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A FOLLOW-UP STUDY WITH IMPLICATIONS
FOR FUNCTIONAL EDUCATION

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Education

in
The Department of Extension Education

by
Sister Judith Mary Singer
B.S., Barry College, 1954
M.S., Catholic University of America, 1959
December, 1974
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ABSTRACT

The purpose of this study was to determine the extent to which girls who have participated in the Valley Park Homebound Program (VPHP), a program for pregnant school-age girls set up by the East Baton Rouge School District, return to their regular high school classes to complete the requirements for graduation. Secondly, it was concerned with determining whether any socioeconomic factor or group of factors might be related to the successful completion of a high school education by these students. The third purpose of the study was to determine whether the experience in the VPHP motivated the girls to do better academically when they returned to their regular high school classes. The fourth and final purpose of the study was to ascertain whether more emphasis should be given to other areas of student need, such as medical, psychological, and social services to assist these girls more effectively in adjusting to their regular high school classes.

Since its beginning in September 1970, a total of 160 girls from twelve of the sixteen schools in the East Baton Rouge School District have been instructed in the VPHP. The sample for this study was composed of ninety-eight girls, randomly selected, who attended the VPHP sometime between 1970 and 1974, who could be contacted, and who were willing to participate in the study.
Data were collected by means of personal interviews and information obtained from the school records of the participants. The interview was designed to solicit four types of information: a) personal, social, medical, and educational information; b) attitudes; c) amount of self-esteem; and d) amount of support from external support groups. Data were analyzed utilizing the statistical procedures of frequency and percent distribution, chi-square test of difference, analysis of variance, coefficient of correlation, paired t-test, and a median test.

Of the ninety-eight girls who were interviewed, eighty-four girls either graduated at the end of the semester they were at VPHP or returned to their regular school classes. A total of fifty-six girls had completed their requirements and had graduated, while twenty-six girls were still in school at the time of the study. A real improvement in grade averages by the majority of returned students as compared with their grades in the semester before attendance at VPHP was shown in a paired t-test which was significant at the .005 level of confidence.

The majority of girls in this study were blacks. However, there was no significant difference between races in the age level at which pregnancy occurred. The economic level of most of the girls' homes was in the low income bracket. A statistically significant difference in mean age at which pregnancy occurred was approached in cases when both parents lived in the home as compared with only one being present.
Although all the participants received medical care in facilities other than the VPHP, only half received detailed instruction in prenatal and infant care from the school nurses at VPHP. In the related area of nutrition, it was found that the majority of girls did not eat enough fruits and vegetables nor drink enough milk to satisfy the daily suggested servings of the United States Department of Agriculture.

It was found that the average participant received positive support from six of the eight external support groups investigated. Satisfying relationships with parents and friends were found to be age related.
CHAPTER I

INTRODUCTION

Much like ostriches with their heads buried in the sand, school boards until the mid 1960s had quite successfully been able to avoid the problem of educating school-age pregnant girls simply by expelling them from the school scene as soon as their condition was disclosed. From this point on, however, the courts have repeatedly upheld the right of the pregnant teenager to an education when the issue was contested and thus have forced a reluctant change in policy by school districts. To ascertain just how slowly this change has occurred, Charles Harrison in a publication of the National School Public Relations Association reports that:

In 1968, the Educational Research Service (jointly sponsored by the National Education Association and the American Association of School Administrators) asked school districts with an enrollment of 12,000 or more for a copy of their policy regarding unwed pregnant students. Of that number, fifty-one required the immediate removal of the girl from the regular school program as soon as the pregnancy was reported or discovered. Another seventeen policies required a pregnant student to be dropped as soon as she became a 'problem' to herself or, more importantly, to school officials. An additional fifteen policies set a specific time during the pregnancy when the student must drop out of school (the end of three months, four months, etc.) The remaining policies allowed school officials to decide 'on an individual basis' when the pregnant student should end regular school attendance (1. p. 5).
Furthermore, there were no arrangements in less than half the 154 policies for the student to continue her education, according to Mr. Harrison.

In April 1970, the American School Board Journal reported a survey of 17,000 school districts in which they found that only one out of three districts made any education available to pregnant girls (2). In one way, this situation is quite closely reflected by the statistics for the State of Louisiana which show that as of the beginning of the 1974-75 school year, twenty out of sixty-four parish school systems will have a special education alternative for pregnant school-age girls.

On February 29, 1972, S. P. Marland, Jr., the United States Commissioner of Education, made a definitive statement that pregnancy was not a sufficient cause to deprive any girl in the United States of an education in the public schools (3).

It is difficult to point to reliable statistics which can effectively reflect the magnitude of the problem of teenage pregnancy. It is simply not known how many school-age girls become pregnant annually. Numbers of girls who are members of middle to upper income families leave their places of residence, live in maternity homes until they deliver, place their babies up for adoption, and return home without even their close friends, relatives, and neighbors knowing of their condition. Besides these, there is undoubtedly a sizable number of girls who obtain either
legal or illegal abortions, or who miscarry early in their pregnancies. Marion Howard cites some alarming statistics when she writes: "What we do know nationally is that over 200,000 school-age girls actually do give birth each year and their numbers are increasing by about 3,000 annually (4, p. 361)." Pregnancy is usually listed as the most frequent single physical condition that causes an adolescent to leave high school before graduation.

In a recent study in Maryland, it was found that "more than twice as many adolescent females left school with pregnancy as the stated reason than left school for all other physical and medical reasons (5, p. 1)." Furthermore, of the 200,000 pregnant school-age girls, maternity homes serve only 5-10 percent of this population. Also, figures show that 85 percent of these girls do not place their babies for adoption, but attempt to mother the babies themselves (4).

The East Baton Rouge School District has offered the alternative of homebound instruction to pregnant school-age girls since 1967. This is an extension of regular classroom work, averaging about four hours per week per student if a homebound teacher is available. This form of instruction continues to be an option of alternative education for the girl who is physically incapacitated by her pregnancy, or is unable to make transportation arrangements to and from Valley Park. In 1970, the East Baton Rouge School Board
reevaluated its placement of pregnant girls as students whose education rightfully belonged under the aegis of the homebound teachers program, both in the light of the burden their numbers were placing on this department as well as the question of whether or not their condition appropriately classified these girls as physically handicapped. At this point, the School Board initiated an alternative program of instruction to be held at the Valley Park Continuing Education Center which would be more comprehensive in meeting the needs of this population of teenagers. Unfortunately, it is still known there as the Homebound Program (certainly a misnomer) and will hereafter be referred to as the Valley Park Homebound Program (VPHP) to distinguish it from the regular homebound instruction given on an individual basis in a student's home.

In addition to academic instruction, the VPHP includes some instruction by the nurses of the school district in prenatal care and infant care. When the program first began the Family Counseling Service of Baton Rouge was contacted for help in family adjustment situations in those cases in which this type of assistance was indicated. At the present time, family counseling is done by the Louisiana State University School of Social Work intern students.

At the present time, the VPHP operates under the administration of the special education department. To be considered for participation in the program a girl's appli-
cation form must be signed by her parents, a medical doctor, the principal of the regular school, the supervisor of special education programs, and the coordinator of special services. A girl is encouraged to enroll in this program in an advanced state of her pregnancy depending on her physical condition. She may stay in the program until the end of the semester in which she enrolls or may return to her regular classroom program as soon after delivery as she is able. She is carried on the roll of her regular school throughout the time she spends in the VPHP. She carries at least four academic subjects and is graded every nine weeks on the standard report form sent to her by her regular school. Close communication is maintained between the VPHP instructor and the guidance counselor at each girl's respective school both as to her academic progress and her attendance record.

Statement of the Problem

The nature of the problem to be undertaken in this study is fourfold. The investigation is primarily concerned with determining the extent to which girls who have participated in the VPHP return to their regular high school classes to complete the requirements for graduation. Secondly, it is concerned with determining whether any socio-economic factor or group of factors may be related to the successful completion of a high school education by these students. The third purpose of the study is to determine
whether the experience in the VPHP motivates the girls to do better academically when they return to their regular high school classes. The fourth and final purpose of the study is to ascertain whether more emphasis should be given to other areas of student need, such as medical, psychological, and social services to assist these girls more effectively in adjusting to their new roles as mothers and in readjusting to their more familiar roles as students in their regular school classes.

Delimitations of the Study

This study is limited to a sampling of those students 1) of the East Baton Rouge School District from grades nine through twelve who were admitted to the VPHP and participated in the program from its beginning to the completion of the 1973-74 school year, 2) whose addresses and telephone numbers at the time of their enrollment, on file in the school office, led the researcher to contact them at that address or elsewhere in the Baton Rouge area, and 3) who were willing to participate in this study.

One of the major problems with a study of this kind lies in the delicacy of the subject—illegitimacy. The girls who were willing to participate knew that their responses would be part of a study which hopefully will lead to some improvements in VPHP which their cases indicate are necessary.
Definition of Terms

For the purpose of this study the following definitions hold. The physical terms have all been taken from Stedman's Medical Dictionary.

External support system--people or agencies in the girl's relationship network who reinforce her motivation to complete high school and who help her to overcome deterrents.

Grade average--a number resulting from assigning a numerical equivalent to each academic subject grade, then summing these for a given semester, and dividing by the number of subjects taken.

Homebound program--a program of individual instruction given to a handicapped child sixteen years and under in his home in lieu of his attending regular school.

Infant morbidity--a diseased state of health in an infant.

Neonatal--referring to time from birth through the first month of life.

Perinatal--occurring, or pertaining to before, during, or after the time of birth.

Premature infant--denoting an infant born after less than thirty-seven weeks of gestation.

Primigravida--a woman who is pregnant for the first time.

Primipara--a woman who has been delivered of an infant with a gestational age of twenty weeks or more.

Recidivism--a repeat of out-of-wedlock pregnancy and delivery of a live infant. There is some objection to the use of this term since it is felt to have judgmental overtones. It is used here not implying an evaluation but simply stating a fact.

School-age girl--any girl who is eighteen years old or younger.

Toxemia--an ill-defined term referring to metabolic disorders of pregnancy characterized by hypertension, edema, and albuminuria.
VPHP—the Valley Park Homebound Program, a program designed to continue the education of pregnant school-age girls during their pregnancy, and to a limited extent, following it.

Significance of the Study

With school authorities being in the vanguard of those who recognize the important relationship between a child's home environment and his ability to learn, it is logical for the school to lead the way in implementing services to help the pregnant girl undertake her new role of parent as completely as possible. School personnel are among the first to learn about the girl's plight, to perceive her physical, psychological and developmental needs during pregnancy, and to understand the importance of a good beginning for her child whom they will shortly be expecting to enter some school program. Thus it can be postulated that it is a school's responsibility to continue the girl's education without interruption and to assist her in obtaining whatever services she may require (6).

If the problem of pregnancy in teenagers is considered in totality, it can be seen that the sociological consequence of the situation is a radical alienation of the girl from almost all the support groups she has known and relied upon: her family, her friends and peers, her teachers and counselors, her church, and perhaps her boyfriend. This near-total estrangement comes at a time when "she has to face the physical discomforts and anxieties of motherhood as
a scared and unprepared adolescent (7, p. 787)." The usual result of this alienation between the girl and her support groups is a partial or complete disintegration of her life.

Also, the pregnant teenager is considered to be a high risk obstetrically due to poor diet, high mortality rates, increased chances of premature delivery, and a high infant mortality rate. Data obtained from a study done in Maryland over a three year period ending in 1970 on girls eighteen years and under who delivered living babies found that "the unmarried mother's maternal mortality rate is four times greater than that of the married woman and her infant mortality rate and premature birth rate is twice as high (8, p. 441)."

In addition, without educational opportunities, guidance, and some degree of positive self-concept, many of these girls repeat out-of-wedlock pregnancies, drop out of school, become unmarketable commodities on the job market due to lack of training and skill, become added cases on the welfare rolls, increase the tax burden of their community, and increase the rate of suicide among the young (9).

Preventing school dropouts and preparing students to become better prepared for the world of work has become a major school responsibility. Accomplishing this requires flexibility to initiate and improve special programs and supplementary services. The Baton Rouge area has been fortunate in having school authorities who saw the need to
inaugurate a continuing education program for school-age pregnant girls when only a minority of school districts were moving in this direction. It is now time to evaluate the outcome of the program in terms of the success of its clientele so that improvements may be made where necessary and feasible to better fill the gap between where these girls are educationally, psychologically, medically, and socially and where they need to be so that they can become well-adjusted young mothers.

If the young mothers of this study, and many more much like them, are to take their contributing places in our modern, fast-moving society, they must have the knowledge, skills, attitudes, and self-esteem that will allow them to do this to the fullest extent of their individual capabilities. It is education—mainly through our educational institutions—that introduces these teenagers to that essential element of humanness, namely growth, upon which their very survival as human beings depends. That is growth in its most universal sense—physical, psychological, social, mental, spiritual growth; the development, maturation, flowering of the human spirit to whatever degree of greatness is contained embryonically within each of these adolescents.

In gathering information about the educational outcomes of this one segment of our young people, the study hopes to lead school administrators, coordinators, counselors, adult educators, educational planners, and all who work with ado-
lescents to question whether the present program design provides the knowledge base necessary to give them the background to make intelligent judgments in their efforts as learners in life. The study should provide an insight into the process of adjustment these girls face as they attempt to perform the developmental tasks of both the adolescent and the young adult. In addition, the information obtained should provide a practical approach in counseling pregnant girls and should indicate areas to be emphasized by teacher-planners.

Organization of the Study

Chapter I includes an introduction, a statement of the problem, recognized limitations of the study, definition of terms, and the significance of the study. Chapter II presents a review of the related literature. The design and structure of the study is discussed in Chapter III. Chapter IV consists of the presentation of the descriptive and analytical data which were compiled as the study progressed. A summary of the study together with recommendations is given in Chapter V.
REFERENCES CITED


CHAPTER II

A REVIEW OF RELATED LITERATURE

Since comprehensive programs designed to meet the many problems of the pregnant schoolgirl were initiated in the 1960's, literature related to the subject is not found to any extent before that time. Even then, the number of studies was limited. Dempsey lists forty-three articles appearing in education journals during the 1960's in his search for materials that dealt with the pregnant and married high school student (1). Twenty of these articles have to do mainly with the married high school student; eleven are concerned with both the married student and the pregnant student, be she married or not; twelve are concerned primarily with the unwed pregnant student.

Even during that decade, the majority of written work must be considered as being predominantly descriptive. Such is Berl's article on an interim educational program for unwed mothers in 1960 (2). However, in addition to her description, she cites a lack of communication skills as the common characteristic of the many girls she has dealt with in a maternity home setting. Whether this is a result of the girls' pregnancy or a cause of it may be debated, but it is a factor to be kept in mind in designing a program for these girls. Also based on her experience is Berl's opinion that every program
should offer recognition, acceptance, and direction to these girls.

In a study conducted in Cuyahoga County, Ohio in 1960 by Tuttle, a case count of public welfare clients in two population groups within the Aid to Dependent Children category was taken (3). One group was composed of single, widowed, or divorced women who were receiving ADC for one or more illegitimate children, while the second was made up of those unmarried mothers who were themselves minors in families receiving ADC grants. The findings were thought to be similar to those of other northern industrial cities in that the unwed mother caseloads in such cities have similar socio-economic status, and racial and age compositions. The need for individualized diagnosis and treatment planning is emphasized due to the cultural differences between the caseworker and the client.

A Social Welfare Research Group conducted another study in Ohio in 1962 to determine what happens to unmarried mothers who keep their babies (4). In discussing the problem of the increasing numbers of babies available for adoption due to the increase of illegitimacy and the decrease in the number of adoptive homes especially among minority groups, they point out that with her decision to keep the baby, the mother further decreases her educational, social, and economic opportunities. The sample of 118 mothers included in this study disclosed that about 40 percent of
the mothers were dependent on public welfare, 40 percent were self-supporting, and 20 percent were dependent on parents or relatives. Approximately only 10 percent of the mothers returned to school after the birth of the child. In this study, however, the ages of the mothers were given only in terms of three ranges: under eighteen, between eighteen and twenty-five, and over twenty-five.

Cremidy's investigation which also dealt with young unmarried mothers who kept their babies was conducted in an East Harlem Child Health station from 1960-62 (5). The group of subjects was made up of one hundred women under twenty-one, virtually all of whom were Negro or Puerto Rican, and most of whom were high school dropouts. The purpose of the study was to contact the subjects in a personal manner with a variety of casework techniques and then compare the number and kind of responses. The mothers who were contacted by personal letters and individual home visits by the caseworker responded well to the offer of educational, employment, and personality counseling and other services. The authors concluded that a flexible approach to casework for unwed mothers can be of value.

In an effort to relate socio-economic factors to the occurrence of pregnancy in young women, Bleiberg administered a questionnaire to three hundred clients under twenty-two years of age through physicians in child health stations in Central and East Harlem (6). The results were published in
1962. Thirty-nine percent of the subjects were unmarried and 28 percent had been married after conception. There was no correlation between educational experiences and the marital status of the subjects. The home life experience of the mothers was rated as "normal" or "non-normal." "Normal" was defined as both mother and father living together in the home, while "non-normal" meant that only one parent lived with the children. It was found that 44 percent of those from normal homes were married before conception as opposed to 23 percent from non-normal homes. It was concluded that adolescents from normal homes were more likely to get married before delivery. Eighty-five percent of the married mothers obtained prenatal care during the first two trimesters of pregnancy as compared with 70 percent of the unmarried mothers.

Another study of the relationships between socio-economic characteristics and pregnancy in girls from twelve to sixteen years of age was conducted by Keeve in Newburgh, New York (7). In this investigation there were 125 subjects who were located through a search of hospital records from 1959-1963. The data showed no particular trend during this period. A comparison of spare time interest profiles on the Otis I.Q. Test of fifty-three of the 125 subjects with fifty-three randomly selected controls showed 43 percent of the primiparous adolescents having no spare time activity as compared with 27 percent of the control group.
The Webster School-Centered Rehabilitation Project, which began in the 1963-64 school year in Washington, D.C., was one of the first experimental projects to be financed by the Children's Bureau of HEW as a research and demonstration grant in response to the increasing urgency of what might be done to meet the needs of pregnant school-age girls (8). Since that time, federal funds have been used to try a number of new approaches for dealing with this segment of the school population. Some of the programs have been health centered focusing on the need for adequate prenatal and postnatal care; other community-action programs have concentrated on poverty conditions; some have been education-centered wherein the school system acts as the coordinator of the various services needed by this clientele. Most of the programs that have sprung up in the past decade are considered to be comprehensive programs using a team approach to facilitate necessary services while utilizing one of the contributing agencies as coordinator.

The Webster School's purpose was to continue the education of pregnant girls until they could return to their regular schools. Thus the education segment of the program was set up to follow the normal secondary school curriculum and procedures. It should be noted that the District of Columbia has a standard course entitled Personal and Family Living. This course was enlarged upon in the Webster School and became the core of the educational element of the program.
Since the school was experimental and could not accommodate all the girls who were eligible, and since the purpose of the program was to have the girls from Webster re-enroll in a regular secondary school after delivery, candidates were accepted who were judged by an admission committee as being most likely to take advantage of the opportunity. The results of the study showing educational outcomes probably reflect this selection process. Of the total number of girls enrolled in the first three years of operation, an average of 83 percent completed the program; that is, returned to a regular school following delivery. An average of 37 percent of those who returned to regular school had dropped out by the time the study was done.

Attendance was regarded as an indicator of the feasibility of such a program because of its effect on learning and on exposure to the rehabilitational aspects of the program. In the three year period studied, 52 percent of the students attended the sessions at least three-fourths of the time and an additional 39 percent were present from one-half to three-fourths of the time.

The study determined that 50 percent of the Webster girls were able to maintain their previous grade averages and 30 percent improved them. The most significant factor related to future school success apparently was age. Girls who were under sixteen at the time of their enrollment at Webster dropped out in significantly higher numbers than did
those who were over sixteen when they came into the program. At the time the study was done, 52 percent of the Webster girls were either in regular school or had graduated; 42 percent were not in school.

The major known reason for dropping out of school following reentry was pregnancy, this reason accounting for a third of the Webster cases. Other reasons given (such as poor attendance, baby care, work and marriage) appear to be ones that might have been overcome if more help had been available to the girls. There were indications that some girls were apparently discouraged by the unresponsive or actually adverse attitudes on the part of school personnel. In particular, girls who did not do well academically appear to have needed encouragement and support to keep them from leaving school.

This would seem to indicate that in planning comprehensive programs of the Webster sort, emphasis should be placed on services that deal with problems of special importance for the students (8,p.44).

An examination of incidence figures for out-of-wedlock births in Buffalo, New York collected by Anderson over the period from 1950-64 indicated a definite increase in the number and percentage of out-of-wedlock teenage pregnancies (9). A special program was begun in 1963 for school-age mothers due to their related medical, educational, and social problems. Originally the program involved only case-finding and follow-through medical care which was shown to reduce infant morbidity and prematurity rates. In 1965, the program expanded to include prenatal and postnatal clinics and educational facilities.

A study conducted to determine the frequency of births to school-age girls as well as the duration and effects of prenatal care was done by Stine in Baltimore (10).
Birth certificates for all infants born to residents of Baltimore sixteen years or under were examined for 1957, 1960, and 1961. The results showed more than eight hundred pregnancies in a city of 900,000 population as well as a high frequency of premature births and infant mortality. Adolescents were found to obtain prenatal care later than older women; furthermore, the neonatal death rate when a mother received no prenatal care was found to be three times as great as when she did receive it. A concentration of high fertility rates for adolescents was found in those sections of the city which were crowded, low-income areas.

After a program to deal with the problems of school-age pregnant girls had been established in Baltimore, Stine compared some outcomes of its participants with the same characteristics in a control group (11). The experimental group was composed of pregnant girls who were enrolled in the Edgar Allen Poe School between September 1967 and December 1968. It was required that each participant of the school would be simultaneously registered with a social agency and would be receiving prenatal care. This study group was compared to a group of pregnant girls matched as to race, age, and sex and birth order of their infants. Among the reported findings were that there were twice as many subjects in the control group as in the study group who delivered lighter than normal weight infants. In the school group, 21 percent delivered prematurely while 34 percent of the control group
had premature infants. Prenatal care was begun by 44 per-
cent of the subjects in the study group in the first tri-
mester of pregnancy while 29 percent of the subjects in the
control group began prenatal care in the first trimester.
There was one infant death in the study group compared with
eight in the control group at the time the study was made.

In an attempt to discover whether the retention in
school of students of seventeen years or less who were mar-
rried, mothers, or pregnant, was a function of formal policy
statement or whether it reflected existing practices, Atkyns
surveyed 153 school districts in the United States with a
population of 100,000 or more as well as all the school dis-
tricts in Connecticut (12). His questionnaire was designed
to reflect the changes in policy and practice over the years
from 1940-66 in five year periods. Results showed that most
districts were not consistent in having a policy for all three
of these circumstances which led the author to conclude that
policy was formed as problems occurred. A trend in the large
cities toward removing restrictions on attendance since 1940
was observed with the sharpest change taking place after 1955.
Provision of adult evening classes was implied by many as
being the preferred form of instruction for married students,
the unwed mother and the pregnant girl. Geographically, the
southeastern states tended to have the most restrictive pol-
icies overall while the west coast was the least restrictive
in general. The southwestern states were most restrictive
with respect to unmarried pregnant girls. In 1966, 44 percent of the total sample districts denied attendance to the unmarried pregnant student and 38 percent denied it to married students.

Failure to remain in school was cited as one of the elements in a syndrome of failure by Waters in a study carried out in Atlanta, Georgia, in 1967 (13). Subjects for this study were patients aged eleven through sixteen at Grady Memorial Hospital in Atlanta. They were characterized as being mainly "urban, indigent, unwed, and Negro." Members of this age group represented the most rapid increase in the hospital's obstetric census at that time, according to Graves (14). In addition to failure to remain in school, the other facets of the failure syndrome were identified as: "failure to fulfill the functions of adolescence, failure to limit family size, failure to establish stable families, failure to be self-supporting, and failure to have healthy infants (13, p. 655)." To address itself to the needs of 250 young pregnant girls and their families yearly was the purpose of the Atlanta Adolescent Pregnancy Program, a community project begun in 1968 through Emory University School of Medicine with federal funds.

The need of special help for unwed mothers who return to school if they are to succeed in obtaining a basic education was also found in a study by Hoeft in Elgin, Illinois in 1968 (15). He suggested that school authorities need to be lenient
and understanding because these girls have many more problems to face than does the normal student. This study took place in one school labeled "culturally deprived" in an urban area. Hoeft selected thirty-seven subjects whose progress in attendance, grades, and emotional behavior as measured under the title of "trait ratings" on the school report forms was followed for one semester upon the students' return to school. He compared these thirty-seven subjects with a control group made up of a random sampling of the school's population. Results showed the study group to be significantly lower than the control group in all three areas. "In percentage terms, excluding graduating students, 13 percent of the control group left while 56 percent of the study group left school during the course of the semester (15, p. 228)."

While the study was being conducted, it was discovered that eleven members of the study group were in a division known throughout the school as a group which needed special attention. The scores of this subgroup, taken alone, are in all three areas even poorer than the study group or the control group, yet only three of the eleven members or 27 percent left school before the end of the semester. Discounting these students from the study group raises the student mortality rate of the study group to 66 percent. The difference is attributed to the sympathy and understanding of the teachers and counselor.
Using data collected from the earliest participants in the Young Mothers Educational Development Program in Syracuse, New York, Murdock found that 68 percent returned to school after delivery (16). Medical data for the first eighty-five deliveries showed a greater incidence of health problems and complications than was anticipated. This was assumed to be the result of good prenatal care and service. There were no stillbirths and no infant mortality among the subjects in this program.

In a study concluded in 1968 which spanned eleven years of data on private and clinic patients at Freedmen's Hospital and the Iona Whipper Home, a residence for pregnant girls connected with Howard University's Department of Obstetrics and Gynecology, Clark found that the most outstanding medical complication in patients ranging from ten to sixteen years of age was toxemia (17). The second most significant complication was the occurrence of premature births. "In addition to the high complication rate, poor prenatal care was paramount among these young mothers. Sixty-five percent did not receive prenatal care until the third trimester. Twenty-five percent did not receive any prenatal care (17, pp. 1028-9)." It is generally found that the incidence of toxemia increases significantly with inadequate prenatal care.

In discussing the social implications of the problem, Clark said:

The adolescents in the group we have been delivering
are either just entering senior high school or completing junior high school. Some are grade school students. The formal education of these young people has been disrupted and they are destined to be ill equipped to cope with the technical world of today. The problem of attrition is common.

Twenty girls were selected at random from one group of adolescents and were interviewed in order to determine what their outcome had been without special educational facilities. The patients were all 14 years old or younger, and came from the lower socioeconomic level with family incomes ranging from $3200 to $5200 annually. Only four of the 20 girls were able to continue their education. Ten of the 20 mothers had one pregnancy, six had two children and four had three children. Seven of the 20 were married. Of the entire group, only one girl had been able to maintain a job which paid over $3000 per annum. This small study shows the crippling effect of pregnancy on the adolescent with respect to her education and preparation to cope with the world of today (17, p. 1033).

In a follow-up survey of teen-age unwed mothers published in Chicago in 1968 by the Crittenton Comprehensive Care Center as their first evaluative report, Bedger determined the status of clients who had been in the program from October 1966 through September 1967 (18). Data were gathered on 180 of the girls who had applied for or participated in all or part of the program services through means of a personal interview. Forty percent of the subjects interviewed stated that they did not need further help at that time, 23 percent needed help in seeking employment, 16 percent needed financial assistance, 8 percent needed help in caring for the child, 6 percent needed further educational help, 6 percent desired job training, 3 percent needed help with housing problems, and 2 percent required legal aid.
The study concluded:

...the services being offered have been well received, adequately utilized, and appear to have been considered valuable by the clients and their families. The users of services have expressed the value of the services (the special attention, counseling, and small classes) and have shown their appreciation of them (18, p. 14).

According to Shea who conducted an investigation over a four year period on girls eighteen years old and under who delivered living infants in Montgomery, Maryland, girls not completing their high school education were those causing concern since they were ill-prepared to take on the responsibility of parenthood (19). It was not determined how many girls returned to school after delivery, but it was discovered that about 2 percent of the total number of girls enrolled in high school were on home instruction and that of this number an average of 22 percent were pregnant. Since the State of Maryland requires on its birth certificates the education of the mother in terms of grade completed at the time of birth, it was possible to determine that over 50 percent of the mothers had not completed the twelfth grade. This study pointed out the need for education which includes not only academic studies, but also vocational studies, health care, psychiatric and/or psychological therapy for those in need, and information on social and welfare aid.

Using a multidisciplinary approach involving obstetrics, pediatrics, psychiatry, education, social work, nursing, and public health, Sarrel in 1969 studied the first
119 participants in the Young Mothers Program in New Haven all of whom were under eighteen years of age (20). The hallmark of this program was the early, thorough, and more personal obstetrical approach than is ordinarily the case in clinic situations. Forty-seven percent of the patients underwent obstetric examinations before the twenty-first week of pregnancy; less than 20 percent were examined after the twenty-eighth week. Incidence of both toxemia and premature births was relatively low: 5 percent of the former was noted, while the premature birth rate was between 10 and 11 percent. It was concluded that good prenatal care, joining the hospital with the community through education and service, does reduce obstetrical complications and is one solution to the repetition of the "unwed mother" syndrome.

Discussing etiological factors relative to premartial pregnancy, Liben reviewed reasons for criticism of some recent research (21). The basis of the criticism was two-fold: biased sampling and invalid basic assumptions that the causes vary with social and ethnic classes. "The tendency has been to assign intrapsychic factors to middle-class white women, while social factors and 'moral laxity' continue to be emphasized in lower-class nonwhite women (21, p. 1869)." In an effort to steer clear of these problems and to fill a void in the literature, Liben reported on the social and psychiatric characteristics of fifty-three
nonwhite patients who were attending a prenatal clinic. Of these, seventeen were married during pregnancy or following delivery, fifteen were recidivists, and twenty-eight were unmarried and delivered their first live births. The sample was separated into five groups on the basis of age and further subdivided as to married, recidivist, or unmarried status. A short typical case for each of the five groups was written on the observations and attitudes reported using an adaptation of Bernard's classification of etiological factors (22).

Liben found that "the younger the patient at the first out-of-wedlock pregnancy, the more severe were the primary predisposing factors (21, p. 1878)." These included "early deprivation resulting from separation from parent(s) and subsequent degree of contact and/or stability or adequacy of substitute parent(s)," and "the mother's marital or sexual pattern which served as a role model for the girl (21, p. 1871)." Liben concluded that by decreasing poverty, the incidence of illegitimacy would also decrease in the lower social classes. Comprehensive programs need to be developed to accomplish this.

If the programs are to be comprehensive, they should include medical care, continuing educational programs, vocational training, response to social needs, education in sexual matters, and in the physiological and anatomical changes in pregnancy, guidance and counseling on child care, provision of child care services, and reaching out to and involving the putative father in the program (21, p. 1878).
Schomholz studied 135 patients at the Obstetrics-Gynecology clinic established exclusively for adolescents at Mt. Sinai School of Medicine in New York City (23). All the adolescents included in the study were attending school when they became pregnant. Ninety-five percent discontinued their education during pregnancy, but half of these had returned to school at the time of the study and the remainder had plans to return in the future. The majority of cases in this study were classified as being economically disadvantaged. Intelligence did not appear to be related to the occurrence of pregnancy. Preliminary analysis confirmed other studies in that the majority of adolescents are on their own in regard to sexual conduct. "The adolescent girl of the ghetto is not equipped with the psychologic, sociologic, and physiologic facts of sex to understand the effect of sexual activity on herself and on society (23, p. 614)."

A third study pertaining to the causes of unwed pregnancy was done by Von der Ahe with 150 teenagers averaging sixteen years of age in four maternity homes in California in 1969 (24). The findings seem to negate the theory that the broken home is the prime factor in the incidence of unwed pregnancies. The result of low exposure to accurate information was reflected by the answers given to sex knowledge questions on the study questionnaire and a definite relation was found to exist between the age at the time of the first date and the age at the time of first sexual
intercourse. It was concluded that sex education in the schools is ineffective, that parents do not educate their children in these matters, and that the adolescent turns to her peers for information.

Research was done in 1970 by Doctors Howard and Joy Osofsky to determine whether the high risks found in pregnant adolescents were actually reduced by the Young Mothers' Educational Development Program in Syracuse, New York (25). In addition to obstetrical, social, and educational data collected both during pregnancy and after delivery, there was included a rating of infant development based on activity, responsivity, and affectivity as well as a mother-infant interaction rating based on verbal interaction, physical interaction, and warmth. Both ratings were given on a five-point scale with the score of one representing the lowest and the score of five representing the highest rating. The infants were rated above three in activity but were lower in both responsivity and affectivity. The mothers were found to have a mean of slightly higher than three in physical interaction and warmth, but were lower in verbal interaction. The authors conclude:

What YMED and other programs like it demonstrate is that given a reasonable--and not too costly--opportunity, individuals who are at high risk and who are supposedly uninterested will respond. Most individuals will take advantage of the offered options. Medical complications prematurity, and even perinatal mortality will be considerably reduced. In spite of problems of poverty, prior school deficiencies, and responsibilities for infant care, individuals will make considerable educational
progress, and will frequently graduate from high school and even continue for higher education (25, p. 832).

Because pregnancies among teenage girls are an increasingly serious health, psychological, social, educational, and vocational problem, Wallace surveyed the primary Health Officers and the Superintendents of Schools in 150 cities of the United States having a population of at least 100,000 (26). The survey, referring to services offered over the five year period from 1966 through 1970, was conducted throughout the first half of 1971, collecting data on the number of teenagers served, the type of sponsorship, sources of funding, and content of programs. Responses relating to the provision of services and the evaluation of unmet needs were received from both the Department of Health and the Department of Education in 130 cities, with all but fifteen reporting at least one unmet need. The most frequent unmet need for teenage pregnant girls was reported to be the need for educational services, including special classes, instruction in sex education, or family life education, education about child care, and health education. Ranked second, third, and fourth respectively as the most frequently unmet needs were: general and administrative services, health services and social services.

Webb and coworkers compared the outcomes for girls who received the same intensity of clinical services in San Francisco with some of them enrolled in a multidisciplinary special educational center also while the remainder were not (27).
The subjects in this study were eighteen years old or under and all attended the Adolescent Maternity Clinic of Children's Hospital between 1969 and 1970. Seventy-seven of the total were also enrolled in the Special Service Center which is an educational program established in conjunction with the San Francisco Unified School District, while 135 of the subjects received clinical services only. It was found that the younger, black, primiparous girls utilized the school service rather than the services of the clinic alone. Of importance as well was the fact that a "moderate" number of married girls utilized the clinical services. "With large proportions of teen marriages (approximately 50 percent) failing at present, services to the young couple at this critical period around the birth of a baby may be of far-reaching benefit (27, p. 518)." Other outcomes noted were that the girls in the school program had shorter extended labor times, more consistent and earlier prenatal care, and a higher percentage were bringing their babies for regular clinical examinations than did the girls who received clinical care only.

With the development of comprehensive programs for school-age girls, emphasis on prevention also came into focus. Dempsey, in a study of the Baltimore No. 1 School in 1969-71, attempted to relate the prevention of two problems--recidivism and withdrawal from school after delivery--to data gathered from school records and personal interviews (28).
The population he chose to study consisted of subjects who had been in the service program inaugurated in the 1966-67 school year which allowed school-age girls to continue their education during pregnancy with the expectation that they would return to regular school following delivery. Thus the follow-up study allowed a two year interim between the time the subjects were involved in the school program and in the study. The population consisted of upwards of one hundred girls. As to recidivism, Dempsey found that 18 percent of the study group had a repeat out-of-wedlock delivery. Concerning school withdrawal, it was found that 88 percent of the group returned to regular school but at the end of the two year interim, 43 percent had withdrawn, 36 percent had graduated, and 20 percent were still in school. Dempsey attempted to correlate successful school completion in terms of motivation, deterrents, and external support groups. He suggested that the necessity to restrict services due to limited funds means identifying those clients whose motivation is low, for whom there are many deterrents, and who have few external support groups as well as those whose motivation is high, for whom there are few deterrents, and who have many external support groups. Both these classes of clients would then be evaluated as being ineligible for services, while attention would be given to the intermediate cases.

Jorgensen (29), in a study at Pennsylvania Hospital's Obstetric Clinic in Philadelphia observed that:
Adolescent obstetric patients are not adults, even though they are pregnant. They do not get maximum care in an adult-centered program. They are adolescents struggling for mastery, control, and independence. They strive to accept the responsibility for their own sexuality. An adolescent-centered obstetric program that maximizes preventive care and utilizes peer group interaction can lower all obstetric risks and management problems. Family planning information offered as an alternative way of placing mastery and control into the adolescent's hands can be effective (29, p. 818).

Patients more difficult to work with, all of whom were Blacks or Puerto Ricans, were the subjects of a study by Babikian and Goldman in New York City (30). Many problems were being encountered in working with the teenage segment of patients, including erratic visits to the clinic and inconsistency and reluctance in following instructions during pregnancy. The authors investigated fifteen of these subjects in a study designed to identify the subjects' social characteristics and the psychodynamic forces contributing to their pregnancies. Among the most consistent findings were chaotic early life experiences leading to deficits in the superego and poor structuring of the ego.

A discussion of statistical methods in comparative studies prefaced a comparison of three programs for pregnant teenagers by Jekel and associates (31). The problem of actually obtaining a random sample was discussed. The authors suggest that there are too many uncontrollable variables associated with the mothers themselves, so they submit that the outcome of healthier infants be the dependent variable in such studies. They applied this suggestion in their
study using survival, birth weight, and Apgar scores as the indicators of infant health. (The Apgar score is a rating of the vital signs of infants done routinely by hospital personnel at the time of birth.) Using statistical tests of ranking and scoring on the collected data, the authors show how to use statistical methods to their maximum advantage. Their application in this study shows that one program was more effective than the other two.

In a study by King (32) and coworkers in San Francisco "social background, dietary intake, and outcome of pregnancy were evaluated in eighteen pregnant teenagers" for whom money was a common problem (32, p. 916). This data was compared with similar data collected on three other teenage groups. None of the nutrients tabulated in the study was found to be adequately supplied to all the girls with or without prenatal vitamin supplements that may have been prescribed. "The nutrients most poorly supplied by the diets during and after pregnancy were calcium, iron, vitamin A, and energy. Protein was the most nearly adequate. Neither birth nor maternal weight gain were influenced by maternal age, height, or recorded dietary energy and nutrient intake (32, p. 925)." These data support the theory that nutritional status at the time of conception is a culmination of a girl's lifetime nutritional experience.

Results of a study conducted by Kaminetzky concerning nutritional intake in pregnant girls ranging from
thirteen to seventeen years in age is rather discouraging (33). It was found that despite intensive dietary counsel-
ing, approximately 50 percent of the subjects did not im-
prove dietary intake during pregnancy. The subjects were
all patients in the Newark Maternal and Infant Care Project
under the sponsorship of the New Jersey Medical School.

In reporting on the assessment of services to young
families in Cleveland, Dempsey cites the necessity of follow-
up services for the adolescents served (34). Withdrawal
from school after return following delivery was seen to be
the end point in a process of increasing absenteeism. It
was found that girls with high absenteeism rate while en-
rolled in the program for pregnant girls have a signifi-
cantly higher rate of withdrawal from the regular school
upon their return. Follow-up services may be able to de-
crease this figure.

Notable among investigations following a recent
trend to evaluate existing programs are two studies related
to outcomes done at the Margaret Hudson Program in Tulsa by
Doggett (35, 36). The first of these is an analysis of
attainment and goal-seeking behavior of school-age mothers
which compared the participants of the Margaret Hudson Pro-
gram with a matched group who did not attend the program.
The high school attainment level of the study group was
higher than that of the control group as was also the know-
ledge and use of health and social service resources. It
was concluded that the greater attainment and goal-seeking behavior in terms of practical plans gave the study group an advantage in confronting their life problems.

The second study is an evaluation of attitudes, knowledge, and change in the girls attending the Margaret Hudson Program. The eighty-five subjects studied through pre-tests and post-tests showed significant change in terms of locus of control shifting to an increased internal locus, an increase of self-esteem, and increased health knowledge.

The need for more research and the evaluation of the programs is necessary to comprehend the nature and extent of the problems and progress in the complex phenomena of adolescent pregnancy and motherhood. That there is interest in this direction is attested by the publication of Guidelines for Self-Evaluation of Programs Serving Adolescent Parents through the Maternity Care Research Unit of the Graduate School of Public Health at the University of Pittsburgh (37).

The variety of the literature reviewed gives some indication of the complexity of the problem of teenage pregnancy and some approaches which deal with this high-priority social, medical, educational, psychological, and vocational problem. There is much necessity for individualized appraisal of needs, and the evaluation and development of individualized services.
REFERENCES CITED


CHAPTER III

RESEARCH DESIGN AND PROCEDURES

The purpose of this study was to determine the extent to which VPHP participants return to their regular high school classes and to determine whether there were any socio-economic factors that were related to the successful completion of high school requirements by these girls. Further, the purpose was to determine if the participants who did return to regular classes were motivated by their experience at Valley Park to do better academically than before, and to determine whether more or different emphases should be given to other areas of student need—namely, medical, psychological, and social services.

Objectives of the Study

The study was specifically designed to accomplish the following objectives:

1) To determine to what extent the girls who attend VPHP return to their regular school classes and successfully finish high school.

2) To ascertain whether the grade average of the student who returns to regular classes is better the first semester than it was before she left the regular school.
3) To compare the attendance records of the returned student with her attendance before she participated in the VPHP.
4) To determine whether or not there is a significant relationship between any socioeconomic factor or group of factors and the completion of high school requirements by these students.
5) To explore the kind and amount of pre-natal and post-natal care these subjects and their babies received.
6) To assess the subjects' understanding of the value of a properly balanced diet in terms of their eating habits.
7) To determine the extent to which the subjects feel positive support from their reference groups—parents, the child's father, relatives, friends, neighbors, ministers, teachers, counselors.
8) To assess the subjects' perception of themselves in terms of self-esteem.
9) To determine the source of the subjects' material support.
10. To determine the extent to which the putative father contributes to the support of the child.

Sources of Data

The descriptive method of research was used. Facts collected from individual school records from both the regular high school and VPHP files for each participant, as well as information gathered through interviews with each
participant constitute the primary sources of data for this study.

Selection of the Sample

A list of all the girls who had participated in the VPHP from its beginning through the close of the 1973-74 school year together with their addresses and telephone numbers in most cases at the time of their attendance, as well as the schools from which they came and to which they returned, were obtained from the VPHP files.

It was found that in each academic year several girls who were referred to the program discontinued after less than a month's time or never showed up due to problems with transportation or for personal reasons. The names of these girls were not considered in this study.

The names of all the other girls were arranged in alphabetical order regardless of the academic year they attended and were numbered consecutively from 1 to 160. Tags bearing the same numbers were put in a box and were selected one at a time then returned to the box to establish the order in which the girls whose names matched the randomly selected numbers would be contacted to constitute a representative sample.

The first contact was attempted by telephone when such information was available, to determine if the participant was still living at the given address and to determine
if she was willing to talk with the researcher. If this was the case, an appointment was made at the subject's convenience either at her home, at a neighborhood center, or at Valley Park Continuing Education Center. As it turned out, almost all the interviews were held in the subjects' homes. When there was no telephone listing, or when the listing was inactive, the first contact was made in person at the given address when the researcher was in the neighborhood on another interview. In these cases, the interview took place at the time of the first contact or a return appointment time was scheduled at the subject's convenience.

In attempting to contact the subjects through both the telephone listings and the given addresses, efforts were made to secure the help of the person who answered the telephone and the occupant at the address, as well as neighbors in the area, in trying to locate the subjects. Indeed, a goodly number of subjects were found in just this sort of Sherlock Holmes fashion.

With respect to completing the interviews, the goal was to obtain a representative sampling of the total number of participants in the four-year history of the program. The interviews were terminated when 99 had been completed. Tables 1 and 2 illustrate the distribution as to the final disposition in this study of the total number of VPHP students.
TABLE 1
ACTUAL ENROLLMENT IN VPHP BY ACADEMIC YEAR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total referred</td>
<td>48</td>
<td>50</td>
<td>45</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Number who discontinued or who did not show up</td>
<td>10</td>
<td>8</td>
<td>10</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Actual enrollment</td>
<td>38</td>
<td>42</td>
<td>35</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 2
DISTRIBUTION OF VPHP ENROLLMENT IN THIS STUDY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Found to have moved from Baton Rouge</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Refused to be interviewed</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Both given address and telephone number led to dead end</td>
<td>12</td>
<td>8</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Interviewed in present study</td>
<td>16</td>
<td>23</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td>Actual enrollment</td>
<td>33</td>
<td>36</td>
<td>28</td>
<td>41</td>
</tr>
</tbody>
</table>
As can be seen in the above table, only six individuals refused to be interviewed. Two did so on the grounds of being too busy, two participants themselves preferred not to discuss the subject, and two did so on the decision of a parent with whom they consulted.

Development of Instruments

An interview schedule, reproduced in Appendix B, was devised through which the researcher sought to perceive participant attitudes and opinions regarding her experience at VPHP. Thirty-seven comprehensive programs in various parts of the United States, known to have begun in the 1960s, were contacted to determine if an evaluation of program outcomes had been done. A specific request was made for the interview schedule if this method was used in the evaluation. (See Appendix A) All such schedules received by the researcher were reviewed in preparation for the final interview schedule used in this study.

Permission to obtain such academic and social information as was relative to the study was sought and obtained through the Superintendent of Schools (Appendix A). In order to avoid duplication of information thus making the interview schedule longer than necessary, it was first determined that the educational background and occupations of father and mother, the number of siblings, intelligence quotient of the subject, grades for the semesters preceding and following enrollment in the VPHP, absenteeism records, and
status as to present relation to the school (graduated, presently enrolled, or dropped from rolls) should be found in the school records. It turned out that all this information was not always available on each student which will account for different subtotals in the analyses in the following chapter.

The school information was obtained by making appointments with the guidance counselors in all but one of the schools listed as last having been attended by the subjects. The school counselors the researcher did see were very interested in the study and were most helpful in supplying the data either directly or indirectly.

In one case, the guidance counselor refused to cooperate even though the Superintendent of Schools had authorized the study and the girls had voluntarily agreed to take part in it, on the basis that giving out this information violated student rights. School Information on the subjects from that school is not included in this study. Fortunately, there were only four students from that school.

The interview schedule was organized to solicit four distinct types of information: a) personal, social, medical, and educational information; b) attitudes; c) amount of self-esteem; d) amount of support from external support groups.

Part I was constructed to obtain factual information about the subjects themselves. It established that they were mothers by discussing the child's age, sex, and progress
in development. It established whether the subject was working, going to school, or was remaining at home and who, in the first two instances, was responsible for the child's care in the subject's absence. It ascertained if the child's care had posed problems and if the putative father contributed to its support. The first section also dealt with the following variables: a) present marital status of the subject as well as the status at the time of the child's conception and birth, b) where and with whom the subject lived while enrolled at VPHP and at present, c) present sources of income, d) place and amount of medical care of both subject and child, e) a twenty-four hour food intake recall, and f) amount and source of reading materials concerned with prenatal care, infant care, and child development.

Part II was designed to establish the subject's attitudes and opinions concerning her VPHP experience. It attempted to evaluate the amount of help that she did receive from this source during her pregnancy, as well as how much help she received from her parents and the father of the child during that time. In this section also there were listed a number of subject areas related to home management, personal grooming and hygiene, and infant care, growth, and development. Each subject was asked to rank how important lessons in these subject areas would have been during her pregnancy. As part of this section also, the subject was asked open-ended questions about what she liked best about her
experience at VPHP and what suggestions she might have for improvements. This was the last item in the interview so that the subject might mention anything that had or had not been mentioned.

In Part III, the subject was to rank twenty statements about herself as being either completely false, mostly false, partly true and partly false, mostly true, or completely true. This was done to give some estimate of the subject's perception of her self-esteem.

Part IV consisted of ranking the subjects' external support groups into one of six categories. The support groups considered were parent(s), child's father, relatives, friends, ministers or priests, teachers, counselors, and neighbors.

Statistical Analysis

Upon completion of the interview, the researcher scored Section C, Estimation of Self Esteem, giving one point for "completely false" responses, two points for "mostly false" responses, three points for "partly true and partly false" responses, four points for "mostly true" responses, and five points for "completely true" responses for all statements except those numbered four, seven, eleven, fourteen, fifteen, seventeen, and twenty. Responses to these statements were scored in reverse; that is, five points for "completely false", four points for "mostly false", three points for "partly true and partly false", two points for
"mostly true", and one point for "completely true" responses. The points given on the twenty statements were then added to yield a total self-esteem score. This score as well as the number of points given for each response was recorded.

Responses to Evaluation of Relationships, Section D in the Interview, were scored in the following manner. Eight relationships were considered. The possibilities of responses ranged from unhappy, mostly unhappy, partly unhappy and partly happy, mostly happy, to happy. There was also a sixth category of "no contact" under which the names of any of the eight external support groups could have been placed by the interviewee. Only those relationships which were indicated as being either happy or mostly happy were judged to be truly supportive. Thus the total number of groups which were marked in either of the above ways by each subject were counted to give the overall relationship score, which ranged from zero through eight.

After this scoring was completed, all responses from the interviews and the information gathered from school records were coded on IBM Code Sheets then key-punched on IBM 80-column computer cards. These cards were sorted for analysis.

The data were first summarized as to frequencies and percentages using the Louisiana State University Computer Research Center facilities. Analysis of variance was utilized
to measure overall significance of differences in age and educational, medical, social, psychological, and nutritional factors that were uncovered in the study. Some analyses of variance used the age at the time of entry into the VPHP while others required the use of the participants' present age. The chi-square test was used to detect differences between the observed and expected responses of the participants divided into groups on the basis of some of the above factors. The coefficient of correlation test was used to determine if there was a relationship between age and self-esteem, the age at which pregnancy occurred and the education of fathers and mothers, the age at which pregnancy occurred and the marital status of the girls' parents, and the age at which pregnancy occurred and the number of brothers and sisters in the subjects' families. A regression analysis was run to ascertain if there was a dependency of self-esteem on the completion of school. A paired t-test was done to determine if there was a real difference in the grade averages before and after the VPHP experience of the students who returned to school. Lastly, a median test was performed according to chi-square procedure to determine if there was a real difference between the score of self-esteem and the school outcome.

The .25 level of probability was accepted as being statistically significant. Although certain research findings may fail to measure up to some prescribed level of statistical significance, such findings can nevertheless be
extremely important to the investigator and to planners of programs.

Summary tables were constructed to present the data, and findings were identified and interpreted.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Until recently education at the secondary school level of the young pregnant girl has been extremely limited. This tacit discouragement of education has led to a lack of interest in self-improvement resulting in high rates of school dropouts, lack of marketable skills on the employment scene, an increase in the number of persons carried on the welfare rolls, repeat of pregnancies out of wedlock, and high suicide rates.

The present study has been concerned with the identification of personal and social characteristics of the participants in a program for pregnant girls sponsored by the East Baton Rouge School District as well as the educational outcomes of this program. Data were collected through interviews with the participants and through information obtained from their school records.

For purposes of analysis the data were organized into the following seven parts: the participants and their background, their babies, their relationships, estimation of their self-esteem, their nutritional habits, their medical care, and their program.
The Participants and Their Background

A total of 160 girls were actually instructed in the VPHP over the four year period from September 1970 through June 1974. Contact was attempted with 138 or 86.25 percent of the total. Nine girls or 5.6 percent were found to have moved out of Baton Rouge by the time the study was done. Six girls or 3.8 percent refused to participate when the request was made, and 15.6 percent could not be found through tracing the telephone numbers and addresses listed at the time of enrollment. Thus 61.25 percent of the total enrollment was actually interviewed.

The girls participating in the VPHP came from twelve of the sixteen senior high schools in the East Baton Rouge School District and from three junior high schools in the area. A little more than 50 percent came from just two schools.

Table 3 indicates the age and grade placement of the participants at the time of their entry into the program. Ages ranged from thirteen through eighteen years with the average age being sixteen. There was an increase in the number of younger girls entering the program in the last two years. The majority of the girls came to the program in their junior or senior year of high school. Only 28 percent entered the VPHP from the ninth and tenth grades.
TABLE 3

<table>
<thead>
<tr>
<th>Grade</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>3</td>
<td>12</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>19</td>
<td>19.4</td>
</tr>
<tr>
<td>11</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>24</td>
<td>5</td>
<td>1</td>
<td>34</td>
<td>34.7</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>24</td>
<td>5</td>
<td>37</td>
<td>37.7</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>7</td>
<td>20</td>
<td>32</td>
<td>31</td>
<td>7</td>
<td>98</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The educational background of the girls' parents ranged from third grade through college degrees with the average for both mothers and fathers being tenth grade.

Tables 4 and 5 show that there was no significant difference in age at which the girls became pregnant and the educational background of the parents.

TABLE 4

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 3 through Grade 8</td>
<td>31</td>
<td>38.8</td>
<td>16.2</td>
</tr>
<tr>
<td>Grade 9 through Grade 11</td>
<td>22</td>
<td>27.5</td>
<td>16.0</td>
</tr>
<tr>
<td>Grade 12 through College</td>
<td>27</td>
<td>33.7</td>
<td>16.1</td>
</tr>
</tbody>
</table>

F = .0730; NS @ .25
TABLE 5
EDUCATION OF GIRLS' MOTHERS ACCORDING TO GIRLS' MEAN AGE AT TIME OF PREGNANCY

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 3 through Grade 7</td>
<td>31</td>
<td>32.3</td>
<td>16.2</td>
</tr>
<tr>
<td>Grade 8 through Grade 11</td>
<td>32</td>
<td>33.3</td>
<td>16.0</td>
</tr>
<tr>
<td>Grade 12 through College</td>
<td>33</td>
<td>34.4</td>
<td>16.1</td>
</tr>
</tbody>
</table>

F = 1.0825; NS @ .25

Almost 84 percent of the girls interviewed were Blacks. There were no other minority races represented in the study. An analysis of variance test of the mean age by race did not reveal a significant difference between the races as to the age at which pregnancy occurred. This is shown in Table 6.

TABLE 6
RACE OF VPHP GIRLS ACCORDING TO MEAN AGE AT TIME OF PREGNANCY

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>82</td>
<td>83.7</td>
<td>15.9</td>
</tr>
<tr>
<td>White</td>
<td>16</td>
<td>16.3</td>
<td>15.6</td>
</tr>
</tbody>
</table>

F = .0067; NS @ .25
Intelligence quotients were not available for all the girls interviewed. Of the seventy-seven scores taken from school records, the average was found to be in the normal range. Table 7 gives the distribution of intelligence quotients.

**TABLE 7**

**DISTRIBUTION OF PARTICIPANT IQ'S**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 89</td>
<td>17</td>
<td>22.1</td>
</tr>
<tr>
<td>Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90-109</td>
<td>52</td>
<td>67.5</td>
</tr>
<tr>
<td>Above Normal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110-119</td>
<td>7</td>
<td>9.1</td>
</tr>
<tr>
<td>Bright</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120-130</td>
<td>1</td>
<td>1.3</td>
</tr>
</tbody>
</table>

Previous studies on the marital status of parents of teenage mothers indicate that a high percentage of these parents are either divorced, separated, deceased, or have never married. In this study 14 percent of the girls had one parent deceased, 30 percent came from families in which the parents were separated or divorced, and 56 percent came from families in which the parents were living together.

Analysis of variance indicated that a significant difference was closely approached in the age at which pregnancy occurred and the presence of both or only one parent in the home. This is shown in Table 8.
TABLE 8
RESIDENCE OF PARENTS ACCORDING TO GIRLS' MEAN AGE AT TIME OF PREGNANCY

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both parents</td>
<td>55</td>
<td>56.1</td>
<td>16.0</td>
</tr>
<tr>
<td>in home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One parent</td>
<td>43</td>
<td>43.9</td>
<td>15.7</td>
</tr>
<tr>
<td>in home</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F = 1.3145; F probability .2559; NS @ .25

As to the marital status of the girls themselves, 13 percent were married at the time their babies were conceived. Twenty-nine percent reported being married at the time the child was born. At the time this study was conducted almost 42 percent were married. However, 7 percent of those who had been married were separated. What was significant here was that 86 percent of those separated were married just before or just after the birth of the child, which may indicate the pressure the teenagers were under to be married because of the girls' pregnancy. Certainly this type of pressure does nothing to strengthen the odds in favor of a successful marriage in what is presently a high risk situation. Analysis of variance according to age showed no significant difference between married and unmarried girls as is indicated in Tables 9 and 10 at the time of conception and baby's birth. However, a significant difference in age was evidenced at the time of the study as is shown in Table 11.
TABLE 9
MARITAL STATUS OF VPHP GIRLS ACCORDING TO MEAN AGE AT CONCEPTION OF CHILD

<table>
<thead>
<tr>
<th>Status</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>13</td>
<td>13.3</td>
<td>15.9</td>
</tr>
<tr>
<td>Single</td>
<td>85</td>
<td>86.7</td>
<td>15.6</td>
</tr>
</tbody>
</table>

F = 1.0478; NS @ .25

TABLE 10
MARITAL STATUS OF VPHP GIRLS ACCORDING TO MEAN AGE AT BIRTH OF CHILD

<table>
<thead>
<tr>
<th>Status</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>28</td>
<td>28.6</td>
<td>15.9</td>
</tr>
<tr>
<td>Single</td>
<td>70</td>
<td>71.4</td>
<td>15.6</td>
</tr>
</tbody>
</table>

F = .1641; NS @ .25

TABLE 11
MARITAL STATUS OF VPHP GIRLS ACCORDING TO MEAN AGE AT TIME OF STUDY

<table>
<thead>
<tr>
<th>Status</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>41</td>
<td>41.8</td>
<td>18.3</td>
</tr>
<tr>
<td>Single</td>
<td>50</td>
<td>51.0</td>
<td>18.5</td>
</tr>
<tr>
<td>Separated</td>
<td>7</td>
<td>7.1</td>
<td>19.6</td>
</tr>
</tbody>
</table>

F = 1.9567; p < .15

School outcome by age is tabulated in Table 12. A total of 85.7 percent of the girls either returned to school or graduated from their regular schools at the end of the
semester in which they were enrolled in the VPHP. Of those who returned to school, 97.6 percent were either still in school or had graduated. This is a very high percentage compared to the studies in the literature. Of course, this number includes twenty girls from the 1973-74 class at VPHP, some of whom may drop out of school before they finish.

<table>
<thead>
<tr>
<th>Age</th>
<th>Did Not Re-Enter</th>
<th>Dropped Out After Returning</th>
<th>Still in School</th>
<th>Graduated</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>7</td>
<td>0</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16</td>
<td>3</td>
<td>2</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>18</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>14 (14.3%)</td>
<td>2 (2.0%)</td>
<td>26 (26.6%)</td>
<td>56 (57.1%)</td>
</tr>
</tbody>
</table>

The present study confirms what has been found elsewhere; namely, that the younger a girl is when she becomes pregnant, the less chance there is that she will complete school. An analysis of variance test was calculated to determine if there was a significant difference in the age at which pregnancy occurred in the girls who returned to school and those who did not return. The results are given in Table 13.
TABLE 13

RETURN TO SCHOOL ACCORDING TO GIRLS' MEAN AGE AT TIME OF PREGNANCY

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returned</td>
<td>84</td>
<td>85.7</td>
<td>16.1</td>
</tr>
<tr>
<td>Did not return</td>
<td>14</td>
<td>14.3</td>
<td>15.6</td>
</tr>
</tbody>
</table>

F = 2.5502; p < .15

The educational experiences of an individual enable her to obtain specific knowledge, acquire or change attitudes and develop particular skills that can be utilized in daily living. A brief summary of the main occupations of the participants at the time of the study will allow the reader to determine some of the ways in which the girls were using the knowledge, attitudes, and skills they had acquired in educational settings. Table 14 lists the frequencies found among the participants in regard to working, going to school, and remaining at home.

TABLE 14

OCCUPATION OF PARTICIPANT AT TIME OF STUDY

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job outside home</td>
<td>22</td>
<td>22.4</td>
</tr>
<tr>
<td>Student</td>
<td>36</td>
<td>36.7</td>
</tr>
<tr>
<td>Homemaker</td>
<td>32</td>
<td>32.7</td>
</tr>
<tr>
<td>Job/Student</td>
<td>8</td>
<td>8.2</td>
</tr>
</tbody>
</table>
Since Table 12 indicated that only twenty-six girls were enrolled in regular high school classes, Table 14 directs attention to the fact that eighteen additional girls were involved in an educational program. Seven of these were girls who had not returned to regular high school classes but were working toward the Graduate Equivalency Diploma through one of the Adult Learning Centers, while the other eleven were matriculated in college programs or business schools.

At the time this study was conducted, 56 percent of the girls were living in some quasi-parent-independent situation outside their childhood homes, while 44 percent were still living with their parents. Only twenty-four girls were receiving welfare assistance and eleven were getting social security payments. Fifty-two girls were independent financially, relying on their own jobs or those of their husbands as their main sources of income. Only fifteen girls listed themselves as mainly being supported by their parents, while eighteen additional participants said that their parents continued to help them financially on a regular basis.

The Participants' Babies

Following the national trend of young single girls keeping their babies, this study discovered that only two participants made the decision to have their babies adopted. Both these girls were caucasian. The babies of three other participants either died shortly after birth or were still-born.
One of the interview questions was directed toward determining if the participant, upon finding that she was pregnant, ever entertained any question of whether or not she wanted to keep the baby. Seventeen girls indicated that they did have questions, but they were resolved before the birth of the baby. Further, when asked if their decision to keep the baby was in any way influenced by the father's feelings, twenty-two girls answered affirmatively. The analysis of variance performed on this factor to determine if the cases in which the fathers' feelings were influential were age related showed a significant difference according to age at the .25 level of confidence, with the older girls having been more influenced by the fathers' feelings. (Table 15) This may have resulted from the older girl being a little more realistic about the problems of raising a child. It could also have been indicative of a desire on the part of the older girl to marry the child's father.

**Table 15**

<table>
<thead>
<tr>
<th>Influence</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
<td>22.4</td>
<td>16.1</td>
</tr>
<tr>
<td>No</td>
<td>76</td>
<td>77.6</td>
<td>15.6</td>
</tr>
</tbody>
</table>

F = 1.3747; p < .25
In analyzing who took the major portion of responsibility for the child's present care, it was found that fifty-four girls themselves exercised this responsibility by either being at home, for the most part, or hiring a sitter or nursery to take care of the child while they were out of the home. Thirty-nine girls depended on their relatives—mostly their mothers—to exercise responsibility for the child's care. An analysis of variance test was performed to determine if this factor showed a significant difference according to the girls' present mean age. Table 16 shows that this factor is age related.

**TABLE 16**

**RESPONSIBILITY FOR PRESENT CHILD CARE ACCORDING TO GIRLS' MEAN AGE AT TIME OF STUDY**

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant</td>
<td>54</td>
<td>58</td>
<td>18.6</td>
</tr>
<tr>
<td>Relative</td>
<td>39</td>
<td>42</td>
<td>17.7</td>
</tr>
</tbody>
</table>

F = 6.5237; p < .05

The problem of taking care of their babies is often a major difficulty for young mothers either in continuing their education or obtaining a working position. When asked if this was a problem for them, thirteen girls in this study indicated that it was a problem, while eighty said that the child's care was not a problem. According to an analysis of variance test as shown in Table 17, the factor of child care
being a problem is not age related.

### TABLE 17

**OCCURRENCE OF PROBLEMS IN ARRANGEMENTS FOR CHILD CARE ACCORDING TO GIRLS' MEAN AGE AT TIME OF STUDY**

<table>
<thead>
<tr>
<th>Problem</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>13</td>
<td>13</td>
<td>18.8</td>
</tr>
<tr>
<td>NO</td>
<td>80</td>
<td>87</td>
<td>18.8</td>
</tr>
</tbody>
</table>

*F = .3321; NS @ .25*

The Participants' Relationships

The need on the part of the young pregnant girl for support from external groups in overcoming the problems and concerns that threaten her well-being cannot be overemphasized. If she does not have supportive relationships with family and friends, she cannot possibly raise her child in a psychologically sound way.

In asking her to rate her relationships with parents, the child's father, relatives, friends, priests or ministers, teachers, counselors, and neighbors, the researcher attempted to elicit the number of supportive groups of which each participant was cognizant. The rating was supposed to have been done over the span from the time the girl was enrolled at VPHP to the time of the study. It is quite possible that some recent pleasant or unpleasant exchange with each group might have biased the subject's rating. Also, interactions with one or two dominant figures in a group
may have biased the rating of the group as a whole. For instance, teachers as a group were in some cases rated very high because of the girl's positive interactions with the teacher at VPHP. Different expectations of different groups could also have resulted in some groups being scored more strictly than others. However, all these criticisms of the rating scale to the contrary, the researcher believes it to be valid as a rough estimate of the amount of external support the subject has received since she became pregnant.

### TABLE 18

<table>
<thead>
<tr>
<th>Category</th>
<th>0 - 3</th>
<th>Number of Groups</th>
<th>6</th>
<th>7 - 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>22</td>
<td>21</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>Percentage</td>
<td>22.45</td>
<td>21.43</td>
<td>26.53</td>
<td>29.59</td>
</tr>
</tbody>
</table>

The frequency distribution is shown in Table 18 with only those relationships rated as mostly happy or happy being counted as positive support. Analysis of variance tests were run to determine whether or not any of these ratings were age related. Although, for the most part, there was no significant difference according to age, the reader may be interested in the distribution shown in Tables 19 through 26 due to their individual and group counseling implications.
### TABLE 19

**ASSESSMENT OF RELATIONSHIP WITH PARENTS ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy, mostly unhappy, partly unhappy</td>
<td>15</td>
<td>15.3</td>
<td>18.3</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>83</td>
<td>84.7</td>
<td>19.3</td>
</tr>
</tbody>
</table>

\[ F = 1.8760; p < .20 \]

### TABLE 20

**ASSESSMENT OF RELATIONSHIP WITH PUTATIVE FATHER ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy, mostly unhappy, partly unhappy</td>
<td>24</td>
<td>24.5</td>
<td>18.9</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>56</td>
<td>57.1</td>
<td>18.7</td>
</tr>
<tr>
<td>No contact</td>
<td>18</td>
<td>18.4</td>
<td>18.7</td>
</tr>
</tbody>
</table>

\[ F = .0715; \text{NS} @ .25 \]

### TABLE 21

**ASSESSMENT OF RELATIONSHIP WITH RELATIVES ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy, mostly unhappy, partly unhappy</td>
<td>26</td>
<td>26.5</td>
<td>18.8</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>72</td>
<td>73.5</td>
<td>18.9</td>
</tr>
</tbody>
</table>

\[ F = .0028; \text{NS} @ .25 \]
TABLE 22
ASSESSMENT OF RELATIONSHIP WITH FRIENDS
ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy, partly unhappy</td>
<td>26</td>
<td>26.5</td>
<td>19.4</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>72</td>
<td>73.5</td>
<td>18.2</td>
</tr>
</tbody>
</table>

F = 5.0125; p < .05

TABLE 23
ASSESSMENT OF RELATIONSHIP WITH MINISTER OR PRIEST
ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy, no contact</td>
<td>26</td>
<td>26.5</td>
<td>18.8</td>
</tr>
<tr>
<td>Partly unhappy</td>
<td>14</td>
<td>14.3</td>
<td>18.7</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>58</td>
<td>59.2</td>
<td>18.8</td>
</tr>
</tbody>
</table>

F = .0185; NS @ .25

TABLE 24
ASSESSMENT OF RELATIONSHIP WITH TEACHERS
ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly unhappy, partly unhappy, no contact</td>
<td>33</td>
<td>33.7</td>
<td>19.0</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>65</td>
<td>66.3</td>
<td>18.7</td>
</tr>
</tbody>
</table>

F = .2392; NS @ .25
TABLE 25

ASSESSMENT OF RELATIONSHIP WITH COUNSELORS
ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy, mostly unhappy, partly unhappy</td>
<td>20</td>
<td>20.4</td>
<td>18.8</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>50</td>
<td>51.0</td>
<td>18.4</td>
</tr>
<tr>
<td>No contact</td>
<td>28</td>
<td>28.6</td>
<td>19.2</td>
</tr>
</tbody>
</table>

F = .5570; NS @ .25

TABLE 26

ASSESSMENT OF RELATIONSHIP WITH NEIGHBORS
ACCORDING TO PRESENT MEAN AGE OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy, mostly unhappy, partly unhappy, no contact</td>
<td>38</td>
<td>38.8</td>
<td>18.7</td>
</tr>
<tr>
<td>Mostly happy, happy</td>
<td>60</td>
<td>61.2</td>
<td>18.9</td>
</tr>
</tbody>
</table>

F = .1268; NS @ .25

A further indication of the supportiveness of the parents and the child's father was sought in answer to the question of how helpful these two groups had been during the participant's pregnancy. Tables 27 and 28 indicate that this support was not age related, that the majority of the girls felt their parents had given them a great deal of support, and that approximately one-half the girls felt they had
received much or very much help from the putative father. Further information was gathered showing that 59 percent of the girls received some amount of financial or material support from the alleged fathers of their children.

**TABLE 27**

<table>
<thead>
<tr>
<th>Extent of Help</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>No help, little help, some help</td>
<td>11</td>
<td>11.2</td>
<td>15.8</td>
</tr>
<tr>
<td>Much help, very much help</td>
<td>87</td>
<td>88.7</td>
<td>15.8</td>
</tr>
</tbody>
</table>

F = .2938; NS @ .25

**TABLE 28**

<table>
<thead>
<tr>
<th>Extent of Help</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>No help</td>
<td>30</td>
<td>30.6</td>
<td>15.6</td>
</tr>
<tr>
<td>Little help, some help</td>
<td>17</td>
<td>17.3</td>
<td>16.1</td>
</tr>
<tr>
<td>Much help, very much help</td>
<td>51</td>
<td>52.1</td>
<td>15.8</td>
</tr>
</tbody>
</table>

F = .6787; NS @ .25

Participants' Estimation of Self-Esteem

Self-esteem is quite an elusive concept to be captured in terms of measurement. However, it is an important factor to consider since an individual's concept of self has
been shown to be highly influential in much of her behavior. It is directly related to her general personality and her state of mental health. A person who sees herself as desirable, worthy, or "good," tends to act in accordance with these qualities. One who holds a highly unrealistic self-concept generally approaches life and other people in unrealistic ways. The knowledge of how individuals perceive themselves can be useful in attempting to help them.

The statements making up the Estimation of Self-Esteem section of the interview were compiled to reflect the girl's perception of her own behavior, acceptance of her physical appearance, description of herself in a moral framework, her adequacy as a person and in relation to others, and her sense of identity and self-satisfaction. Table 29 presents the correlation between these statements and the age of the participant. It can be seen that six statements show either positive or negative correlation at the .25 level of confidence. The total score shows a significant negative correlation.

Scores in this section ranged from a high of ninety-five to a low of fifty-six with the median being eighty-two. More than half the participants scored within five points higher or lower than eighty-two. The very high scores reflected an unrealistic outlook and a lack of ability for self-criticism, while the very low scores indicated a definite lack of self-esteem and an overly severe judgment of self.
### TABLE 29
CORRELATION OF SELF-ESTEEM ITEMS AND TOTAL SCORE
WITH AGE AT TIME OF STUDY

<table>
<thead>
<tr>
<th>Statement</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have a healthy body.</td>
<td>-0.1901</td>
<td>.0576*</td>
</tr>
<tr>
<td>2. I am a decent person.</td>
<td>0.1137</td>
<td>.2642</td>
</tr>
<tr>
<td>3. I am a calm, easy-going person.</td>
<td>-0.0500</td>
<td>.6306</td>
</tr>
<tr>
<td>4. I am a nobody.</td>
<td>-0.0227</td>
<td>.8193</td>
</tr>
<tr>
<td>5. I have a lot of self-control.</td>
<td>-0.1366</td>
<td>.1766*</td>
</tr>
<tr>
<td>6. I am an important person to my family and friends.</td>
<td>0.0478</td>
<td>.6453</td>
</tr>
<tr>
<td>7. I am mad at the whole world.</td>
<td>-0.0342</td>
<td>.7377</td>
</tr>
<tr>
<td>8. I like my looks just as they are.</td>
<td>-0.1171</td>
<td>.2493*</td>
</tr>
<tr>
<td>9. I am satisfied to be just who I am.</td>
<td>-0.0916</td>
<td>.6271</td>
</tr>
<tr>
<td>10. I am as smart as I want to be.</td>
<td>-0.0627</td>
<td>.5467</td>
</tr>
<tr>
<td>11. I am too sensitive to things my family and friends say.</td>
<td>0.1334</td>
<td>.1873*</td>
</tr>
<tr>
<td>12. I would rather win than lose a game.</td>
<td>0.0015</td>
<td>.9851</td>
</tr>
<tr>
<td>13. I do what is right most of the time.</td>
<td>-0.1467</td>
<td>.1458*</td>
</tr>
<tr>
<td>14. I change my mind a lot.</td>
<td>0.0804</td>
<td>.5628</td>
</tr>
<tr>
<td>15. I try to run away from problems.</td>
<td>0.0864</td>
<td>.5976</td>
</tr>
<tr>
<td>16. Things usually turn out for me the way I want them to.</td>
<td>-0.0775</td>
<td>.5454</td>
</tr>
<tr>
<td>17. At times I think I am no good at all.</td>
<td>0.1395</td>
<td>.1672*</td>
</tr>
<tr>
<td>18. I am able to do things as well as most people my age.</td>
<td>-0.0501</td>
<td>.6298</td>
</tr>
<tr>
<td>19. I can always take care of myself in any situation.</td>
<td>-0.0561</td>
<td>.5899</td>
</tr>
<tr>
<td>20. I am hard to be friendly with.</td>
<td>-0.0261</td>
<td>.7941</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td><strong>-0.1568</strong></td>
<td><strong>.1190</strong>*</td>
</tr>
</tbody>
</table>

* Significant correlation at the .25 level
A chi-square analysis based on the median was used to determine whether or not there was any real difference in the number of girls who scored above or below the median on the total self-esteem score and those who did or did not return to school. Results of this test indicated no significant difference at the .25 level as shown in Table 30.

<table>
<thead>
<tr>
<th>TABLE 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>SELF-ESTEEM SCORES ACCORDING TO SCHOOL OUTCOME</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-Esteem Score</th>
<th>Returned To School</th>
<th>Did Not Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 84</td>
<td>N = 14</td>
<td></td>
</tr>
<tr>
<td>Below average</td>
<td>53.57</td>
<td>42.86</td>
</tr>
<tr>
<td>Above average</td>
<td>46.43</td>
<td>57.14</td>
</tr>
</tbody>
</table>

\[ X^2 = .7143 \text{ with 1 df; NS @ .25} \]

Total self-esteem scores and the number of positive support groups are related as Table 31 indicates.

<table>
<thead>
<tr>
<th>TABLE 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER OF POSITIVE SUPPORT GROUPS ACCORDING TO MEAN TOTAL SELF-ESTEEM SCORE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Groups</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-3</td>
<td>22</td>
<td>22.4</td>
<td>74.5</td>
</tr>
<tr>
<td>4,5</td>
<td>21</td>
<td>21.4</td>
<td>81.7</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>26.5</td>
<td>79.8</td>
</tr>
<tr>
<td>7,8</td>
<td>29</td>
<td>29.6</td>
<td>83.7</td>
</tr>
</tbody>
</table>

\[ F = 6.2131; p < .001 \]
The discovery of the above relationship indicated that the participant's estimation of her own self-esteem was highly significant in relation to the number of external positive support groups she recognized. It attests the need for focusing discussion time on self-identity and personal relationships.

Participants' Nutritional Habits

A young woman's nutritional history is paramount in contributing to the physical state of health as well as the mental capabilities of her children. Therefore, the researcher was interested in addressing part of the investigation to this important area.

The participant was first asked what she understood by a balanced diet. Table 32 indicates the frequency distribution and completeness with which this question was answered.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No idea</td>
<td>6</td>
<td>6.1</td>
</tr>
<tr>
<td>Vague, ill-defined response</td>
<td>36</td>
<td>36.7</td>
</tr>
<tr>
<td>One basic food groups named</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Two basic food groups named</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td>Three basic food groups named</td>
<td>24</td>
<td>24.5</td>
</tr>
<tr>
<td>All four basic food groups named</td>
<td>22</td>
<td>22.5</td>
</tr>
</tbody>
</table>

TABLE 32
FREQUENCY DISTRIBUTION OF COMPLETENESS OF BALANCED DIET CONCEPTS
After this answer had been elicited, the interviewer completed naming those of the four basic food groups not mentioned by the participant. Then the girl was asked if she ate a balanced diet while she was pregnant. To this, seventy-three girls or 74.5 percent responded affirmatively, while twenty-five girls or 25.5 percent responded negatively. As is seen in Table 33, the observance of a balanced diet during pregnancy was significantly different according to age. Sixty-two girls said that their eating habits changed during pregnancy. Most of the change was accounted for by following the doctor's suggestion of cutting down on or being completely without salt, fried foods, and carbonated beverages. However, twelve girls said they ate better balanced, more regular meals during that time.

### TABLE 33

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>73</td>
<td>74.5</td>
<td>15.9</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>25.5</td>
<td>15.4</td>
</tr>
</tbody>
</table>

F = 3.2973; p < .10

When asked if they fed their babies the proper foods, all replied that they did. Seventy-four girls said they knew the proper foods because they followed the lists given them by a medical facility. The other twenty said they
decided for themselves what should be fed to their children.

To determine to what extent they put their theoretical knowledge about the four basic food groups into practice, the participants were asked if they had eaten breakfast, lunch, and dinner within the past twenty-four hours and exactly what they ate at these meals. The results are given in Tables 34 and 35.

### Table 34

**MEALS TAKEN WITHIN TWENTY-FOUR HOURS OF INTERVIEW**

<table>
<thead>
<tr>
<th>Category</th>
<th>Breakfast Number</th>
<th>Breakfast Percent</th>
<th>Lunch Number</th>
<th>Lunch Percent</th>
<th>Dinner Number</th>
<th>Dinner Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>55</td>
<td>56.1</td>
<td>72</td>
<td>73.5</td>
<td>96</td>
<td>98.0</td>
</tr>
<tr>
<td>No</td>
<td>43</td>
<td>43.9</td>
<td>26</td>
<td>26.5</td>
<td>2</td>
<td>2.0</td>
</tr>
</tbody>
</table>

### Table 35

**REQUIRED SERVINGS OF FOUR BASIC FOOD GROUPS* WITHIN TWENTY-FOUR HOURS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes Number</th>
<th>Yes Percent</th>
<th>No Number</th>
<th>No Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I Milk</td>
<td>18</td>
<td>18.4</td>
<td>80</td>
<td>81.6</td>
</tr>
<tr>
<td>Group II Meat</td>
<td>93</td>
<td>94.9</td>
<td>5</td>
<td>5.1</td>
</tr>
<tr>
<td>Group III Fruits-Vegetables</td>
<td>23</td>
<td>23.5</td>
<td>75</td>
<td>76.5</td>
</tr>
<tr>
<td>Group IV Bread-cereal</td>
<td>95</td>
<td>96.9</td>
<td>3</td>
<td>3.1</td>
</tr>
</tbody>
</table>

*Based on servings recommended by U.S. Dept. of Agriculture
As homemakers these young mothers are, or will be, responsible for the dietary habits of their family. Teaching them what kinds of foods the body needs and why is an important educational goal, especially in the light of increased food costs as well as shortage in the world's food supply. To determine to what extent this area had been covered in the VPHP, the participants were asked what they learned about proper nutrition and its importance. That the extent of help received in this area is not age related is shown in Table 36. It also indicates a rather large discrepancy between what they knew or thought they knew and what they actually practiced. Knowledge in this area is only as valuable as the extent to which it is applied.

**TABLE 36**

<table>
<thead>
<tr>
<th>Extent of Help</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>None, little, some</td>
<td>34</td>
<td>34.7</td>
<td>16.0</td>
</tr>
<tr>
<td>Much, very much</td>
<td>64</td>
<td>65.3</td>
<td>15.7</td>
</tr>
</tbody>
</table>

F = .1684; NS @ .25

Participants' Medical Care

Medical attention was received early in their pregnancies by most of the girls in this study. Fifty percent reported being examined within the first trimester and
47 percent were seen initially by a doctor within the second trimester of pregnancy. An analysis of variance test was performed to determine if the stage at which medical care was first received was significantly different according to age. Table 37 presents the results of this analysis which showed no significant difference at the .25 level.

**TABLE 37**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>First trimester</td>
<td>49</td>
<td>50.0</td>
<td>15.8</td>
</tr>
<tr>
<td>Second or third trimester</td>
<td>49</td>
<td>50.0</td>
<td>15.9</td>
</tr>
</tbody>
</table>

F = .0951; NS @ .25

All the girls reported keeping their subsequent appointments on a regular basis. The Earl K. Long Family Planning Center, which was the medical facility used by 69 percent of the girls, confirmed that most of their patients are no problem in this regard. The girls who received medical care through this facility were required to attend one pre-natal class session in which they were presented with the important facets of health care during pregnancy. Each time they reported for an appointment they were seen privately by a nurse as well as by the attending physicians so that they might ask any questions they had concerning their condition.
The remaining 31 percent of the subjects were under the care of private obstetricians. It was assumed by the investigator that each case received the amount of time and attention it required.

Although there was no significant difference between races in the age at which pregnancy occurred as shown in Table 6, there is, perhaps not unexpectedly, a significant difference in age at which the Earl K. Long facilities are used for delivery compared with private facilities. This analysis is shown in Table 38.

**TABLE 38**

PLACE OF DELIVERY AS INDICATOR OF ECONOMIC LEVEL
ACCORDING TO GIRLS' MEAN AGE AT TIME OF PREGNANCY

<table>
<thead>
<tr>
<th>Place</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earl K. Long</td>
<td>72</td>
<td>73.5</td>
<td>15.2</td>
</tr>
<tr>
<td>Charity Hospital</td>
<td>26</td>
<td>26.5</td>
<td>16.5</td>
</tr>
</tbody>
</table>

\[ F = 3.0313; p < .10 \]

To be eligible for services at the Earl K. Long Hospital, the girls must meet low income requirements. The researcher proposes that this is an indication that the economic level of the home is one of the factors contributing to the homogeneity of the study group.

Nurses from the East Baton Rouge School District visit the VPHP to instruct the girls in pre-natal and infant care. The girls who received this instruction found it to be very
helpful. The nurses' visits are not arranged on a regular enough basis, however, since roughly 50 percent of the participants said that they had not seen nurses at VPHP.

All the subjects reported that their babies have had regular physical examinations and immunization either through the Earl K. Long Hospital, the East Baton Rouge Public Health Unit, and/or the services of private physicians. Only two girls failed to receive the usual post-partum medical examination.

The Program

In determining the extent to which the girls returned to their regular classes following their pregnancies, it was important to establish what part the VPHP played in this outcome. Many remarks such as, "If it had not been for VPHP I never would have graduated," or "I was encouraged to go back (to regular school) because of what I accomplished at VPHP," were heard by the interviewer. The responses to the question of the extent of help given by VPHP in encouraging the participants to return are summarized in Table 39.

The analysis of variance test indicated that the amount of help is age related, with the youngest girls being the most encouraged to return. The interviewer suggests that a masking factor appeared in those responses in which the participants gave "no, little, or some help" answers. The masking element is that of high personal
motivation to return to school for a number of different reasons. Their reasoning was that since they were so personally determined to return, they could not be encouraged by an external agent to do something they had already set out to accomplish.

TABLE 39

EXTENT OF ENCOURAGEMENT TO FINISH SCHOOL GIVEN BY VPHP ACCORDING TO GIRLS' MEAN AGE AT TIME OF PREGNANCY

<table>
<thead>
<tr>
<th>Extent of Help</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very much</td>
<td>57</td>
<td>58.1</td>
<td>15.6</td>
</tr>
<tr>
<td>Much</td>
<td>28</td>
<td>28.6</td>
<td>15.9</td>
</tr>
<tr>
<td>Some, little, no</td>
<td>13</td>
<td>13.3</td>
<td>15.7</td>
</tr>
</tbody>
</table>

F = 1.9876; p < .15

Of sixty-one girls who returned to regular high school classes, forty-two improved their grade averages over what they had been the semester before they went to VPHP. Four girls retained exactly the same grade average, while the grade averages of fifteen girls showed a decrease the semester following the VPHP experience as compared with their averages the semester before.

A paired t-test was performed using the grade averages before and after the girls' VPHP sojourn. The t value required for significance at the .005 level of confidence with 60 degrees of freedom is 2.9146. The calculated t value for this study's data of 4.01 exceeds the tabled
value. This means that the post-VPHP grade averages were different from the pre-VPHP averages in terms of location of the mean. This was a highly significant finding in terms of the academic value of the VPHP.

The VPHP does not appear to be concerned with directing its participants to other agencies that could help to alleviate distress in related areas. In responding to the question, "To what extent did VPHP help you in practical matters such as, where to get financial and/or medical help or where family counseling services are offered?" more than half the girls answered that VPHP was of no, little, or some help. Table 40 indicates that this factor was not age related.

<table>
<thead>
<tr>
<th>Extent of Help</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>25</td>
<td>25.5</td>
<td>15.8</td>
</tr>
<tr>
<td>Little, some</td>
<td>37</td>
<td>37.8</td>
<td>15.8</td>
</tr>
<tr>
<td>Much, very much</td>
<td>36</td>
<td>36.7</td>
<td>15.9</td>
</tr>
</tbody>
</table>

\[ F = .1538; \text{NS @ .25} \]

In determining the extent of freedom that was felt by the participants in the asking of pregnancy-related questions while they were at VPHP, the older girls were found to feel more free as is shown in Table 41. The interviewer
suggests that the "none" category was increased by those who did not feel a need to ask questions rather than by girls who were inhibited in the VPHP environment.

**TABLE 41**

**GIRLS' OPINIONS AS TO EXTENT OF FREEDOM TO ASK QUESTIONS WHILE AT VPHP ACCORDING TO MEAN AGE AT TIME OF PREGNANCY**

<table>
<thead>
<tr>
<th>Extent of Freedom</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Mean Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>25</td>
<td>25.5</td>
<td>15.7</td>
</tr>
<tr>
<td>Little, some</td>
<td>19</td>
<td>19.4</td>
<td>15.6</td>
</tr>
<tr>
<td>Much, very much</td>
<td>54</td>
<td>55.1</td>
<td>16.1</td>
</tr>
</tbody>
</table>

$F = 1.8958; p < .20$
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Purpose

The nature of the problem undertaken in this study was fourfold. The study was primarily concerned with determining the extent to which girls who have participated in the Valley Park Homebound Program return to their regular high school classes to complete the requirement for graduation. Secondly, it was concerned with determining whether any socioeconomic factor, or group of factors, can be related to the successful completion of a high school education by these students. The third purpose of the study was to determine if the girls were better motivated to complete their education as a result of their experience at VPHP. The final purpose of the study was to ascertain whether more emphasis should be given to other areas of student need, such as medical, psychological, and social services.

Procedure

Since a study such as this would require access to student records at Valley Park and at the regular high schools of the girls involved, a letter was written to the Superintendent of the East Baton Rouge School District requesting permission to carry out the study. His reply,
reproduced in Appendix A, granted the permission and authorized access to needed information. This involved using the VPHP records to determine the names, addresses, and telephone numbers of the girls who had participated in the program, as well as obtaining other personal information from the regular high school records of these girls.

A conference with the General Coordinator of Special Education Programs was arranged. Feasibility of this study was confirmed at that time.

The researcher conferred with the teacher in charge of the VPHP at her home in order to obtain information on the program offerings and student services available. A visit was made to Valley Park so the researcher could see that part of the campus which is used for the homebound program.

Directors of thirty-seven programs, somewhat similar to that of the VPHP, operating throughout the United States were contacted by the researcher with a request for information concerning methods of program evaluation together with a description or copy of any instruments used for this purpose. This letter is reproduced in Appendix A. Replies were received from thirteen individuals, eleven of whom responded to the request for evaluative instruments and other materials. These were studied for comparative purposes before the investigator drafted an interview schedule reproduced in Appendix B.

The schedule was designed to solicit four types of information: a) personal, social, medical, and educational
information, b) attitudes, c) amount of self-esteem, and d) amount of support from external support groups.

The sample was composed of ninety-eight girls, randomly selected, who could be contacted and who were willing to participate in the study. This number represents 61.25 percent of the total enrollment of the VPHP from its beginning in September 1970 through June 1974.

Data were collected by means of interviews and information obtained from the school records of the participants. Analysis of these data utilized the statistical procedures of frequency and percent distribution, chi-square test of difference, analysis of variance, coefficient of correlation, paired t-test, and median test. The .25 level of confidence was accepted as being statistically significant.

Findings

The findings of this study can best be summarized on the basis of specific objectives established in Chapter III of this study.

1. Objective Number One: to determine to what extent the girls who attend VPHP return to their regular school classes and successfully finish high school.

Of the ninety-eight girls who were interviewed in this study, eighty-four girls or 85.7 percent either graduated at the end of the semester they were at VPHP or returned to their regular school classes. A total of fifty-six girls, 57.1 percent, have completed their requirements and have graduated from their regular high school since the beginning
of the VPHP. The younger the girl is when her pregnancy occurs, the greater the possibility that she will not finish high school. Of those who returned to school, only two girls have dropped out over the past four years. As for the fourteen who did not return, seven of them are actively pursuing the Graduate Equivalency Diploma through one of the Adult Learning Centers.

2. Objective Number Two: to ascertain whether the grade average of the student who returns to regular classes is better the first semester than it was before she left the regular school.

Of the sixty-one students whose records could be obtained, forty-two girls showed improved grade averages for the semester following their VPHP experience over their grade averages in the semester preceding their attendance at VPHP. Four girls kept the same grade average the semester following their return to regular high school classes that they had the semester before they entered the VPHP. The grade averages for fifteen girls decreased the first semester after their return, compared to what they earned the semester before they went to VPHP. The improvement in grade average by the majority of returned students is reflected by a real difference according to a paired t-test.

3. Objective Number Three: to compare the attendance records of the returned student with her attendance before she participated in the VPHP.

This objective could not be evaluated due to different methods of keeping the attendance records in the sixteen
high schools of the East Baton Rouge School District. At varying times over the past four years, all these schools have switched over to a computer recorded grading system which cumulates the absences over the entire year on the only permanent record. There is no way of breaking this down into semesters for all the students. If the entire year figure had been used, the sample would have been drastically reduced, therefore, this option was not taken. Some schools kept more conscientious absentee records than others before the computer system was adopted. The accuracy of the records, therefore, was questionable which was another reason for not pursuing this objective.

4. Objective Number Four: to determine whether or not there is a significant relationship between any socioeconomic factor, or group of factors, and the completion of high school requirements by these students.

There were a greater number of Blacks (83.7 percent) than caucasians in this study. This does not automatically reflect a greater incidence of teenage pregnancy among the black population of the Baton Rouge area, although this may be so. It does indicate that a greater number of negro girls have availed themselves of the educational opportunity that the VPHP offers. According to the sample studied, there is no significant difference between the races in the age levels at which pregnancy occurs.

The economic level of the home seems to be a related factor in the incidence of teenage pregnancy in the Baton Rouge area. The majority of participants (73.5 percent)
were able to meet the economic guidelines for services at the Earl K. Long Charity Hospital, which indicates that they are considered to be in a low income bracket.

Neither the occupation nor the educational background of the participants' parents was found to be a significant factor in the age at which pregnancy occurred. The average educational background of both mothers and fathers was tenth grade. More than half the mothers of the girls were listed as housewives or homemakers with no occupation outside the home.

Fifty-five girls came from homes in which both parents were living; forty-three came from homes in which only one parent was present. Having both parents or only one in the home was found to approach a significant difference in the age level at which pregnancy occurred, with the younger girls coming from homes in which just one parent was living.

5. Objective Number Five: to explore the kind and amount of pre-natal and post-natal care these subjects and their babies received.

Exactly one-half the girls in this study received medical care in the first trimester of pregnancy. The majority of the participants received this care from the Earl K. Long Family Planning Center. Those who receive care from this facility are required to attend one session on pre-natal and infant care.

More detailed instruction from the East Baton Rouge School District nurses at VPHP was received by approximately
half the participants. These sessions were found to be extremely helpful by those who participated.

All the girls' babies were reported to have received regular medical examinations as well as immunizations. Almost all the girls themselves had the regular post-partum medical examination.

6. Objective Number Six: to assess the subjects' understanding of a properly balanced diet in terms of their eating habits.

A clear, well-defined concept of what is meant by a balanced diet is lacking on the part of most of the subjects in this study. Almost half the girls (43.9 percent) do not breakfast regularly. Slightly more than one-fourth of the participants (26.5 percent) had not eaten a luncheon meal within twenty-four hours of the interview. The greater majority of the girls do not eat the proper amounts of fruits and vegetables (76.5 percent) and do not drink enough milk (81.6 percent). At least the proper amounts of the other two food groups are eaten by the participants.

7. Objective Number Seven: to determine the extent to which the subjects feel positive support from their reference groups--parents, the child's father, relatives, friends, priests or ministers, teachers, counselors, and neighbors.

The average participant receives positive support from six of the above groups. Most of the girls are given support by the parents. Only 15.3 percent found their parents lacking in this regard. Slightly more than half the girls (57.1 percent) have supportive relationships with the
alleged fathers of the children, although eighteen girls have no contact at all with the putative fathers. A corresponding number of girls reported that these two groups—parents and alleged fathers—were very helpful during their pregnancy. Two sets of relationships were found to be age-dependent—those with parents and with friends. The older girls receive less satisfaction from friends than do the younger ones, but they derive greater pleasure from their parents. One-fourth of the study group reported no contact with priests or ministers. Relationships with teachers were ranked more satisfying than those with counselors. However, this may simply be a result of the difference in their numbers.

8. Objective Number Eight: to assess the subjects' perception of themselves in terms of self-esteem.

Scores on the self-esteem portion of the interview ranged from ninety-five to fifty-six with the very high scores indicating girls who were unrealistic and not capable of criticizing themselves, while the low scores were indicative of those whose self-image was scarred and whose judgments of self tended to be overly harsh. There were more of the former than the latter found among the subjects in this study. The median score was eighty-two with more than one-half the girls scoring within five points either way of this median score.

The total score has no absolute meaning. It is only an indication of the girls' estimation of their own
self-esteem. The fact that so many fell within a relatively narrow range (77-87) is an indication of the homogeneity of the group studied.

9. Objective Number Nine: to determine the source of the subjects' material support.

Only twenty-four of the girls interviewed receive welfare assistance, while eleven receive social security checks. Fifty-two of the subjects are self-supporting, with their revenues resulting from their own jobs and those of their husbands. The remainder rely on their parents for support. The majority of this last group are still students.

10. Objective Number Ten: to determine the extent to which the putative father contributes to the support of the child.

Of the forty-one girls who were married at the time the study was conducted, thirty-four were married to the father of the child, while the remaining seven were married to men other than the child's father. In addition to the above thirty-four who assume full financial responsibility for their children, fifteen others contribute regularly in some measure toward their child's support. The majority of this last group contribute voluntarily.

Conclusions

Within the limitations of this study it seems reasonable to draw the following conclusions concerning the Valley Park Homebound Program and those of its participants from
whom the data were gathered.

1. It is possible to find and interview girls several years after they have broken contact with the program, and receive extremely cooperative and frank responses.

2. The profile of the pregnant teenager in the VPHP reveals an average girl to be sixteen, non-white, in the eleventh or twelfth grade, unmarried, not interested in giving up her baby, desirous of raising the baby properly, eager to continue school, but not sure of her future.

3. The girls who need the services of the VPHP are a very homogeneous group. They show many common concerns and problems. They recognize the need for education and they show themselves willing to learn by their presence in the program and the high rate of return to their regular high schools.

4. The success of a program like VPHP very much depends on the person of the teacher who must be able to transmit effectively her concern for each of the girls. She is a powerful influence in the girls' lives. She exercises a great deal of latitude as far as the program is concerned.

5. The VPHP is fulfilling its purpose not only in seeing to it that the majority of girls it serves do return to their high schools, but also in the fact that they are more successful academically when they do return.

6. The younger girls and the poorer students are the most vulnerable and are, therefore, the ones who can
benefit most from the VPHP. If choices among applicants must be made at any time, it would follow that girls who fit this description would be given priority ratings.

7. Although statistics were not found to prove the point, it is a certainty that more girls remained in school and graduated from high school after the special services of the VPHP were offered than before. The value of the small classes, the dignity with which the girls were treated, and the interest on the part of the teacher made a great impression on the girls. In many cases this was their best learning experience.

8. The services being offered by VPHP have been well received, adequately utilized, and appear to have been considered valuable by the participants.

9. This study showed a number of adjustments in the life management capabilities of girls who attended VPHP. The evidence is strong that the program contributed significantly to the change process, although it is recognized that a causal relationship cannot be said to exist without an experimental control group being studied.

10. In tackling the problem of providing educational services to pregnant schoolgirls, the East Baton Rouge School District has made a significant contribution to the welfare of both pregnant girls and the community in general. Through VPHP, many pregnant girls who need help and encouragement have been and can be reached at an age when there is much room for learning, future planning, and change.
Recommendations

Based on the findings of this study and the conclusions which were drawn, the following recommendations are presented for further consideration.

1. The East Baton Rouge School District needs to organize a detailed plan for family life education in the schools that will be endorsed by the State Legislature. To be effective, the program should begin in the elementary school at the fifth or sixth grade level. With recent emphasis on vocational decision-making beginning early in the educational process, a program for family life education could effectively be unified.

2. The VPHP or one of the offices in special education programs should establish a follow-up process utilizing students in the Louisiana State University School of Social Work. These students would work with the girls who do not return to school or who encounter problems upon their return so that some contact is maintained to provide needed support for as long as a year.

3. The School District should put greater emphasis on helping school officials, teachers, and counselors to understand the difficulties and needs of returning school-age mothers. Encouraging school continuance by these girls must be a total school and community responsibility.

4. The East Baton Rouge School District should have a definite program plan stating specific objectives and the means that will be utilized to achieve these objectives.
The objectives should be considered from the viewpoint of the consumer. Basically, these questions must be asked: What services do these young mothers-to-be need? and which of these are we in a position to offer? There is a need for ongoing evaluation and reassessment of how needs are being met, but this is not possible or productive when there are no written program objectives in the first place. Such a program could be extremely cohesive in the light of the homogeneity of the consumers.

5. In writing out the program objectives some attention should be paid to the developmental tasks of adolescence and adulthood as are set forth by such writers as Havighurst and Erikson.

6. Greater cooperation between the Earl K. Long Family Planning Center and the VPHP would benefit both programs. The visits of the School District nurses to VPHP should be made on a more regular basis so that every girl receives the advantages of sufficient and effective pre-natal and infant care instruction. Implementing this latter suggestion would improve the educational environment by freeing each student from the overriding concerns and worries about her physical condition, leaving her free to concentrate more fully on her studies.

7. There is need for an effective nutritional program to be included in the VPHP curriculum. It should be centered on immediate outcomes rather than long-range goals.
although it would be expected that the latter would ultimately be affected to some extent.

8. The VPHP should capitalize on the homogeneity of the participants by incorporating some group discussions into the program. Suggested areas to highlight such discussions might deal with the problems of how to implement satisfying relationships with parents and with the father of the child.
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Mr. Robert Aertker, Superintendent  
East Baton Rouge Parish School Board  
P.O. Box 2950  
Baton Rouge, Louisiana

Dear Mr. Aertker,

Please accept this letter as a request to use the assistance of the personnel (mostly guidance counselors), facilities, and records of the East Baton Rouge Parish School Board to do a research study concerning the program for pregnant school-age girls at the Valley Park Continuing Education Center.

I have worked in the Baton Rouge area for the past three years as the education specialist at the Community Correction and Research Center. At present, I have reduced my involvement there to a part-time basis so that I can write my dissertation in the Department of Extension Education at Louisiana State University.

I have written a prospectus of the study. Its objectives are: 1) to determine to what extent the girls who attend the Valley Park Homebound Program (VPHP) return to their regular school classes and successfully finish high school; 2) to ascertain whether the grade average of the student who returns to regular classes is better the first semester than it was before she left the regular school; 3) to compare the attendance records of the returned student with her attendance record before she participated in the VPHP; 4) to determine whether or not there is a significant relationship between any socio-economic factor or group of factors and the completion of high school requirements by these students; 5) to explore the kind and amount of prenatal and postnatal care these subjects and their babies received; 6) to assess the subjects' understanding of the value of a properly balanced diet in terms of her eating habits and those of her child; 7) to determine the extent to which the subjects feel positive support from their reference groups—parents, neighbors, relatives, boyfriend, minister, teachers, and counselors; 8) to assess the subjects' perception of themselves as "good" mothers; 9) to determine the source of the subjects' material support; and 10) to determine the extent to which the alleged father contributes to the support of the child.

I intend to gather the necessary information from the school records (state of grade completion, grade average, attendance, etc.) and by interviewing those participants who are willing
to discuss their experience. One of the major problems with a study of this kind lies in the delicacy of the subject—illegitimacy. The girls who are willing to participate will know that their responses will be held in strictest confidence and that the study primarily seeks to evaluate the objectives that the program has been able to reach in an effort to make it of yet greater help to its participants.

With school authorities being in the vanguard of those who recognize the important relationship between a child's home environment and his ability to learn, it is logical for the school system to lead the way in implementing services to help the pregnant girl undertake her new role of parent even as she struggles with that of adolescent.

This study would hope to lead all who have to do with the education of teen-age girls to consider more deeply those aspects of the problem with which they may be concerned and which would make them more helpful in relating to this segment of the total school population.

Of course, it would be understood that nothing concerning this study would be published without the School Board's approval and that the School Board would receive a copy of the findings.

You will have my sincerest appreciation for your cooperation in the study.

Sincerely yours,

Sister Judith Singer
Sister Judith Singer  
Box 16445  
Louisiana State University  
Baton Rouge, Louisiana 70803  

Dear Sister Singer:

I have reviewed your letter requesting to use the assistance of the personnel, facilities, and records of the East Baton Rouge Parish School Board to do a research study concerning the program for pregnant school-age girls at the Valley Park Continuing Education Center.

Please let this serve as authorization for you to proceed with your study. It is understood that nothing concerning this study is to be published without the approval of the School Board and that the School Board will receive a copy of your findings.

Sincerely yours,

Robert J. Aertker  
Superintendent

RJA/mal
Dear

I am presently doing some research in the area of educational opportunities extended to school-age pregnant girls. Your agency was listed in an HEW publication, "Multiservice Programs for Pregnant School Girls," as having such a program. Have you been able to carry out some type of follow-up study, or an evaluation that would indicate the effectiveness of your program? If so, would you please be so generous as to share your results with me? I am particularly interested in the instruments of evaluation that you used.

I should like to include your findings in my dissertation, with your permission, if they can be related to the study. Have you found a characteristic of the clientele that is related to successful outcome? Is there an element or two in the program that is related to successful outcome? How can this be documented?

I will be most grateful for any help you can give me.

Sincerely yours,

Sister Judith Singer
APPENDIX B
INSTRUMENT
INTERVIEW SCHEDULE

According to the school records, you went to Valley Park in the school year 197_ – 197_. The questions I would like to ask you are mainly about the amount and kind of help the program gave you and the problems you may have had. Maybe we could start with some questions about your child.

A. FACTUAL INFORMATION

1. What is its name? How old is it?

2. At present are you working, going to school, or staying at home?
   If at work or school, where?
   If either work or school, who takes care of ______ while you're there?
   Did you go back to school after you had ____?
   If yes, who took care of ____ then?
   Was arranging for ____'s care a problem then? Is it now?

3. Was there ever any question in your mind as to whether or not you should keep _____?
   If yes, what were the issues or problems that were involved?
   With whom did you feel you could talk freely about the problem?
   When did you definitely decide what to do with the baby?
   What influenced you to make the decision finally?
   Would you have felt better if you could have discussed the situation with someone who understood?
Are you generally happy with the decision you made? Did the feelings of the father in any way influence your decision to keep ____?

4. Were you married at the time ____ was conceived? Were you married at the time ____ was born? Are you married at present? To ____'s father or to someone else?

5. At the time you went to VP, where were you living? With whom? Where are you living now? With whom?

6. What is your main source of income for living expenses? Do you have any other sources of income? If the father contributes, does he do so voluntarily or through court order?

7. Did you have medical attention when you were pregnant with ____? If yes, from whom? At what stage in the pregnancy? How often?

8. Where was the baby delivered?

9. Did you have medical care after ____ was delivered? From whom?

10. Did the baby have regular medical examinations after birth? From whom?

11. What is a balanced diet? Did you follow a balanced diet when you were pregnant? Did your diet change when you were pregnant? How? On whose suggestion? Do you feed ____ nutritional foods? How do you know what these are?

What did you have yesterday for breakfast, lunch, dinner?
12. Did you read any books on infant or child care? If yes, do you remember their titles?

What other sources of information did you have about the care of the baby and its development?

B. ATTITUDES (To be answered by marking response sheets)

1. To what extent did your experience at VP encourage you to return to school?

2. To what extent did your experience at VP help you in deciding to keep your baby?

3. To what extent did VP help you to be a better mother?

4. To what extent did VP help in practical matters such as where to seek medical help, how to obtain financial help, where to find family counseling help?

5. How helpful were your parents?

6. How helpful was the father of ___?

7. To what extent did VP help you learn about proper nutrition and its importance?

8. To what extent did the nurses at VP teach you about infant care and growth?

9. To what extent did the nurses at VP help you with your questions, fears, and concerns about your pregnancy?

10. To what extent did you feel free to ask questions about any problems concerning your pregnancy and related matters of any staff member in the program at VP?

11. Rate the following subjects as to how helpful you would have found them while you were at VP:

   Home management  Infant care
   First aid         Grooming and charm
   Child growth and development  Nutrition
   Sewing           Budgeting and money
   Cooking          managing
   Others (Name them)
C. EVALUATION OF SELF-ESTEEM (Answers to be marked on answer sheet)

1. I have a healthy body.
2. I am a decent person.
3. I am a calm, easy going person.
4. I am a nobody.
5. I have a lot of self control.
6. I am an important person to my family and friends.
7. I am mad at the whole world.
8. I like my looks just the way they are.
9. I am satisfied to be just who I am.
10. I am as smart as I want to be.
11. I am too sensitive to things my family and friends say.
12. I would rather win than lose a game.
13. I do what is right most of the time.
14. I change my mind a lot.
15. I try to run away from my problems.
16. Things usually turn out for me the way I want them to.
17. At times I think I am no good at all.
18. I am able to do things as well as most people my age.
19. I can always take care of myself in any situation.
20. I am hard to be friendly with.

D. RELATIONSHIPS WITH EXTERNAL SUPPORT GROUPS

I have five signs here—unhappy, mostly unhappy, partly unhappy and partly happy, mostly happy, and happy. Now I am going to give you some cards that name groups of people that you come in contact with. I am going to
ask you to place each of these cards under the label that tells me how you evaluate your contacts, interactions, and relationships with each group. I also have another category just in case you don't interact with the group named on any card. It says no contact. Use this label when you need it.
B. ATTITUDE RESPONSE SHEET

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<th>Of some help or value</th>
<th>Of much help or value</th>
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C. EVALUATION OF SELF-ESTEEM RESPONSE SHEET

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VITA

SISTER JUDITH MARY SINGER
Born October 31, 1929 in Detroit, Michigan

EDUCATION

1954 Bachelor of Science, Barry College, Miami Shores, Florida

1959 Master of Science, Catholic University of America, Washington, D.C.

EXPERIENCE

1950-1955 Elementary School Teacher, St. Ann School, West Palm Beach, Florida

1955-1958 Secondary School Teacher, Central Catholic High School, Fort Lauderdale, Florida

1959-1963 Secondary School Teacher, Rosary High School, Detroit, Michigan

Summers 1960-1962 Instructor, Siena Heights College, Adrian, Michigan

1963-1968 Instructor, Barry College, Miami Shores, Florida


1968-1969 Academic Dean, St. Dominic College, St. Charles, Illinois

1969-1970 Graduate Assistant, Louisiana State University, Baton Rouge, Louisiana

1971- Education Specialist, Community Correction and Research Center, Baton Rouge, Louisiana
Candidate: Sister Judith Mary Singer

Major Field: Extension Education

Title of Thesis: A Program for Pregnant School-Age Girls in the East Baton Rouge, Louisiana School District: A Followup Study with Implications for Functional Education

Approved:

[Signature]
Major Professor and Chairman

[Signature]
Dean of the Graduate School

EXAMINING COMMITTEE:

[Signature]
Joel Selby

[Signature]
Paul Allen

[Signature]
Bruce Kent

[Signature]
Edward W. Cassie

Date of Examination: November 22, 1974