowledge, training, and experience of obstetrical and pediatric nurses in the field of child development in general, and in infant behavior in particular.

The present project involved the development and presentation of a parent education program to new and expectant parents by an experienced pediatric nurse in a small community hospital in Manhattan, Kansas.

Review of Literature

Parent education has been defined as "as activity using educational techniques in order to effect change in the parental role performance (Brim, 1959, p.20)." Such techniques usually include mass media, individual counseling, or group discussion formats. Activities which we might call parent education are as old as human nature (Brim, 1959). Prior to the 1800's, information on child care was imported from Europe into the hands of American mothers in written form on pamphlets very similar to those produced in mass quantities today. The first record of group meetings of parents dates back to 1815 in Portland, Maine. Maternal Associations were also popular around this time with regular meetings held to discuss child-rearing problems. These early groups were concerned with the religious and moral improvement of their children and discussed techniques for "breaking the will."

Parent education efforts have continued into the present, and if anything, have increased in recent years. According to Bredehoft and Hey (1984), there are four indicators which suggest parent education programs are important today and will continue to be important in the future : 1) government, churches, and social service agencies have made substantial investments in parent education; 2) there has been an increase in the enrollments in parent education programs over the last decade; 3) there is a growing interest in colleges and universities concerning parent education; and 4) there has been an increase in research on parent education.

"Research on the effectiveness of parent education has been historically inadequate, both in the amount and in quality (Croake & Glover, 1977, p. 153)." The criteria for success has frequently consisted primarily of comments made by the participants on the helpfulness of the program; and in most cases, non-treatment or alternative treatment control groups were not employed. Brim (1959) recognized this problem stating "only a few of the many studies undertaken in

parent education are satisfactory from the standpoint of design and analysis" (p. 290). The latter studies are reviewed below, and include programs for parents of children of various ages.

Parent Education - Adolescents

Most parent education programs involving adolescents have focused primarily on preparing them, i.e., the adolescents, for parenthood, as opposed to the parenting of adolescents. In terms of the latter, a study by Stanley (1978) stands out

Stanley (1978) designed a program for parents and their adolescent children in which rules were established and family conflicts resolved through democratic procedures. This program, based on an Alderian approach to family education (Dreikers et al., 1959) and Gordon's Parent Effectiveness Training (1970), involved role playing situations based on real life conflicts. In order to evaluate the effectiveness of this program in bringing about changes in parental decision-making attitudes and behaviors, and adolescents' moral reasoning, and experimental design was employed.

Sixteen volunteer couples and their adolescent children were assigned to one of three groups: Group A (consisting of 10 parents and 7 adolescents, representing 5 families); Group B (consisting of 12 parents and 6 adolescents, representing 6 families); Group C (consisting of 10 parents and 5 adolescents, representing a 5-family postponed treatment control group). Both of the treatment groups met for 10 weekly 2½ hour sessions (Group A parents and adolescents attended together, while in Group B, only parents attended) and received training in conflict resolution and the use of family meetings. Also, as part of the program, parents in Groups A and B conducted family meetings on a regular basis. Prior to the first training session, and after the completion of the program, the following inventories were administered: 1) The Ferreira-Winter Questionnaire for Unrevealed Differences; 2) the Parental Attitude Research Instrument; 3) the Family Decision Making Scale. The Kohlberg Moral Judgement Interview was administered

to the adolescents pre-treatment and repeated nine months after completion of the program. In addition, a pre- and post-treatment family meeting involving parents and adolescents in all three groups was tape recorded.

In terms of treatment effects, parents in Groups A and B significantly increased their egalitarian attitudes toward family decision making from pre-test to post-test. Furthermore, in their family meetings, these same parents significantly decreased their proportionate talking time and significantly increased the number of personal feeling questions from pre-test to post-test. But, only Group A parents significantly decreased the number of directive or ordering statements made to their children during family meetings. And, interestingly, all five Group A families were still holding family meetings at the 9 month follow-up, while only 2 Group B families continued with the meetings.

In terms of changes in the adolescents, only Group A participants showed significant pre- to post-test gain on the Kohlberg Moral Judgement Interview. This study demonstrated the impact of the program on both parents and adolescents, while highlighting the particular benefits resulting from the involvement of adolescents along with their parents in parent education programs.

Parent Education - Elementary School Age Children

One of the larger and earlier studies on parent education for parents of school age children was carried out between the years 1955 to 1960 in Austin, Texas by Carl Hereford (1963). The goals of the study were to develop and establish in a community a workable method of helping parents with their parent-child relationships, and to evaluate this method in terms of the resulting attitudinal and behavior changes. Hereford (1963) suggests the following criteria for a successful parent education program: 1) the method must provide for parental participation; 2) the method must be feasible; 3) the method must be economical; 4) the method must be acceptable and interesting to parents; and 5) the method must be testable by evaluative research. Hereford (1963) states the method that meets

these standards best is that of the discussion group.

Mothers and fathers of elementary school age children were placed in one of the following categories: 1.) The Experimental Group (n = 363) attending at least one discussion group meeting. 2.) The Lecture Control Group (n = 91) who attended at least one in a series of lectures by professionals in the field of parent-child relationships. Neither the lecturers nor the audience were aware of their control group status. 3.) Non Attendant Control Group (n = 138) consisting of parents who registered for either a discussion group or a lecture series, but did not attend. 4.) Random Control Group (n = 256) consisting of parents who did not register or attend. The experimental group was divided into two subgroups according to their attendance: Group I attending one or two discussion group meetings; Group II attending three or more.

The discussion group series consisted of 6 weekly 2-hour sessions led by trained but nonprofessional volunteers. Meetings began with an educational film on parent-child relationships, the primary purpose of which was to stimulate discussion and provide a general topic for the meeting. A few groups requested no film be used at all, so they could use the entire meeting for group discussion.

Pre- and post-treatment assessments were made of parental attitudes, (Confidence in Parental Role, Causation of Child's Behavior, Acceptance of Child's Behavior and Feelings, Mutual Understanding and Mutual Trust), and parental behaviors (obtained from interviews focusing on: Difficulties in Child Rearing, Parental Worries, Amount of Freedom Given Child, Punishment, Ideal Child - Ideal Parent), and childrens' peer relations and Classroom Adjustments (as noted by teachers). The results showed that the experimental group changed in the positive direction significantly more than any of the three control groups on all of the behavior and attitude scales except Confidence in Parental Role. The trend was in the positive direction for confidence but didn't reach statistical significance. Furthermore, it should be pointed out that the two experimental subgroups showed very

similar quantities of change indicating that the frequency of attendance did not affect the outcome.

In terms of the childrens' behavior, the teachers ratings of the children revealed no significant differences between the children of parents in either parent education program or either non-treatment control group.

The conclusion drawn from this study was that the discussion group method resulted in significant changes in parental attitudes and behaviors, and further, that this method was more effective than the alternate parent education education program presented in lecture format. The underlying assumption of the group discussion format was that parents can learn from each other, without an expert in charge of the class. The responsibility for the success of the program rested on the participants. Without relying on professionals, the cost of the program is contained, and the program could be more accessible to all communities.

In another study by Sumerlin and Ward (1978), mothers and fathers of kindergarten and 2nd grade children participated in Dinkmeyer and McKay's (1976) Systematic Training for Effective Parenting discussion group. The primary focus of the program was to change parents' attitudes towards their children and to increase the self-concept of their children. Parents who signed up for the class were randomly assigned to the experimental (n = 26) or the control group (n = 24). The control group began the program two months after the experimental group.

Hereford's (1963) Parent Attitude Survey was administered to the experimental group after they completed the six session STEP study group and administered to the control prior to their classes. The Primary Self Inventory assessing three major domains of self-concept (personal self, intellectual self, and social self) was administered to the experimental group children two months after their parents' study group ended and to the control group children before their parents began their study group sessions. It should be noted that no pre-test assessments were

administered to the experimental parents or their children and no post-test assessments were made of the control group parents and their children.

It was found that the parents in the experimental group scored significantly higher on all five variables making up the Parent Attitude Survey, i.e. they felt more confident as parents, more responsible for their child's behavior, were more understanding of their child, and had more trust for their child than did the parents in the control group. Acceptance and Trust scores accounted for the largest between group variation, with Confidence scores accounting for the least difference.

The experimental group children exhibited significantly higher levels of personal self, social self, and intellectual self than did the control group children.

Another study utilizing Dinkmeyer and McKay's (1976) Systematic Training for Effective Parenting by Nystul (1982) took place in Brisbane, Australia. Applicants for the STEP course were randomly assigned to control and treatment groups with 14 mothers in each group. The ages of the children were not reported. The control group was placed on a waiting list for the program. Both groups of mothers were given The Attitude Toward Freedom of Children Scale II (ATFC - II) and the Parent Attitude Research Instrument Q 4 (PARI Q 4). The experimental group was measured before and after the STEP program and the control group was measured on two occasions within the same 10 week interval.

The mothers in the experimental group did not vary from the control group on their pre-test scores. On the post-test scores, the results were as predicted, with mothers who attended the STEP program becoming more democratic in their child-rearing attitudes, less strict in their child-rearing practices, and more encouraging of vocalization than mothers in the non-treatment group.

Levant and Doyle (1983) conducted a parent education program aimed at improving communication skills of fathers with children ages six to twelve years.

They believe that parent education aimed at fathers is a badly neglected area, for as more mothers enter the work force, the demand for fathers' participation in child care will increase.

A voluntary sample of 11 fathers was recruited from announcements in schools, churches, and health and social service agencies. A control group of 11 fathers was recruited using the same procedures from another community. The education program consisted of 8 three hour sessions held weekly. The first half of the course focused on listening and responding to one's child; the second half on increasing fathers' awareness of their thoughts and feelings which emerge while interacting with their children and fathers' acceptance of their children.

Fathers in both groups were assessed on the Sensitivity to Children Scale (STC) and the Porter Acceptance Scale (PAS) before and after the parent education program. Both groups of children were assessed on the Kinetic Family (KFD) test (assessing the child's feelings related to self-concept and to interpersonal family relations) before and after the program, and Structured Child Interviews which inquired into the child's perception of his or her relationship with the father.

The results showed that the experimental group had improved significantly on the overall STC scale. No differences were found between the groups on the PAS scores. The children in the experimental group were judged to have more positive changes in their relationships with their fathers in both the structured interview measure and in the KFD measure.

Thus, education efforts with parents of school age children have shown that educational programs, particularly ones employing group discussions, can be an effective method in changing parental attitudes towards childrearing. The effects of parent education upon school age children are not as clear. In Hereford's (1963) study, the teachers' ratings of the children did not reveal any differences between the various groups of children; but the Sumerlin and Ward (1978) and the

Levant and Doyle (1983) studies did find significant changes in the children whose parents were involved in parent education programs.

Parent Education - New / Expectant Parents

Parent education programs aimed at new or expectant parents have mainly focused on increasing parental skills, knowledge, and/or confidence.

Dickie & Gerber (1980) conducted a parent training class designed to increase the ability of parents to assess, predictively elicit, and contingently respond to infant behavior and to increase infants' contingent responses to the parents' behavior. In this study, parental competence was defined as being present in a parent-infant dyad when both parents and infant provide crucial contingency experiences for one another.

Nineteen interested parent couples were randomly assigned to either the control or experimental group. The infants' mean age was 8 months, with 14 of the 19 infants being first-borns. The control group was offered the class at the completion of the study.

Both parents and their infant attended the training classes lasting 16 hours over an 8-week period. Training included lecture, discussion, and demonstration emphasizing child development, individual infant variation, knowledge of the infant's temperament and cues, provision of content experiences, and awareness of the infant's effect on the parents and the parent's effect on the infant.

No measures or observations were taken at the outset of the program. At the end of the program live and videotaped parent-infant interaction in the home were rated by trained observers on several dimensions, including: the extent to which the home was modified for the infant, infant predictability and responsiveness, parent anticipation of infant needs, parent responsiveness to infant cues, and parent contingent verbal responses. Each parent also completed an 80-item quest-

ionnaire judging their self-perceived competence as a parent, and amount of parental competence they felt their spouse had.

As expected, trained parents anticipated infant needs, responded more appropriately to infant cues, and provided more frequent verbal and nonverbal contingent responses than did the control group parents; and their infants were more responsive and predictable. Training did not increase the parents' self-competence ratings, but it did increase their judgement of their spouses' competence.

Wandersman et al. (1980) conducted a parent education course for first-time parents of newborns. Twenty-three volunteer mothers and 18 volunteer fathers were divided into groups of 6 to 10 married couples. They began weekly structured, formal classes six to ten weeks postpartum (depending on delivery date) for 6 weeks, then met monthly for 4 more sessions. The control group consisted of 23 mothers and 24 fathers who expressed an interest in the class, but could not attend.

Each class focused on a topic of interest: infant health and nutrition, cognitive development, changes in the husband-wife relationship, parenting values, and socialization techniques.

The goal of this study was to explore the relationship of various kinds of social support to parents' adjustment to parenthood and parental sense of competence. At Time I (first class), several dimensions of social support were assessed, including: Marital Instrumental: assessed by asking which spouse generally does the household tasks other than the baby care. Marital Emotional: consisting of consensus on matters of importance to dyadic functioning, affectional expression, and cohesion. Network Emotional: measuring individuals' perception of having enough close friends to share with and help out. The final measure of social support was Group, regarding participation or nonparticipation in the class.

At Time II (9th class), several dimensions of adjustment were assessed,

including: well-being (fullness of life, energy, relaxation, health, and positive mood, marital interaction, and parental sense of competence (utilizing a job competence scale). Unfortunately, only the class participants completed the adjustment measures at the end of the program.

The results showed the importance of various types of social support may be different for mothers and fathers. Marital cohesion predicted mothers' reports of well-being and marital interaction and fathers' reports of fullness of life and parental competence. The parent education class support did not correlate significantly with any of the measures of well being, quality of marital interaction, or parental sense of competence.

Smith & Smith (1978) conducted a longitudinal study involving 41 couples, 73% of whom were expecting their first child. The goal of the program was to enhance parents' problem-solving techniques and to help parents gain self-confidence and security in their new roles. No control group was utilized in this study. The class included nine prenatal sessions from the 3rd month of pregnancy up until delivery, and 5 postpartum sessions up until the baby reached about 3 months of age. (Attendance was sporadic in the postpartum period)

Course content included the following: physical and emotional changes that occur during pregnancy, labor and delivery procedures and experiences, infant feeding, infant care, child development, family adjustments, practicalities of life with a newborn, and parenting. The curriculum material was presented through small group discussion methods and the course was led by the staff of an obstetrical unit.

Pre- and post-test questionnaires were given to all participants. The testing involved 3 questions pertaining to knowledge of child development, e.g. "When does a baby first hear?" Participants were also asked to describe the amount of emotional support they were receiving from spouse, friends, and relatives.

Results showed that the mothers' knowledge of child development increased significantly on all three areas tapped after attending the classes, while the fathers showed improvement on only one of the three areas. The previous years of formal education was not a major variable influencing knowledge of child development. The participants (mothers and fathers) rated the prenatal and postnatal classes as having been very helpful to them, i.e. mean ratings above 4.0 on a 5 point scale.

Another parent education study aimed at first-time parents of newborns was conducted by Myers (1982) which took place in the hospital immediately postpartum. The goal of the program was to increase both parental knowledge of newborn behavior and skill in handling the infant, which in turn, would increase parental self-confidence.

All families meeting the following criteria: full term, healthy, vaginal delivery infant, middle class, and married were randomly assigned to one of the following groups: mother treatment (n = 14), father treatment (n = 14), or control (n = 14). Forty-two families participated in the program.

The parents in the treatment groups were each given an individual session by the experimenter in which all of the items on the Brazelton Neonatal Behavior Scale were demonstrated on their own infant. The experimenter then encouraged the parent to administer each item. The control group spent a comparable amount of time with the experimenter becoming acquainted. This single intervention took place before the mothers' discharge.

Observations and measurements were taken in the hospital at least 6 hours after intervention and at home 4 weeks postpartum. In-hospital measures included a ten minute observation of father-infant and mother-infant interactions, a test of knowledge of infant behavior, a confidence in parenting, and a satisfaction with infant measure. The 4 week postpartum at-home measures repeated the test of knowledge of infant behavior, asked fathers to rate their caretaking tasks, and

asked parents to estimate when they first fell in love with the baby and felt like the baby was really theirs.

The experimental fathers and experimental mothers had significantly higher post-test knowledge scores in the hospital and at 4 weeks postpartum than the control group. The wives of the treatment fathers did not differ significantly from the controls' wives at either test period, but the husbands of the treatment mothers did have significantly greater knowledge scores than the controls' husbands at 4 weeks postpartum. No group differences were found on the immediate in-hospital confidence questionnaire, as all groups of parents rated themselves as being fairly confident. However, at the 4 week assessment, 57% of the treatment mothers said that their participation in the program made them feel "more sure of themselves" as caretakers, while none of the control mothers felt "more sure" of themselves. Fathers showed no significant effect on self-confidence at either measurement time. Myers pointed out however, that the lack of treatment effect on self-confidence may be due to the fact that most participants were older (mothers' mean age = 28, fathers' mean age = 31), more mature, well educated (most were college educated), and fairly confident at the outset, and due to the fact that this program consisted of a single 30 minute intervention.

No treatment-group effects were found during the 10 minute observation periods of mother-infant and father-infant interactions. There was no significant differences between the groups on the following behaviors with their infants: En face, Smile, Talk, Touch, and Position.

The results of this study indicate the program positively affects parental knowledge, satisfaction, involvement with infants, and to some extent, self-confidence. Myers suggests both parents be involved in the Brazelton intervention.

Parental Self-Confidence

Myers-Walls (1977) and Resnick (1981) propose that self-confidence of parents in

their new roles is an important issue that needs to be addressed in parent education programs. Myers-Walls believes that new parents who feel more confident in themselves in their ability to care for their infants could be expected to make a smoother transition to parenthood. Resnick (1981) also feels that self-confidence is particularly important stating that ideal goals for parent education programs would be to instill confidence in women as mothers and men as fathers, and would encourage the discussion of negative as well as positive feelings toward their new roles.

In order to identify the factors contributing to parental self-confidence, Myers-Walls (1977) interviewed 103 women, 51 primiparas, and 52 multiparas, while in a hospital postpartum ward. It was hypothesized that the following factors would all contribute positively to self-confidence: 1.) Direct experience with infants: the completion of various caretaking tasks with children under 6 months of age. 2.) Information/Skills Training: participation in any information dissemination program which does not involve direct experience and which teaches concepts and abilities necessary for the care and rearing of an infant. 3.) Knowledge About Child Development, Childrearing, and Parenting: the amount of information a woman can correctly report concerning the listed fields, without concern for the source of knowledge. 4.) Indirect Experience and Training Through Exposure to Models: the number of opportunities a woman feels she has had to observe other mothers caring for their infants.

Self-confidence in this study was defined as maternal self-ratings of confidence to perform specific tasks related to the care and nurturance of an infant.

A significant positive relationship was found between direct experience with infants (#1) and self-confidence for the group as a whole, and for first-time mothers, and between training (#2) and self-confidence for the multiparous women. When training was broken down into books, classes, and other training, only the subcategory classes was significantly positively related to self-confidence, and

again only for the multiparous women. There was a tendency, though not significant, for training to be negatively correlated with self-confidence for primiparous women. Myers-Walls suggests that an explanation for the negative correlation is that these mothers have learned about the demands and responsibilities of parenting without having had a chance to try their hands at it, so they are conservative in their estimates of parenting. The multiparous group of women did not score significantly higher on the self-confidence measure than did the primiparas.

Myers-Walls concludes that the hypothesis that direct experience, training, observation of models, and knowledge contributes to self-confidence in new parents was partially confirmed. She suggests the need for longitudinal research on parental self-confidence since self-confidence may be artificially high or low during the "honeymoon period" immediately postpartum. The full effects of experience, training, knowledge, and observation of models would be more clearly demonstrated over time.

Overall, the training effects of various studies focusing on increasing self-confidence in the parental role have yielded differential success. Most research conducted on new or expectant parents has been concerned with multiple goals: increasing parental skills, knowledge, and confidence. These programs have been more successful at increasing parental skills and knowledge than in increasing self-confidence, and this differential success may be due to a variety of factors. One of the above mentioned programs (Myers, 1982) was a single intervention lasting only 30 minutes, and the brevity of this program may have accounted for the lack of treatment-group effects on self-confidence ratings in the hospital. The Wandersman (1980) study utilized a job competence scale (to assess confidence) not specifically aimed at parenting which may have accounted for the lack of treatment effects on self-confidence. The Smith & Smith (1978) study had no specific measures of self-confidence included in the study; and the Dickie and Gerber (1980) study did not assess the participants at the outset of the program

which make treatment effects impossible to assess. None of these programs had parental self-confidence as their primary or only goal, and more effort may have been focused on increasing parental knowledge and skills, furthermore, none of these programs aimed at parents of newborns assessed parental self-confidence at the outset and the completion of the program in both treatment and non-treatment groups.

In response to the interview question, "What are the things that worry you most about being a parent?," both groups of parents in the Hereford (1963) discussion group and lecture programs responded with: "own adequacy" more frequently after attending their respective programs. But, this response was more marked in the lecture series parents than in the discussion group. Hereford (1963) states "perhaps increased concern about self-adequacy is a natural consequence - at least the desired goal - of any attempt to educate parents in parent-child relations (p. 129)." The results of the study revealed that the discussion group parents did something about their increased concerns, i.e., they changed their behavior, whereas the lecture-series parents did not.

Present Study

I agree with Resnick (1981) and Myers-Walls (1977) that increasing self-confidence in new parents is an important goal of parent education programs. I designed and implemented a parent education program geared to parents of newborns designed specifically to increase parental confidence in five specific domains: Physical Care, Health Care, Cognitive-Intellectual Development, Social-Emotional Development, and Family Responsibilities. The parent education group and a control group were measured at the outset and completion of the program. A reliable instrument was utilized for pre- and post-test measurements of confidence in these five domains. I predicted that the class group would show significantly greater increases in self-confidence than the control group.

METHOD

Sample & Design

In March of 1983, posters announcing a parent education class for new or expectant parents were placed in local obstetrical, pediatric, and family practice offices, at the public health department, and on the local hospital's postpartum ward. Announcements of the course were also made by the instructors of the hospital sponsored prenatal classes and by the social workers in the Healthy Start program that make newborn home visits. The majority of the parents who ended up attending the parent education classes were recruited from the prenatal classes.

Subjects

A total of ten couples signed up the course, and an additional 10 couples were recruited from the prenatal classes to serve on a nontreatment control group. These couples were contacted by phone and asked if they would complete a questionnaire on two occasions, six weeks apart. One couple from each group was lost before the completion of the program, leaving 9 couples in the parent education class and 9 couples in the control group.

At the start of the program, 5 couples in the class had recently delivered and the remaining 4 couples all delivered before the last class. Four couples in the control group had delivered at the start of the program, four couples delivered before the last class, and one couple in the control group had not yet delivered at the end of the program. Eight couples in each group were expecting or had just delivered their first child; one couple in each group had recently delivered their second child by the start of the program. Other pertinent descriptive data are presented in Table 1.

A series of t-test and Kolmogorov-Smirnov Two-Sample tests indicated that there were no significant differences between the parent education and control group husbands and wives respectively on these demographic features. The extent

Table 1

Demographic Characteristics of Sample

<u>Characteristic</u>	<u>Parent Ed Class</u>		<u>Control Group</u>	
	<u>Husb</u>	<u>Wives</u>	<u>Husb</u>	<u>Wives</u>
	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
Age (Years)	26.42	25.89	25.73	25.42
Education (Years)	15.11	14.55	17.11	15.44
<u>Work Status</u>	<u>n</u>	<u>n</u>	<u>n</u>	<u>n</u>
Student	1	1	3	0
Blue Collar	3	0	3	2
White Collar	5	5	3	5
Unemployed	0	3	0	2
Pregnancy/Labor & Delivery	<u>n</u>		<u>n</u>	
Complications (n)	2		2	

to which the parents in each group utilized different sources of information regarding child development and parenting, as well as the extent of their experience with infants are presented in Table 2. The mean scores presented here for each informational/experiential source represent responses on a 4-point scale, with 1 = none; 2 = little; 3 = moderate amount; and 4 = a great deal.

As can be seen in Table 2, all of the scores in general varied between little to moderate; thus, these two groups of parents did not extensively use informational sources for knowledge in child development or parenting skills, nor did they have extensive experience with infants. Relatives and friends were rated as the most frequently utilized source of information on parenting skills and child development by the husbands and wives in both groups; while lectures and workshops were the least often utilized sources of information.

There were no significant differences (t-test comparisons) between the two groups of husbands and wives respectively on these informational/experiential sources; however, there were some differences between the husbands and wives within each group. The control group wives rated themselves significantly higher than the control group husbands in overall knowledge from experience, and on their utilization of books, lectures, and workshops to gain child development knowledge. The wives in the parent education class rated themselves significantly higher than their husbands in utilizing books for information on parenting skills.

Class Structure

The class consisted of a series of six 2-hour sessions (one session per week). Each session took place in the evening so that husbands as well as wives would be able to attend. Those couples who were already parents were allowed to bring their infants to class for their convenience, as well as to allow some "hands on" experience for the expectant couples. There was always at least one baby present at each class. The classes took place in the cafeteria of the

Table 2

Informational/Experiential Background of
Parents in Child Development and Parenting Skills *

<u>Informational Sources</u>	<u>Parent Ed Class</u>		<u>Control Group</u>	
	<u>Husb</u>	<u>Wives</u>	<u>Husb</u>	<u>Wives</u>
<u>Sources Utilized for</u> <u>Child Development Info.</u>	$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$
Classes/Courses	2.22	2.44	2.55	2.77
Books	2.33	3.33	1.88	3.11
Lectures/Workshops	1.11	1.66	1.44	2.33
Relatives/Friends	2.77	3.55	2.88	3.33
Other Sources	1.64	1.33	1.85	1.66
<u>Sources Utilized for Info.</u> <u>on Parenting Skills</u>				
Classes/Courses	1.33	1.77	1.88	1.88
Books	2.11	3.0	1.88	2.66
Lectures/Workshops	1.11	1.55	1.22	1.88
Relatives/Friends	2.88	3.11	2.55	2.88
Other Sources	1.16	1.33	1.28	1.55
<u>Experiential Sources</u>				
Direct Experience with Infants	1.88	2.55	2.44	3.33
Opportunity to Observe Others Take Care of Infants	2.33	3.10	2.88	3.33
Overall Knowledge From Your Experience	2.22	2.66	2.55	3.0

* 4-Point Scale: 4 = a great deal; 3 = moderate amount; 2 = little; 1 = none.

local hospital where the prenatal classes were held. There was no charge for the course.

Class Content & Format

The topics covered in the six classes were:

Class # 1 : Health Care

Class # 2 : Basic Infant Care

Class # 3 : Changing Family Relationships

Class # 4 : Safety

Class # 5 : Infant Feeding

Class # 6 : Infant Growth and Development

Each class consisted of a lecture/presentation and a discussion, and many of the classes included films, demonstrations, and handouts. Each class is briefly described below.

Class # 1 : Health Care. The parents introduced themselves and told the class of their labor and delivery experiences if they had already delivered. Following the introductions, the movie "Newborn" (1975) was shown, a film which followed a couple through the birth of their first child. The feelings of the new parents were discussed along with the characteristics of their newborn. Following the film, the common illnesses and their symptoms during the first year of life were described in detail by me, along with suggestions on when to call the doctor. The Gerber Products Co. poster entitled "Patterns of Immunization" (1981) was used to emphasize the importance of immunizations and to identify immunization scheduling for babies. Prices charged by the public health department were quoted to the class.

The class was taught how to take a rectal temperature and shown how to read a thermometer. Growth charts (Appendix A) were handed out and parents were shown how to plot heights and weights and how to read percentile ranking. The wide range of sizes and weights within the normal range was emphasized.

Consideration of the pros and cons of a pediatrician versus a family physician was the final topic for discussion in Class # 1, one which elicited a variety of opinions and a spirited debate.

Class # 2 : Basic Infant Care. Supplies used in bathing infants were shown to the class, and techniques for bathing infants, including cord, eye, and scalp care were discussed. Parents were reassured that most newborns don't enjoy their baths. The rationale behind circumcisions was discussed and parents were told when to expect the circumcision bell to fall off.

The different stooling patterns between breast and bottle fed infants and the prevention and cure of diaper rash were reviewed. Class discussion on the pros and cons of cloth versus disposable diapers followed, and daily cost figures for each type of diapering were quoted.

The preferred styles and fabric content for infant clothing were demonstrated to the class. Age of shoe placement and recommended styles were also presented.

Class # 3 : Changing Family Relationships. At the beginning of class, couples who had delivered were given a chance to talk about how it feels to be a parent. The results of a study by Pellegroni & Swartz (1980) were presented to the class. They found that primigravidas at 3 to 4 weeks postpartum had not anticipated, or had underestimated the rapid growth and responsiveness of their infants, the lack of available time alone with their husbands, loss of sleep, and lack of available time for self. They also reported an unexpected change toward a more open relationship with their mothers if they had received assistance from them during the first two weeks postpartum. The implications of this study were discussed with the class.

Qualities to look for in a babysitter were discussed, along with the importance of having a reliable alternate caretaker allowing parents time alone together.

Feelings on the decision of mothers returning to work or not were elicited from the group, and the need for new mother and father role definitions were discussed. Couples in which the mother had already returned to work told how they

had changed duties around the house. Handouts on the transition to parenthood were distributed at this class (Appendix A).

The importance of grandparents was emphasized, and handouts on this topic were also given out (Appendix A). Parents were asked to be patient with their parents since they were also entering into a new role in their life, i.e., the role of grandparents. The value of listening to advice, but not necessarily following it was stressed. Relationships with parents and in-laws were discussed by the group at the end of class.

In preparation for the next class on safety, parents were asked to crawl around their house on their hands and knees in order to discover the problems and potential dangers that might be encountered by their babies.

Class # 4 : Safety. Parents reported the potential sources of accidents they discovered while crawling around their houses. Information on poison-proofing a home was detailed to the class in lecture format, including the following:

- Children will eat or drink anything, regardless of taste.
- Common drug ingestants are multiple vitamins, baby aspirin, and birth control pills; many poisonings occur while the product is still in use.
- Child resistant caps on medication can be opened by 20% of children in tests on their effectiveness.

The following recommendations were given for poison-proofing a home:

- Never tell a child that medicine is candy.
- All medications, cleaning supplies, and toxic substances should be kept up high out of childrens' reach, preferably in a locked container.
- Keep medication out of purses.
- Before buying household plants, check to see if they are toxic to humans.
- Every household should have Syrup of Ipecac, an over the counter drug that is used to induce vomiting if your child has ingested a toxic substance.

The prevention of home drownings, falls, burns, strangulation, and suffocation

were also discussed. The movie "Car Safety-Don't Risk Your Child's Life" (1978) was shown. This film stressed the importance of infant car seats and seat belt use by showing what happens in an accident when they aren't used. After the film, the proper use of an infant car seat was demonstrated to the class. A poster by Gerber Products Co. entitled "Patterns of Auto Safety" (1981) listing car seats meeting Federal Motor Safety Vehicle Standard 213 was made available to the class for review. Parents were encouraged to try car seats out in their own vehicle before they purchase one to insure proper securement; and were informed of the Kansas law that requires the use of car seats for children under 2 years riding in the front seat of automobiles.

Childhood safety series pamphlets and SIGNA, a bulletin from St. Francis Hospital including Mr. Yuk stickers to place on household poisons (Appendix A), and poison control numbers were given to all couples at this session.

Class # 5 : Infant Feeding. Group discussion on the pros and cons of breast versus bottle feeding took place at the beginning of class.

Proper feeding techniques were discussed including: usual length of feeding, burping, eye contact, body messages, and demand versus scheduled feedings. The various types of formulas and their preparations were reviewed along with the prices for each.

The cause and prevention of obesity in infancy was emphasized along with the cause and prevention of dental caries. The recommended time to introduce solids and their proper sequence was presented.

Parents were taught how to read labels on baby foods and proper heating techniques. Home-prepared baby food was compared with commercial prepared in cost, and pamphlets detailing its preparation were distributed (Appendix A). After the formal lecture, parents discussed feeding problems they were experiencing.

At the end of the class, parents were asked to watch their baby closely and report back to class the new accomplishments over the next week.

Class # 6 : Infant Growth and Development. The filmstrip "Growth and Development of Children # 3" was shown, followed by a discussion of the developmental milestones that usually occur in the first year of life. After the filmstrip and discussion, the meaning of the concept "normal," including the substantial amount of variability within the normal range was stressed, and parents were informed that the concept "the earlier the better" was not valid.

The developmental chart for the first year of life from the American Baby magazine (Appendix A) was presented. This developmental chart reviews monthly physical, sensorimotor, intellectual, and social aspects of development. Appropriate baby play each month was included in the chart and presented to the class.

The Denver Developmental Screening Test (Appendix A) was demonstrated on one of the awake and alert babies present in class that night. Handouts of the Denver Developmental Screening Test and the American Baby's developmental chart were given to all parents present, and mailed out with the final questionnaire to those absent.

Class discussion centered on what each baby was mastering currently. Ira Gordon's book Baby Learning Through Baby Play (1970) was recommended to the class. The central components of the six classes are summarized in Tables 3 & 4.

Assessment of Parental Confidence

Self-confidence in this study was defined as maternal and paternal self-ratings of confidence to perform specific tasks related to the care and nurturance of an infant. Two parallel forms (Form A & B) of a parenting self-confidence scale developed by Myers-Walls (1977) were completed by the parents at the beginning of the first class, with half of the parents completing Form A, and half completing Form B. At the end of the last class, the scales were distributed and completed in the reverse fashion (i.e., Pre-test A -> Post-test B; Pre-test B -> Post-test A). The scale was also mailed out and completed by the control

Table 3

Methods of Class Presentation

	FILE # *	LECTURE	DISCUSSION	DEMONSTRATION	HANDOUTS *
Class # 1 <u>Health Care</u>	"Newborn"	Immunizations - when and why. Common illnesses 1st year of life: pneumonia, otitis media, croup, gastroenteritis.	Labor & Delivery experiences. Pros and cons of pediatrician vs. family physicians.	Taking rectal temperatures & reading thermometers. Plotting height & weight on growth chart.	Physical Growth MKS Percentiles by Ross Lab.
Class # 2 <u>Basic Infant Care</u>		Bathing infants. Cord, eye, scalp, and perineal care. Stooling patterns. Dressing of infants.	Pros & Cons of cloth versus disposable diapers.	Bathing supplies, Infant clothing. Folding of cloth diapers.	
Class # 3 <u>Changing Family Relationships</u>		Common postpartum feelings & experiences.	Feelings about returning or not returning back to work. How it feels to be a parent. Choosing a babysitter.		"Grandparenting: A Gift for Generations" "Transition to Parenthood" Part I, II, III, IV

* Films from Kansas Dept. of Health & Environment

* Pamphlets from KSU Extension

Table 4
Methods of Class Presentation

FILMS *	LECTURE/PRESENTATION	DISCUSSION	DEMONSTRATION	HANDOUTS *
"Your Safety - Don't Risk Your Child's Life"	Prevention of household poisoning, drowning, burns, suffocation, and strangulation.	Potential sources of danger discovered around home. Preventive measures learned from others' experiences.	Proper latching of infant car seat brought in from Public Health Department.	"Child Safety Series" SIGM newsletter and "Mr. Y&K" stickers from St. Francis Hosp. Topeka, Ks.
	Techniques of infant feeding. Introduction of solids. Prevention of obesity and dental caries. Formula and baby food preparation.	Problems with infant feeding. Pros & cons of breast vs. bottle.	Reading of ingredients on baby food jars. Baby food grinder. Removing air from plastic liner bottles.	"Weeding Baby Food"
"Growth and Development of Children # 3" (filmstrip)	Physical, sensorymotor, intellectual, and social aspects of infant development.	Changes in each infant's behavior over the past week.	Administration of Denver Developmental Screening Test	Denver Developmental Screening Test American Baby's Developmental Chart

* Films from Kansas Dept. of Health & Environment

* Pamphlets from KSI Extension

group in the same manner during the same two periods of time.

The scale includes an assessment of parental confidence in five domains of parenting: Physical Care, Health Care, Cognitive-Intellectual Development, Social-Emotional Development, and Other Home and Family Responsibilities. Each form had a total of 15 questions, 3 questions covering each domain. For each question the parents were asked to rate themselves on a scale of 1 to 10, with 1 = Very Incapable and 10 = Very Capable. The scaled scores for each of the 3 questions in each domain were summed yielding a maximum net score of 30 per domain, and 150 for the total instrument. Following is a sample question from each domain:

Physical Care: Dressing my baby warmly enough but not too warmly?

Health Care: Knowing when my child is really ill and how to take care of him/her?

Cognitive-Intellectual: Teaching my child to talk?

Social-Emotional: Helping my child to get along with other children?

Family Responsibilities: Getting along with other parents and in-laws?

Class Evaluation

Class evaluations were completed at the end of the last session, including participants' assessments of the Methods of Class Presentation (lectures/presentations, films, handouts, assignments, exchanges with other parents); Topics Covered in Program (the six classes were listed); Overall Evaluation of the Program; and Overall Evaluation of the Instructor. All of these aspects of the program were rated on the following 4-point scale: 1 = no value; 2 = little value; 3 = some value; 4 = much value. The assessment instrument is presented in Appendix B.

RESULTS

Pre-test Scores

Mean confidence scores for husbands and wives in the class and control groups are presented in Table 5. Scores ranged from 15 to 23 (comprised of 3 ratings ranging from 5 to 8 on a 10-point scale) across the sample, indicating moderately high self-assessments of confidence in these five domains in general. Table 5 also shows the greater amount of variability in the total pre-test scores of the class group compared to the control group.

In order to determine if the class and control groups differed at the pre-test, a series of t-test analyses were run on the confidence scores in each of the 5 domains, and the total scores, for the husbands and wives respectively. These tests, as reported in Table 6, reveal significant differences between the mothers in their health care confidence. Thus on only one of the five domains of confidence, the class and control mothers did differ at the outset of the program.

Post-test Scores

The means of the post-test scores are presented in Table 7. On post-testing there is less variability in the five subcategory scores for the class males and females, compared to the pre-test. Furthermore, post-test scores for the class participants, and particularly the females, were generally higher than pre-test levels.

Change Scores

The hypothesis of this study was that the class participants would show an increase in their self-confidence on post-testing. It was expected that the class would significantly increase their scores on post-testing, with little or no change in scores for the control group. Therefore, change scores were calculated from pre-test to post-test. These scores are presented in Table 8, along

Table 5

PRETEST PARENTING SELF CONFIDENCE SCORES - MALES & FEMALES
MEANS AND STANDARD DEVIATIONS

SUBCATEGORIES	MALES				FEMALES			
	Class		Control		Class		Control	
	M	SD	M	SD	M	SD	M	SD
PHYSICAL CARE	19.66	6.02	20.0	6.57	23.22	4.84	26.22	2.04
HEALTH CARE	15.33	7.05	21.55	5.76	17.66	6.06	22.66	2.95
COGNITIVE-INTELLECTUAL	18.33	6.91	18.88	4.53	20.55	7.31	23.88	3.25
SOCIAL-EMOTIONAL	18.11	7.38	22.55	3.24	23.11	5.08	23.88	3.51
FAMILY RESPONSIBILITIES	20.88	5.68	23.44	3.28	22.22	4.35	23.66	2.95
TOTAL SCORES	92.11	28.15	107.22	14.16	106.77	25.42	120.33	8.09

Table 6

t-test Comparisons Between Class and Control Groups
on Self-Confidence (Pretest)

SUBCATEGORIES	MALES		FEMALES	
	t	p	t	p
PHYSICAL CARE	0.11	-	1.71	-
HEALTH CARE	2.04	-	2.22	.05
COGNITIVE-INTELLECTUAL	0.20	-	1.24	-
SOCIAL-EMOTIONAL	1.65	-	0.37	-
FAMILY RESPONSIBILITIES	1.16	-	0.82	-
TOTAL	1.43	-	1.50	-

Table 7

POST-TEST PARENTING SELF CONFIDENCE SCORES - MALES & FEMALES
MEANS AND STANDARD DEVIATIONS

SUBCATEGORIES	MALES				FEMALES			
	Class		Control		Class		Control	
	M	SD	M	SD	M	SD	M	SD
PHYSICAL CARE	23.11	4.13	22.0	4.76	27.66	1.58	27.33	1.80
HEALTH CARE	19.11	4.07	22.22	6.62	24.33	1.76	22.11	4.31
COGNITIVE-INTELLECTUAL	20.11	4.31	23.22	1.39	24.88	2.71	25.0	3.16
SOCIAL-EMOTIONAL	20.33	4.18	23.77	2.33	24.55	2.40	24.77	2.68
FAMILY RESPONSIBILITIES	22.0	3.39	22.11	3.91	21.66	1.73	22.33	5.09
TOTAL SCORES	104.44	16.73	114.0	14.23	124.22	7.67	122.88	14.08

Table 8

SELF CONFIDENCE CHANGE SCORES AND GROUP COMPARISONS

SUBCATEGORIES	MALES					FEMALES				
	$\bar{M}$ Control	$\bar{M}$ Class	t	P		$\bar{M}$ Control	$\bar{M}$ Class	t	P	
PHYSICAL CARE	2.0	3.55	0.612	-		1.11	4.44	0.493	-	
HEALTH CARE	0.66	3.77	1.219	-		-0.55	6.66	3.233	.005	
COGNITIVE-INTELLECTUAL	4.33	1.77	1.127	-		0.66	4.33	1.235	-	
SOCIAL-EMOTIONAL	1.22	2.22	0.487	-		0.88	1.44	0.247	-	
FAMILY RESPONSIBILITIES	-1.33	1.11	1.404	-		-1.33	-0.55	0.367	-	
TOTAL SCORES	5.77	12.33	0.806	-		1.44	17.44	1.684	.057	

with class-control group comparisons (t-tests) for males and females respectively.

The mean increase in the total scores for the class males was 12, compared to a mean increase of 7 for the control males. This increase was not statistically significant, nor were any of the scores in the 5 subcategories of self-confidence. This may have been due to the poor overall attendance of the males. The average number of classes attended by the fathers was 2.2 compared to an average of 3.4 for the mothers. Males attending 4 or more of the 6 classes had total mean gain scores of 27.0; while those attending less than 4 classes had mean gain scores of 5.0. These differences approached statistical significance ($t = 1.61$, $df = 16$, $p = .066$).

The mean total gain score for the class females exceeded the mean for the control females by 15 points (17.45 vs. 2.55), a difference that was significant at the .057 level. Given the small n , this difference is considered to be significant by this author. These changes are reflected in Figure 1, and show that the class females started out at 14 points below the control females; and at post-testing, they exceeded the controls.

In the health care self-confidence domain, differences in the change scores were quite significant. The class females went from a mean pre-test score of 17.66 to a mean post-test score of 24.33; while the control females remained essentially the same, going from a pre-test score of 22.66 to a mean post-test score of 22.11. This difference was significant at the .005 level. These changes, reflected in Figure 2, show that the class females started out at 5 points below the control females and exceeded them on post-testing.

This program did have an impact on the mothers' overall confidence in themselves as parents, particularly in the health care area. For mothers then, the program's goals were reached.

Class Evaluation

Overall class evaluation, instructor evaluation, and the five methods of presentation (lectures/presentations, discussions & exchanges, films, hand-

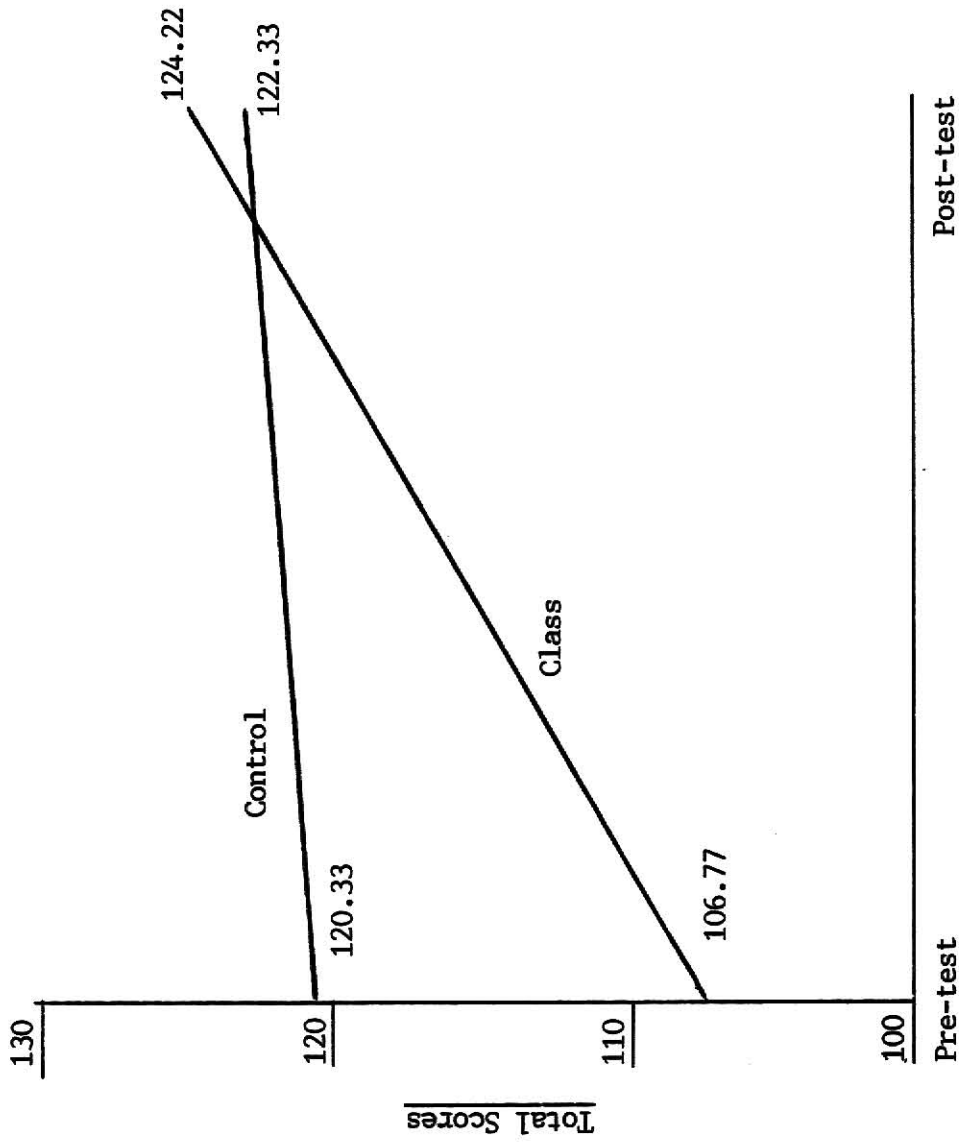


Figure 1

Changes in Total Self-Confidence Scores from Pre-test to Post-test
for Class and Control Group Females

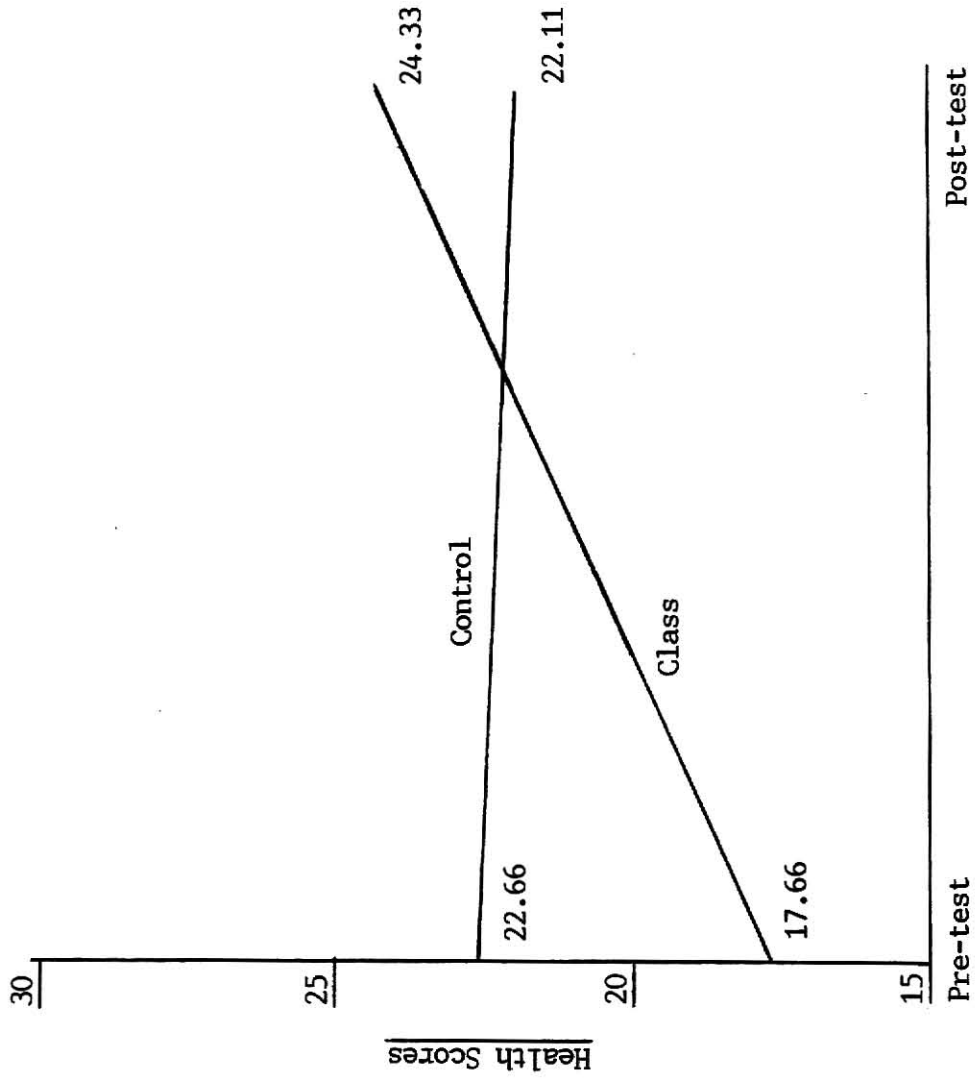


Figure 2

Changes in Health Care Self-Confidence Scores from Pre-test to Post-test
for Class and Control Group Females

outs, and class assignments) were rated on a 4-point scale, with 4 = much value, 3 = some value, 2 = little value, and 1 = no value. A total of 11 class evaluations were returned. The following mean ratings were obtained:

	<u>M</u>	<u>SD</u>
Overall Class Evaluation	3.82	0.40
Instructor Evaluation	3.91	0.31
Lectures / Presentations	3.91	0.31
Discussions & Exchanges	3.82	0.40
Handouts	3.64	0.67
Films	3.18	0.40
Class Assignments	3.00	1.00

In every case the class components were rated from some value to much value for all the participants replying. Several of the parents made additional comments on their evaluation on how helpful the program had been for them. As can be seen in the above figures, the lectures and discussions & exchanges with other parents were rated higher than the films and class assignments, this difference being statistically significant ($t = 4.54$, $df = 20$, $p = .001$). Out of the 11 evaluations returned, only 7 parents gave a rating on the class assignments. This was probably due the fact that there were only 2 assignments given out over the entire program, participated in by only the parents present in class on those two occasions. Instructor evaluation and lectures were the two class components given the most valuable ratings.

DISCUSSION

The results of a 6 session parenting course aimed at increasing self-confidence of new or expectant parents showed that it did have an impact on the mothers' overall confidence, and in particular, their confidence in the health care area. At the outset of the program, the control mothers and fathers exceeded the class participants in their self-confidence in the health care domain. However, on post-testing, the scores of the control mothers remained essentially the same, whereas the class mothers increased their scores significantly and actually surpassed the control mothers.

No specific training effects were shown for the fathers. Poor attendance on their behalf may have accounted for this, since 3 out of the 9 fathers did not attend any of the classes. Fathers attending 4 or more of the 6 classes had total mean score changes of 27.0; while those attending less than 4 classes had total mean score changes of 5.0 ($p .066$).

Similar results were found in the Myers (1982) study in which mothers who participated in the single training session reported more self-confidence as a result of their participation in the training. The fathers in this study did not report higher levels of self-confidence after their participation in the training session.

Interviewing 103 women (51 primiparas & 52 multiparas) immediately post-partum, Myers-Walls (1977) found that training, especially classes, was significantly related to increased levels of reported self-confidence in parenting for the multiparous women. There was a tendency for training to be related to lower levels of self-confidence for the primiparous women. Since these women were interviewed while in the hospital immediately post-partum, it's obvious that the primiparous women experienced training before they could actually utilize the benefits of it. The participants in my parent education program had all delivered before the end of the program; therefore, having an opportunity to try out what they had learned before their post-testing.

In the Dickie & Gerber (1980) study, participants in the parent education program did not report higher levels of parental self-competence than did the non-participants. This outcome difference (from my program) may be explained by the definition of parental self-competence used in this study: parental self-competence was defined as being present in a parent-infant dyad when both the parent and infant provide crucial contingent experiences for each other. In my program, parental self-confidence was defined as the amount of confidence one has to perform specific tasks related to the care and nurturance of an infant.

Thus, this approach to parent education for new and expectant parents can successfully enhance their self-confidence as parents, particularly if they are motivated and involved in the program.

Program Content

Topics

The topic chosen for Class #1 was Health Care, this topic being chosen due to the leader's background as a nurse. Starting out with a topic that the leader felt most knowledgeable and confident in seemed appropriate. There was not much class discussion generated at this first class, due perhaps to the poor arrangement of the tables and chairs around the classroom, or to the fact that the parents were not yet well enough acquainted at this first session. Despite the lack of much group discussion, the mothers in the class improved their scores in the health care domain significantly more than the control mothers. This outcome may have resulted from a number of factors: the medical expertise of the leader, the fact that the program took place in a hospital setting; and due to the 3 other sessions (Basic Infant Care, Safety, Infant Feeding) whose content deals indirectly with health care.

The domain of confidence that showed the least amount of improvement for the class participants (and controls) was the Family Responsibilities domain. The scores in this area are a reflection of Class #3: Changing Family Relationships.

I feel that these scores may be a reflection on the amount of time spent in lecturing in this class. This is the one class that I feel that most of the time should have been devoted to class discussion.

There wasn't really any domain of self-confidence that fully reflected the content in Class # 4: Safety and Class # 5: Infant Feeding, making it difficult to fully assess the success of these two sessions by themselves.

The Social-Emotional domain of self-confidence was a reflection of Class # 6: Infant Growth and Development. The lack of significant mean change scores in this domain could be due to the poor attendance at this class; there were only two couples present that night.

Methods of Class Presentation

The principle method employed in this program was the lecture, with at least half of each class session devoted to this method of presentation. Much of the success of the lecture method of presentation may have been due to the fact that the group leader had a 2 month old infant at home. In addition to being perceived as an "expert" in the health field, the group leader was probably also viewed as another parent going through the same experiences as they were (much like the lay leaders in the discussion groups in the Hereford (1963) study).

More class time could have been devoted to demonstrations. In Class # 2: Basic Infant Care, the actual bathing of an infant should have been demonstrated (especially since I had easy access to the infants in class). The 2 couples in attendance at Class # 6: Infant Growth & Development enjoyed the demonstration of the Denver Developmental Screening Test. This method of class presentation should have been included in the class evaluation.

The films did not generate much discussion, I feel this was due to the lack of expertise on the part of the leader to initiate group discussion from this form of media presentation, and due in part to the selection of films. The films were rated as one of the least valuable (relatively) methods of class

presentation (3.18 on a 4-point scale) by the class participants. In the Hereford study (1963), the parents in the discussion groups also felt this way about films, deciding to do away with them all together in some of the groups so they could devote more time to group discussion.

The class assignments received the least valuable rating from the class participants (3.0 on a 4-point scale). There were only two assignments utilized in this program, and many of the parents weren't present when they were used, which may have contributed to the low rating. The parents who were present in class when these assignments were utilized seemed to enjoy them; these assignments did help to stimulate group discussion. Many interesting issues were addressed as a result of the assignment in which the parents were asked to crawl around the house on their hands and knees to discover the potential trouble their infants could get into once they reached the crawling stage.

Group discussion was an important method of presentation in this program. As the parents became better acquainted, group discussion increased with each class. This increase may have also been due to the increasing ease of the group leader and to the improved seating arrangement after the first session (chairs arranged in a circle and removal of some of the tables). Hereford's (1963) study underlined the importance of group discussion; the parents in this program also felt this method to be of much value as demonstrated in their ratings (3.82 on a 4-point scale). Through group discussion, parents discovered that they were not alone in their experiences and feelings in their new roles.

Program Problems

The results of this program may have shown stronger training effects if more participants could have been recruited; randomly assigning them to either a treatment or a delayed-treatment control group (eliminating pretest differences). The control group utilized in this study may have been a select group

with greater than average amounts of self-confidence in their parenting abilities. They did not elect to participate in the parenting program, but did exhibit a willingness to take part in educational activities by having been participants in the prenatal course.

The treatment effects may have also been stronger if the program would have lasted longer than 6 weeks, although most parent education programs reviewed did not last longer than 8 weeks.

The Myers-Walls (1977) confidence scale utilized in this study was not tailor-made to fit the content of my program. A scale with 6 domains, each covering the 6 individual sessions of the course would better reflect the benefits of the program. The timing of administration of the scale was also a problem. Most of the parents were post-tested shortly after the birth their baby. Post-testing 6 months after completion of the program would have allowed the class participants time to practice what they had learned in class, therefore raising their self-confidence levels.

Recommendations

Upon repeating this program in the future, the following changes would be made: I would aim most of my recruitment efforts at the prenatal classes (realizing that there would be other groups that might benefit more from the class). I would accomplish this by making a personal appearance toward the latter part of the prenatal program, during the mothers' last month of gestation. Eighteen of the original 20 couples recruited for the program were obtained through announcements made by the instructors of the prenatal classes.

Another change that I would make would be to devote more time to demonstrations. I would bathe, dress, bottle feed, burp, suction with a bulb syringe, strap into a car seat, and take a rectal temperature of babies present in class. This would involve changes in method of presentation in nearly all of the classes, reducing the amount of time spent in lecturing.

Another evaluation addressing program effects on participants' behavior, as opposed to self-perceptions, could be utilized in future programs. This could be done with the cooperation of pediatric office nurses; they could utilize a parent behavior check-list on both the control and class participants. These check-lists could evaluate the amount of confidence the parents have in themselves as parents by assessing the amount and quality of concerns they voice. Parental skills could be another realm of behavior investigated; one could look at the number of hospitalizations and/or emergency room visits that each infant has had over the year following the program. Hopefully, there would be less emergency room visits involving accidents for the class participants, especially for those who attended the session on Safety. These behavioral indicators, although indirect, may reveal true change better than written self-reports.

Nursing Implications

The role of nurses, especially pediatric nurses, should be extended and further developed into the area of parent education. Not only should we continue educating parents in our day-to day practice; but we should also design and implement more programs to enhance parental self-confidence.

Conclusion

This six-session parent education program designed and implemented by a pediatric nurse to enhance parental self-confidence of new and expectant parents did have a positive impact on mothers' overall self-confidence, especially in the area of Health Care. The role of nursing, whether it take place in public health departments, schools, physician offices, or hospitals should involve the design, implementation, and evaluation of parent education programs. One of the many goals of nursing is to promote the maintenance of health and well-being of families; parents confident in their parenting skills are more likely to carry through with this goal.

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APPENDIX A

Program Handouts

Class # 1 : Health Care

Boys and Girls : Birth to 36 Months Physical Growth NCHS Percentiles.
Adapted from Hamill, P.V.V., Drizd, T.A., Johnson, C.L., Reed, R.B., Roche, A.F.,
Moore, W.M. : Physical Growth: National Center for Health Statistics Percentiles.
AMJ Clinical Nutrition 32:606-629, 1979. Data from the Fels Research Institute,
Wright State University School of Medicine, Yellow Springs, Ohio.

Class # 3 : Changing Family Relationships

Transition to Parenthood Parts I, II, III, IV and Grandparenting: A Gift
for Generations. From Cooperative Extension Service, Kansas State University,
Manhattan, Kansas.

Class # 4 : Safety

Child Safety Series : Children's Clothing, Poison Prevention, Water Safety
for Children, Home Fire Safety, and Toy Safety. From Cooperative Extension Ser-
vice, Kansas State University, Manhattan, Kansas. SIGNA Summer 1982, St. Francis
Hospital and Medical Center, Vol. 2, No. 2. Mr. Yuk stickers from St Francis Hosp-
ital, Topeka, Kansas.

Class # 5 : Infant Feeding

Making Baby Food. From Cooperative Extension Service, Kansas State University,
Manhattan, Kansas.

Class # 6 : Infant Growth and Development

Denver Developmental Screening Test. William K. Frankenburg, M.D. and Josiah
B. Dodds, Ph. D., University of Colorado Medical Center. Developmental Chart from
American Baby : The First Year of Life, Volume XXXIV 3rd Printing 1982.

APPENDIX B

Parent Education Program
Kansas State University

Program Evaluation

As this is the last session of the program which I designed for you new and expecting parents, I'd like to get some feedback on the quality of the experience from your perspective. In an endeavor as important as child rearing, it is important to identify and evaluate the strengths and weaknesses of parent education programs like this one, i.e. what worked and what didn't work. This information is particularly important as I plan my next program for new and expecting parents. An evaluation by the participants is also necessary if I am to make recommendations to my colleagues engaged in similar types of programs in other communities. Your signature is not required on this evaluation in order to protect your anonymity.

In the spaces provided below, please indicate your assessment of the teaching methods employed in the sessions, as well as the specific topics covered over the 6 weeks of the program. I am particularly interested in your evaluation of the value or usefulness of the program for you as a parent. That is, has the course enhanced or improved your parenting skills. If you haven't yet delivered, please base your judgments on how valuable or useful you anticipate the program to be when you become a parent.

For each item listed below, place a check (✓) on the line that best represents your assessment of its value or usefulness to you. You are to indicate if the dimension in question was of MUCH VALUE, SOME VALUE, LITTLE VALUE, or NO VALUE AT ALL. One check per item.

<u>Methods of Presentation</u>	<u>MUCH VALUE</u>	<u>SOME VALUE</u>	<u>LITTLE VALUE</u>	<u>NO VALUE</u>
lectures	_____	_____	_____	_____
films.	_____	_____	_____	_____
handouts	_____	_____	_____	_____
assignments.	_____	_____	_____	_____
exchanges with other parents.	_____	_____	_____	_____

For items which you judged to be of much or some value, briefly indicate principle reasons below:

For items judged to be of little or no value, please cite reasons below:

Topics Covered in Program (rate each session; if absent from given session please indicate by placing a check on the line provided)

	<u>MUCH VALUE</u>	<u>SOME VALUE</u>	<u>LITTLE VALUE</u>	<u>NO VALUE</u>	<u>I WAS ABSENT</u>
1. Health Care (April 18). . .	_____	_____	_____	_____	_____
2. Basic Infant Care (April 25)	_____	_____	_____	_____	_____
3. Changing Family Relationships (May 2). . .	_____	_____	_____	_____	_____
4. Infant Safety (May 9) . . .	_____	_____	_____	_____	_____
5. Feeding Your Infant (May 16)	_____	_____	_____	_____	_____
6. Infant Growth and Development (May 23) .	_____	_____	_____	_____	_____

For topics judged to be of much or some value, briefly indicate the principle reasons in the space below:

For the topics judged to be of little or no value, please cite reasons below:

Were there topics not included in this program which you think should be included in a parent education program like this one for new or expecting parents? If so, please identify below:

	<u>MUCH</u> <u>VALUE</u>	<u>SOME</u> <u>VALUE</u>	<u>LITTLE</u> <u>VALUE</u>	<u>NO</u> <u>VALUE</u>
Please indicate your overall evaluation of the program	_____	_____	_____	_____
Please indicate your overall evaluation of the instructor.	_____	_____	_____	_____

Parent Education to Increase the Self-Confidence of New Parents :
A Pediatric Nurse's Program in a Hospital Setting

by

Gayle Elizabeth Connet

B.S., University of Kansas, 1973

An Abstract of a Master's Report
Submitted in partial fulfillment of the
requirements for the degree
Master of Science

Department of Family and Child Development

Kansas State University

Manhattan, Kansas

1985

Parent Education is "an activity using educational techniques in order to effects changes in the parental role (Brim, 1959, p. 20)." Educational programs for parents date back to the early 1800's in the United States, when mothers formed associations to discuss child rearing problems and techniques to improve their childrens' religious and moral characters. While most early and contemporary programs were directed at parents of children and adolescents, parent education for new and expectant parents is a relatively recent phenomenon, dating back only to the early 1970's.

Preliminary parent education programs with new and expectant parents resulted in the identification of parental self-confidence as a potentially important mediator of successful transition to parenthood and early parenting. As a result, Myers-Walls (1977) and Resnick (1981) have proposed that increasing self-confidence should be a primary goal of parent education for new and expectant parents.

Although new parents actively seek the advice of their pediatricians, and make use of child rearing books during this period, pediatric nurses have been a generally underutilized professional resource within the domain of parent education (Hollen, 1982). This is unfortunate, given the knowledge, training, and experience of obstetrical and pediatric nurses in the field of child development in general, and in infant behavior in particular.

The primary goal of the program presented here was the enhancement of the self-confidence in a group of parents of newborns. A total of 10 couples volunteered for the 6 week parent education class, and an additional 10 couples were recruited from a prenatal class to serve as the nontreatment control group.

The parent education program consisted of six 2 hour sessions covering the following topics: Health Care, Basic Infant Care, Changing Family Relationships, Safety, Infant Feeding, and Infant Growth and Development. The methods of class presentation were lectures, demonstrations, discussions, films, handouts, and class assignments.

One of two parallel forms of a parenting self-confidence scale developed by

Myers-Walls (1977) was completed by each parent at the beginning of the first class and at the end of the last class. The scale was also mailed out and completed by the control group at the same time period.

The scale included an assessment of parental confidence in 5 domains: Physical Care, Health Care, Cognitive-Intellectual Development, Social-Emotional Development, and Other Home and Family Responsibilities.

The hypothesis of this study was that the class participants would increase in self-confidence, with little or no change in the self-confidence of the non-treatment control group.

A series of t-tests on the change scores from pre-test to post-test for both the class participants and the control group males and females revealed significant differences between the two groups of females in the domain of health care ($p = .005$) and in overall level of self-confidence ($p = .057$).

There were no significant differences between the two groups of males in their pre-test to post-test self-confidence scores. However, this may have been due to the poor overall attendance of the males in the classes. The average number of classes attended by the fathers was 2.2, compared to an average of 3.4 by the mothers. Fathers attending 4 or more of the 6 classes had total mean gain scores of 27.0; while those attending less than 4 classes had total mean gain scores of 5.0. This difference approached statistical significance ($p = .066$).

This parent education program designed for and presented to a group of 10 new and expectant parents by the present author positively impacted on the mothers' confidence in themselves as parents, particularly in the health care area. These results lend support to the usefulness of parent education in bringing about parental attitude changes.