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Effects of Mentoring on the Personal Career Development, Attendance, and Retention of Teen Mothers in a Job Training Program

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EFFECTS OF MENTORING ON THE PERSONAL CAREER DEVELOPMENT, ATTENDANCE, AND RETENTION OF TEEN MOTHERS IN A JOB TRAINING PROGRAM

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ABSTRACT

EFFECTS OF MENTORING ON THE PERSONAL CAREER DEVELOPMENT, ATTENDANCE, AND RETENTION OF TEEN MOTHERS IN A JOB TRAINING PROGRAM

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The purpose of this study was to determine the effects of a mentoring program on the personal career development, attendance, and retention of students of the 1991 Teen-Age Parent Program of Skillbuilding (TAPPS). The study was conducted in Chesapeake, Virginia, within the Chesapeake Public Schools Adult Continuing Education Department. The students were matched and randomly assigned to experimental and control groups. The experimental group (N=15) received a program of mentoring over and above the regular support services of TAPPS. The control group (N=15) received only the regular support services. Students in both groups were pretested on personal career development in the fall of 1990 and posttested in the spring of 1991. Data on student attendance and retention were also compiled.

Findings revealed no significant difference with regard to personal career development, attendance, or retention. The study provided quantitative information regarding the use of mentoring in programs for at-risk

groups such as teen mothers in a job training program. The results of the study indicate that administrators should not automatically assume that mentoring will be an effective tool in programs for teen mothers. Benefits did accrue to a number of students, however. Positive outcomes for some students suggest that, with careful planning and experimentation, variations on traditional mentoring could provide the means for capitalizing on the expertise and resources of community volunteers to assist parenting adolescents.

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CHAPTER I

INTRODUCTION

The United States is the leader among industrialized nations in the number of pregnancies among women 15 to 19 years old.[1] According to 1989 statistics from Planned Parenthood, approximately 1,031,000 American teens become pregnant each year.[2] Although teen pregnancies occur in all communities in this country, statistics reveal a greater concentration of teenage parents in urban settings. Virginia's District 20, an urban area which includes Norfolk, Virginia Beach, and Chesapeake, had some 61 teen pregnancies per thousand females in 1989. In contrast, the rural area which District 2 encompasses had about 26 teen pregnancies per thousand females for the same year.[3] Around 5,300 teen parents are added yearly to New York City's already high population of young mothers.[4] Overburdened community agencies are usually the only avenue of assistance for the majority of these young women. Thus, the link between the problem of teenage pregnancy and the often attendant problems of unemployment and poverty is much more pronounced in urban areas.

Teenage pregnancy is not a new phenomenon. Thirty years ago the teenage birthrate in the United States was

higher. At that time, however, most of the teens giving birth were married,[5] and it was not considered to be a major societal problem. Today more than fifty percent of births to teenagers are illegitimate. This statistic, incidentally, involves a disproportionate number of black females. The pregnancy rate for adolescent black women is twice that of whites, and ninety percent of the pregnancies are illegitimate. However, any explanation for the problem will not be found in the characteristics of individuals or groups, whether they be young black males and females or teenagers in general.[6] Organizational features of our society create social problems.[7] In the case of teenage pregnancy, the increased incidence of single-parent households and occupational segregation partially explain its rise. Teen pregnancy has become an American dilemma, problematic for all groups.[8]

Unplanned and unintended for the most part, teen pregnancies occur despite the fact that the individuals usually are unprepared socially and physically to begin family life. Teen mothers generally have to drop out of school and are more likely to bring their children into poverty-level situations that require some form of social assistance.[9] Concern about the rising dropout rate and increased welfare dependence have promoted the perspective that teenage pregnancy is no longer just a black or a personal problem but one of wide-ranging significance.[10]

As communities have become more cognizant of the individual and societal implications of our schools' rising dropout rate, leaders have engaged more aggressively in activities to retain students. In the process, they have come to realize that teenage pregnancy is no minor contributor to the problem. As a matter of fact, adolescent pregnancy is the major reason why students leave school.[11] Recent retention efforts have necessarily included an increased focus on all aspects of the problem of adolescent pregnancy. Attempts to resolve the problem have come to involve a variety of players in the community whose interests are affected by teen pregnancy.[12]

The other, and related, reason teenage pregnancy has received nationwide attention of late stems from a growing discontent among Americans with our system of welfare.[13] The cost of aid has been steadily increasing, causing many to look askance at who is receiving assistance. Once teen mothers drop out of school, ninety percent remain unemployed.[14] Current figures estimate that about one-third of teens who give birth will require welfare payments.[15] The enormity of the dependence is further reflected in the statistic that sixty percent of the recipients of the burgeoning aid-to-dependent children program began family life as teens.[16] Society often bears the cost of supporting each child through its first twenty years of life.[17] It is not surprising that teenage pregnancy, and the ramifications

thereof, has become a major topic of concern in our society.

A number of solutions for decreasing the teen pregnancy rate have been suggested. These have ranged from widely debated sex education programs to urgings for increased efforts to strengthen family ties in order to meet teens' latent affectional needs.[18] Social researchers confirm, however, that teen pregnancy is not an individual, group, or societal defect. Experts say it is just one of a larger number of societal problems facing teens, all of which must rely on fundamental changes in our society.[19] Given the slow process of social change, researchers voice little optimism that the problem will be easily remedied.[20] Despite a variety of federal, state, and local efforts to reduce unintended pregnancies, only scant evidence of any long-term success in curbing adolescent pregnancy is available.[21]

Two recent political developments are likely to impact teenage pregnancy. Opposition to family life curricula could mean that more adolescent pregnancies will occur, and new abortion regulations could result in more teen pregnancies being carried to term.

Many communities have been voicing strong opposition to the implementation of family life curricula. The programs have been mandated by legislators and designed by educators to provide a program of education to reduce teen pregnancy. Although there is plenty of evidence that

pregnancies occur even when sex education is taught, there is also evidence that with effective curricula they could be avoided.[22]

Recent Supreme Court actions with regard to abortion have added another layer of complexity to the already complicated problem. Webster v. Reproductive Services has given states the power to regulate abortions. Prior to this decision, about 42 percent of pregnant teens were choosing to have abortions each year. Teen pregnancies accounted for one-quarter of all abortions performed yearly in the United States.[23] With the advent of Webster, states have been exercising prerogatives ranging from criminalization of abortion to restrictions such as a requirement of parental consent. Rebecca Stone served as director of public policy at the Center for Population Options, a Washington, D.C., nonprofit group for the prevention of teenage pregnancy. Stone voiced a concern that many who administer such programs have been forced to consider. Any ban or more restrictions on abortion means that teens especially will be more likely to carry their pregnancies to term. A lack of access to abortion by poor teenagers in particular will probably result in more teen mothers who are single and live in poverty.[24]

American schools will inevitably provide the battleground for the larger issue of abortion[25] and continue to be the venue for seeking solutions for teen pregnancy.[26]

As efforts continue to discover ways to reduce the number of adolescent pregnancies, educators must remember the cautions of social researchers. Teen pregnancy is a societal problem which evolved over time; resolution of the problem will also require time.

A number of educators have recognized the importance of treating the symptoms of teenage pregnancy. Some educational agencies are providing help for teens who have already become mothers. Enlightened educators recognize that young mothers must be afforded the opportunity to acquire the education and training that pregnancy usually interrupts but which is so vital for self-sufficiency. Without education and job skills, teen mothers' economic independence and chances for a quality existence in the urban environment are in jeopardy.

Members of all sectors generally agree that the best way young mothers can stay on track is to stay in school.[27] Indeed, the relationship between education and economic self-sufficiency for teen mothers is well substantiated. For instance, female dropouts' chances for being employed full time is only one in seven whereas about one out of two non-dropouts secures employment.[28] Compounding the problem is the fact that more than half of the jobs created between now and the year 2000 will require some education beyond high school.[29] Yet a lack of adequate support systems has prevented many adolescent mothers from continuing school and

acquiring even the basic educational skills. Parents of young mothers work or are unavailable to assist with child care for other reasons; and, as a rule, fathers have not provided support.[30] Completion of traditional public school programs for teen mothers has been almost impossible. Dropping out occurs because of the lack of child care and the stringent attendance requirements of most high schools. As a result, about half of the 500,000 teens giving birth each year have been leaving school.[31] The continuing burden of woman's role as caretaker of her children contributes to her lack of education and job skills. Compounding the problem is the systematic underpayment of women's work in and outside the home. Without special assistance, teen parents can expect to become part of an alarming statistic. Thirty-four percent of the ten million female-headed households in the United States live at or below the poverty line.[32]

Adult educators have a tradition of serving the educationally and economically disadvantaged citizens of the community. Recently they have sought to initiate alternative educational interventions for a number of women-in-transition groups, including teenage mothers. Teen mothers are adults by default, so to speak, with a premature need to become productive citizens. They need help not only with their transition into parenthood but also with their transition into adulthood in general. Some adult education

administrators have recognized the importance of early interventions for teen parents. Involved educators feel it is critical to reach young mothers before they fall into a cycle of physical and intellectual poverty which would be more difficult to reverse through education and training.[33]

The Chesapeake, Virginia, Public Schools Adult Continuing Education Department has provided an alternative program of education and job training for teen parents since 1988. The department is a comprehensive adult education agency serving some 2,000 citizens per year. The city of Chesapeake is an urban area located in the southeastern quadrant of Virginia. With an area of 1,583 square miles, Chesapeake is the largest city in the Commonwealth. Chesapeake is part of the Norfolk-Virginia Beach-Newport News Metropolitan Statistical Area, the 27th largest metropolitan market in the United States.[34] Statistics from the 1990 census reveal a population in Chesapeake of 158,544, of which 73 percent are white, 26 percent black, and 1 percent of other ethnic heritages.[35] The Virginia Department of Health reported that of the 158,544 residents of Chesapeake in 1989, approximately 7,300 were teen females and that 566 pregnancies occurred that year. Rates of pregnancy for the year per thousand females were 8.4 for age 10-14, 67.0 for age 15-17, and 174.1 for age 18-19.[36]

The Teen-Age Parent Program of Skillbuilding (TAPPS) has been funded since 1988 with a gender equity grant under

the Carl Perkins Vocational Education Act. TAPPS offers GED preparation and high school credit, along with job training, for mothers up to age 21. Support services are also provided in an effort to reduce both extrinsic and intrinsic barriers to participation. Services include individual and group counseling, child care and transportation allocations, and workshops and seminars that address a variety of preemployability and employability needs.[37]

Although teen mothers in Chesapeake are encouraged to continue to attend the traditional high school programs, a lack of support services prompts many to drop out. The teen parent program within the Adult Education Department has been the most viable option for a number of students. TAPPS is one of a limited number of projects for teenage parents in the Commonwealth to receive funding under the Carl Perkins Vocational Education Act. Requests for proposals are competitive, and grants are based on need and the ability to serve the population.

Despite the availability of a wide range of services to foster full participation in TAPPS, and despite the fact that the participants enroll voluntarily in the program, certain personal career development deficiencies prevent many from translating intentions into actions. Students demonstrate motivation for participation initially. However, their lack of problem-solving, personal interaction, and coping skills is often reflected in a lack

of motivation for study and work. Many students have sporadic attendance, and some eventually drop out of the program.

Efforts have been made in all aspects of the program to address students' personal career development as an important dimension of full participation in TAPPS. Therefore, administrators of the 1990-91 program have been challenged to seek other support mechanisms that would facilitate accomplishment of the objectives of the program.

A growing body of literature suggests that mentoring could provide the missing link needed to accelerate teen mothers' personal career development and attainment of educational goals.[38] Introducing appropriate role models has been shown to aid in the personal career growth of a number of at-risk groups, including teen mothers.[39] The concept of using others to influence the lives of young mothers, in this case through mentors, can be viewed as an extension of a growing wave of volunteerism in our country. Although the spirit of volunteerism, of helping others, existed even in primitive America, the use of volunteers has become increasingly pertinent today. The need for human services, including educational opportunities, has been steadily increasing while fiscal resources have been diminishing. As more services are demanded in the future, volunteers may be the only means by which the growing needs of our society can be met.[40]

The Chesapeake Public Schools Adult Continuing Education Department espouses a philosophy of promoting community involvement in addressing the educational problems of the community. Their mission statement refers to the need to serve all citizens of the community. Of top priority, however, is providing educational services to those most in need. Since educational problems can be viewed as an extension of social problems, community involvement also means that social issues and concerns are confronted by individuals whose lives are most affected.

A belief has emerged that communities can no longer afford simply to turn their less fortunate citizens over to social agencies. Statistics presented in this document regarding teenage pregnancy and related problems with school dropout rates, welfare dependency, and poverty (despite the existence of a variety of agencies to address them) support this opinion. Mentoring could be a vehicle for community members to become involved in social problem-solving on a local level with a view toward improving the quality of life for all citizens of the community. Moreover, providing mentors for needy groups has the potential for setting in motion a model of helping within the community. Proteges could repay the assistance they received both by becoming productive members of society and by becoming future mentors themselves.

facilitate the education and career development of novices.[41] Teen mothers have a tremendous need for appropriate role models. Research indicates that parenting teens are likely to encounter psychological and economic negatives as a result of their circumstances. While mentoring alone should not be viewed as a cure-all for high-risk populations, potential benefits could accrue to teen mothers by linking them to volunteer professionals in conjunction with other efforts to increase self-sufficiency.

Anderson and Shannon's definition describes mentoring in a general way:

> A nurturing process in which a skilled or more experienced person serving as a role model, teaches, sponsors, encourages, counsels, and befriends a less skilled or less experienced person for the purpose of promoting the latter's professional and/or personal development. Mentoring functions are carried out within the context of an ongoing, caring relationship between the mentor and protege.[42]

However, to be useful to mentors as well as to proteges in a program such as TAPPS in which volunteer mentors from the community were utilized, clear goals and objectives, along with activities to accomplish them, had to be established. In the absence of a formal training program for mentors, a goal-oriented approach was necessary. Such an approach provided appropriate role models guidelines for focusing on the development of specific personal career development. The personal career development variables of problem solving, personal interaction, and coping skills, as

an approach provided appropriate role models guidelines for focusing on the development of specific personal career development. The personal career development variables of problem solving, personal interaction, and coping skills, as they relate to motivation for study and work--and found to be lacking in many adolescent mothers--were the focus of the volunteer mentoring program.

Given the fact that researchers of mentoring programs for young women have criticized the programs' failure to isolate the variable mentoring so that it can be more clearly identified as a change agent, an experimental study to determine the effects of mentoring in a job training program appeared to be justified.[43]

Statement of the Problem

This study investigated the effects of mentoring on the personal career development variables of problem solving, personal interaction, and coping skills of teen mothers, as they relate to motivation for study and work, and attendance and retention in a job training program. The personal career development variables of problem solving, personal interaction, and coping skills were measured by the Sixteen Personality Factor Questionnaire.[44] Motivation for study and work were measured by the Salience Inventory.[45] Attendance was measured by comparing records of attendance for both groups, and retention was measured by comparing records of completion for both groups.

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CHAPTER II

REVIEW OF THE LITERATURE

The literature reviewed in this chapter provides the framework for conducting the research presented in the study. The following topics will be included: historical perspective on mentoring for personal career development, social and adult learning theories and mentoring, volunteerism and mentoring, and importance of mentors' qualities in formal mentorships.

Mentoring for Personal Career Development

Mentoring originated thousands of years ago in Greek mythology. The tale of Odysseus includes an account of how he left his son, Telemachus, under the tutelage of a friend and advisor, Mentor. During Odysseus' absence, Mentor served as guardian, teacher, and father figure to Telemachus; but often Athena, goddess of wisdom and the arts, disguised herself as Mentor and fulfilled those roles.[1]

Other historical examples of mentoring include the sculptor, Pygmalion, and his creation, Galatea, and their modern counterparts, Professor Henry Higgins and Liza Doolittle;[2] Leonardo da Vinci and Michelangelo;[3] and

Margaret Mead and anthropologist Franz Boaz.[4] Mentors have existed in philosophy, arts and letters, the military, and professional sports.[5]

Over the last two decades mentoring has perhaps been most widely associated with its use as a career enhancement strategy for professional men and women. The association has been due largely to a resurgence of interest in mentoring after the publication of popular books by authors such as Sheehy and Levinson in the mid to late 1970's. Both Passages and The Seasons of a Man's Life presented the benefits of establishing mentoring relationships with older, more experienced professionals to facilitate upward mobility in one's career. Women in particular, who in the seventies were climbing career ladders not previously available to them, were urged to seek mentors.[6] In fact, they were advised both to find a mentor and to be one to another woman.[7] Missirian underscored just how critical such a strategy was. She reminded readers that it was not until the mid-seventies that management texts even hinted at the possibility of women as managers. As a consequence, few female role models were available for career women.[8] George and Kummerow advocated the mentorship as a valuable asset which could accelerate women's professional development in their 1981 article, "Mentoring for Career Women."[9] Finding a mentor was seemingly good advice in light of a 1977 investigation of executives regarding mentorships. All

women responding who had achieved executive status had had a mentor.[10]

By the eighties mentoring was being touted as the key not only to the corporate success of women but as a means of facilitating performance in varying aspects of academia as well. Articles focused on the benefits associated with providing mentors to higher education professionals and to students seeking advanced degrees[11] as well as to beginning teachers, counselors, and principals in secondary and elementary education.[12]

Krupp found in her research study of a mentoring project in elementary and secondary schools in Connecticut that a mentoring approach "successfully fostered relationships between adults in public schools and improved the school climate."[13] Gehrke and Kay administered questionnaires and conducted interviews with a large sample of teachers to determine the influence of mentor-protege relationships on their careers. They concluded that "mentors and proteges are very much involved in working together in a wide variety of professional or career concerns. The relationships are open, informal, and have a high frequency of interaction."[14]

As mentoring relationships flourished, it became increasingly clear from studies of their benefits that the psychosocial development of individuals sharing the mentoring relationship was at least as important as the

career development of the proteges.[15] In a study on measuring the amount and quality of mentoring in organizations, Alleman described mentoring as an important relationship in the personal as well as the career development of adults.[16] A University of New Mexico study sought to determine what proteges learned from mentors and how they learned them. With regard to personal career development, findings from interviews of mentor-proteges suggested that proteges learned risk-taking behaviors, communication skills, respect for people, how to be a good listener, and how to get along with all kinds of people.[17]

Emphasis on the psychosocial functions of mentoring signaled the extension of the benefits of such relationships beyond professionals to a number of groups whose personal career development could be enhanced by contact with wiser and more experienced individuals. As a wider variety of clientele utilized the mentorship for group-specific benefits, definitions of mentoring derived essentially from the setting or study in which it occurred.[18] Anderson and Shannon noted in their 1988 article, "Toward a Conceptualization of Mentoring," that a commonly accepted definition of mentoring still had not been agreed upon. In that context, Anderson and Shannon developed a basic definition, including mentoring functions, behaviors, activities and necessary dispositions of mentors to foster the personal and professional development of individuals.[19]

Schockett and Haring-Hidore developed a model depicting four psychosocial and four vocational functions of mentoring. Psychosocial functions have been emphasized with regard to life career or personal career development while vocational functions have been associated with increasing skills more directly related to the job. According to Schockett and Haring-Hidore, psychosocial mentoring functions include role modeling, encouraging, counseling, and moving from transitional figure to friend. Vocational functions involve educating, consulting, sponsoring, and protecting. Schockett and Haring-Hidore conducted a factor analytic study in support of these two categories of functions, results of which added credence to the existence of two types of mentoring functions.[20] Results indicated that confirmation of the two functions could assist in determining which mentor functions are most beneficial at different stages of career development; in identifying which functions would be most valued by certain groups, such as business, educational, and helping professionals; and in implementing systematic mentoring programs by helping programmers recognize the functions on which to concentrate.[21]

Thus, while the resurgence toward mentoring may have been inspired by women seeking to climb the corporate career ladder, recent publications have revealed special new directions and applications of mentoring.[22] As further

indication of this shift of focus toward personal career development and the well-being of the individual are examples of mentorships for a number of ethnic populations, social service groups, and clinical clients. Benefitting from such relationships have been minority groups, abusing parents, the ill, the depressed, and the handicapped, among many others in need of support, counseling, and caring.[23] Rawlins and Rawlins stated that the purpose of their article, "Mentoring and Networking for Helping Professionals," was to encourage members of therapeutic fields to use and extend the concept of mentoring in working with people.[24] Since mentoring has been recognized as important to normal adult development, Rawlins and Rawlins felt elements of the concept could be useful for adults in therapy.[25]

Given the success of mentoring in educational settings with school personnel and its expanding clientele, providing benefits to student populations was only a short leap away. A review of the literature revealed applications of the mentorship with undergraduate students in higher education and with regular students and exceptional students in elementary and secondary public and private schools. A number of studies have indicated the use of mentorships frequently with the gifted and talented and to a lesser degree thus far with other special education groups.[26]

Cosgrove conducted an experimental study of a mentoring program for freshman college students. Pretest/posttest measures of confidence levels of the two groups showed significant differences in two areas closely related to the dependent variables utilized in this investigation--ability to set and achieve goals and ability to solve problems and make decisions.[27] In the textbook, Personality Development for Work, written for vocational students, the importance of a mentor in attaining a "success identity" was stressed. The importance of the psychosocial function of counseling in the mentor relationship was also emphasized.[28] In a study of a program designed to intervene in adolescent girls' lives before attitudes were formed that would limit their academic goals, mentoring was utilized as a tool to discover and develop talent. This approach was a deviation from models in which there was the assumption that innate talent was already in the process of being developed. In that study teachers were utilized as mentors, and findings supported the view that mentors can influence the career aspirations of adolescent women.[29]

With regard to mentoring programs for the gifted and talented, assessment of MAEP (Mentor-Assisted Enrichment Projects) showed that mentored students experienced personal career development in skill areas similar to those addressed in this study. Students were more motivated to do their

homework, and they attended meetings with mentors better prepared to do what had been planned.[30]

A 22-year longitudinal study regarding mentor experiences was conducted by Torrance. Elementary students were adminstered batteries of tests in 1958-1964. Follow-up data of adolescent and adult creative behavior were obtained in 1979-80. Results of mentored students correlated significantly for: quality of highest adult creative achievements; creativeness of future career image; number of recognized creative achievements; and number of creative style of life achievements.[31]

The area in which mentoring of students has been applied with increasing frequency of late is in the personal career development and retention of high-risk students. Educators in both higher education and in secondary schools have been challenged to design and implement initiatives to help those students who are most likely to drop out.

Heightened interest in assisting potential dropouts has stemmed from the economic realities colleges and universities face as enrollments decline,[32] from pressure from national task forces to reverse student failure and absenteeism in America's public schools,[33] and from social concerns. A sense of commitment to high-risk students on the part of educators at all levels has developed.[34] Indicative of the trend toward using mentoring to foster the personal career development of at-risk groups was the list

of topics in the proceedings of the First International Conference on Mentoring in 1986. Under the heading, "Mentoring: Aid to Personal Development and Career Awareness," appeared the following:

1. A Mentoring Experience in the South Bronx: A Successful Strategy for Conducting an Inner-City Mentoring Program
2. Student Mentoring: A Collaborative Approach to the School Dropout Problem
3. Linking Career Role Models with Minority Young Women[35]

Despite these topics, a literature review revealed a paucity of quantitative research regarding the use of mentors with at-risk students, including teen mothers. Many programs for high-risk groups operate with a minimum of funds. Lack of financial support and the tendency to presuppose that mentoring will be effective often results in a lack of research data which has been adequately tested.[36]

Two programs for potential dropouts did formally examine the effects of mentoring. The CUNY/BOE (City of New York and the New York City Board of Education) program has been cited as unique in its approach to tutoring potential dropouts because it incorporated mentoring. Directed at ninth grade potential dropouts, the program utilized education majors who could offer advice, a personal relationship, and academic skills improvement. The majority of mentoring sessions dealt with personal, social, and school concerns. Although the mentored group had better

attendance and GPAs than the control group, differences were not significant. Attitudes of mentees, however, were significantly improved.[37]

Similarly, Flaherty conducted an experiment in mentoring for high school students who had been assigned to basic courses. Flaherty felt that if students from lower socioeconomic backgrounds who were shunted into basic courses were provided caring mentors, academic performance would improve. He concluded that the use of mentoring to improve grade point averages needed further research. However, in support of dependent variables similar to those addressed in this study, Flaherty concluded that student attendance and attitudes in basic courses were sensitive to mentoring.[38]

Information with regard to the outcomes of the majority of the mentoring endeavors cited herein, however, is largely anecdotal or reflective in nature. For instance, a program called Career Links paired Chicago girls between the ages of 14 and 18 who were at risk for dropping out of school with working women. Successful women served as role models, providing advice, support, and encouragement as the girls sought to become more self-sufficient. The program emphasized the personal career development and job readiness of economically disadvantaged young women.[39] The guide provided no information regarding formal evaluation of this initiative. Administrators reported, however, that mentors

have assisted participants with application to college and obtaining part-time employment.[40]

More specific to this particular study, mentoring was applied as a form of support to facilitate the personal career development and participation/retention of single parents, teen mothers, and at-risk inner-city youth as well as other high-risk students in education and job training programs.[41] In addition, volunteer mentors have assisted students in a variety of adult education programs, including illiterate adults in basic education programs, [42] the clientele of which traditionally have been considered at-risk for absenteeism and attrition. Many adult education students who have worked with mentors have reported growth in their sense of intellectual competence, sense of purpose, feelings of autonomy, and personal integrity.[43]

Mentoring was a key element of a program for inner-city youths in Washington, D.C., which was designed to help young people find and maintain meaningful employment. Mentors provided support and guidance for this high-risk group as they faced the world of work. The program has received enthusiastic endorsement by employers, and administrators report that participants have achieved personal growth and realized career and life goals. Programmers further reported that the rapport between mentor and student, which often extended beyond termination of the program, was especially noteworthy.[44]

Other case studies of successful mentoring programs have revealed the use of mentors to provide role models whom participants would not usually have in their lives. The Registry in Seattle, Washington, involved members of the business community to mentor Seattle public school students. Administrators have claimed success in exposing students to the business world, in demonstrating reliability and commitment, and in setting positive examples of adult role models.[45] The Directions Career Mentorship Program of San Francisco has credited the use of mentors with their success in assisting low-income minority youth reach aspirations and potential by increasing job and interpersonal skills.[46]

That disenfranchised and disadvantaged women such as teen mothers seeking entry into the workforce have come to accrue personal career development benefits through mentoring has crystallized the essence of the concept. Several teen parent projects around the country have recruited community members to serve as mentors for a variety of aspects of personal career development in their clients.

Project Redirection was a national demonstration effort for teen parents. In this case a longitudinal study was conducted, providing data to confirm that the use of mentors contributed to operationally successful programs in terms of employment-related attitudes and experiences and chances for self-sufficiency of young mothers.[47]

A major criteria for the Wee Care program for teen mothers in Philadelphia was the use of role models with whom the client population could identify. In that program there was also a focus on improving personal career development skills similar to those addressed in this study--stress management, setting goals, and developing healthy relationships, all with a strong emphasis on staying in school. Although no formal evaluation of the program has been conducted, administrators feel that they have shown participants by example that teenage pregnancy does not have to be the end of dreams and aspirations.[48]

Two projects to improve the life chances of teenage parents, Teen Moms in Portland, Maine, and the Teenage Parent Alternative Program in Lincoln Park, Michigan, utilized elder mentors. The initiatives were studied by Public/Private Ventures, a nonprofit development and research organization in Philadelphia. The purpose was to determine the benefits of intergenerational programs for at-risk youth. The organization found that bonds between youth and elders did form; that there was a willingness on the part of elders to deal with a full range of problems and emotions of students; that there was an improvement in the quality of the day-to-day lives of proteges as they learned many functional skills from the elders.[49]

Finally, as further evidence of the use of mentoring to increase the personal career development of young women

in job training programs, the South College Office Administration Faculty and Department of Student Affairs in Savannah, Georgia, felt that their secretarial students would grow personally and professionally if they had role models from the business world. Members of the Professional Secretaries International were paired with students in the secretarial program so that proteges could receive some hands-on office experience and learn more about the workplace, the role of the professional secretary, and refine their own personal goals. Students reported that they were encouraged to work more diligently to achieve career goals and that they have been motivated to emulate their mentors once they are in the workforce.[50]

Social and Adult Learning Theories and Mentoring

According to the Dictionary of Occupational Titles, mentoring ranks as "the highest and most complex level of functioning in the people-related hierarchy of skills."[51] The concept has been well substantiated in both social learning and adult learning theories.

Social learning theory deals with behaviors that are the result of social interaction.[52] Social learning theory has been defined as learning socially expected, or appropriate and desirable, behaviors.[53] One basic premise of the theory is that learning occurs through role models. Bandura maintained that the process of acquiring acceptable behaviors can be accelerated by identifying and providing

appropriate models.[54] Bolton addressed the importance of role modeling in determining occupational choice.[55] She explored the influence of social learning theory, particularly the function of modeling, on the career development of women. In one article, Bolton outlined Bandura's findings on the effects modeling produces on observers. According to Bandura's research:

1. New patterns of behavior can be acquired through observation.
2. Behavior already learned can be strengthened or weakened.
3. Similar behavior in observers can be facilitated by the actions of others serving as social prompts.[56]

Bandura reasoned that modeling influences are paramount in everyday learning because models demonstrate how required activities are to be performed, modeling provides a faster way of learning than that of direct experience, and some complex behavior can be produced only through the influence of models.[57] Utilizing the research of Bandura and Bolton, Elbert Glover directed his comments on the power of modeling at fellow health educators. Glover cautioned them about the importance of setting a proper example, noting that for many of these professionals health concepts were strictly theoretical and absent from their personal experiential base. Glover characterized modeling as a powerful tool that could either greatly enhance or destroy any verbal communications to students about human health.[58]

Bolton likened the mentoring experience to role modeling. She suggested, though, that mentoring involves more than role modeling since the modeling influences are personalized for the individual by direct involvement.[59] Bolton also posited the view that the mentor contributes in the areas of personal habits and specialized information and attitudes as they relate to certain vocations.[60] Swerdlik and Bardon also included nurturance in the perceived characteristics of the mentor, along with competence, social status, and power.[61] The conceptualization of mentoring by Anderson and Shannon, and utilized in this study, obviously went beyond the observational functions of modeling and embodied the personalization and nurturance to which Bolton and Swerdlik and Bardon refer. Anderson and Shannon featured the role model in performing, teaching, sponsoring, encouraging, counseling, and befriending functions, all within the context of a nurturing relationship.[62]

Anderson and Shannon noted also that in their conceptualization of mentoring the behaviors associated with the teaching function were guided by the principles of adult learning theory. Behaviors included modeling, informing, confirming/disconfirming, prescribing, and questioning.[63] In Merriam's critical review of the literature on mentors and proteges, she suggested that mentoring could be an important vehicle by which adults in our society learn. Merriam referred not only to mentoring relationships in

formal adult education settings but also in informal, close friendships in which adults have reported learning.[64]

Social psychologists tell us that individuals must experience "anticipatory socialization" to succeed as adults in their personal lives and in their careers. To perform well as an adult, researchers say, one must not only possess resources and skills but also understand what the adult role involves. According to Phillips-Jones, mentors can be crucial to initiation into the process, guiding and providing examples in the progression from youth to adulthood.[65] Levinson characterized good mentoring as "analogous to good parenting." He saw the mentor as instrumental to a young adult's entry into the world of adults, essential for developing a meaningful life.[66] Levinson's study in 1978 suggested that a mentor relationship is the most important relationship in young adulthood. However, Levinson concluded that at that time most adults gave and received very little mentoring.[67]

Increasing instances of at-risk youth in our society who are growing up in isolation from caring, consistent adult relationships have been documented. Strong relationships have been deemed critical for adolescents navigating a treacherous course to adulthood. A body of social science research suggests that adult relationships--parents, grandparents, neighbors, and other interested individuals--are common among the more resilient. Students

who achieve success in spite of their economic circumstances consistently have access to helping relationships with interested adults.[68] Many teen mothers are products of fractured or dysfunctional families and lack adequate or appropriate parental models. Concurrently, dropping out of school has precluded sufficient teacher modeling, which many successful people cite as instrumental in shaping their lives. Mentoring can be considered a potential source for providing surrogate developmental relationships for parenting adolescents.[69]

Adult learning theory's experiential learning component also provides a theoretical basis for studying mentoring for personal career development. The value of experiential learning has long been illustrated in the countless examples of young apprentices learning their crafts from masters. The experienced were considered significant in fostering the educational and career development of novices.[70] Craftsmen tutored the uninitiated until they could earn their own way. Apprentices in turn served their own proteges. Modern-day apprenticeship programs usually have existed within labor unions for blue collar workers and various internship programs for professionals.[71]

In the Greek tragedy Antigone, Sophocles says: "The ideal condition would be, I admit, that men should be right by instinct. But since we are all likely to go astray, the

reasonable thing is to learn from those who can teach."[72] Experiential learning emphasizes experience-based learning and personal growth. The term became a "buzz word" of the eighties, but it has actually existed since man and woman evolved and taught life skills to their children.[73] As surely as Mentor was a surrogate father to Telemachus, today's mentors exemplify the essence of experiential learning by teaching life skills to those who have lacked parental and other models to provide necessary developmental exercises.

According to Atkinson and Murrell, Kolb's Model of Experiential Learning was formulated in part from the work of Dewey, who recognized the importance of experience in learning.[74] Kolb's model included a "reflective observation" component which relates to the concept of mentoring for personal career development.[75]

Howard Seeman never mentioned the use of mentors in his article on the resistance among today's educators to experiential learning. However, he captured the value of mentors in facilitating the transition to the workplace:

> Since feelings are often crucial to understanding the workplace, knowledge may be emotional and even nonlogical. Besides reasoning and logic, craft and intuition must be included in knowing....we must consider not only the truth-value of propositions but the appropriateness of feelings as well.[76]

Seeman urged instructors to be value clarifiers, facilitators of trust, even counselors, to show their

"studentperson," thereby advocating the psychosocial functions of a mentor relationship.[77]

Adult learning theory features another important developmental stage for adults termed "generativity versus stagnation." Erikson has studied various "ego stages" which he contends all adults traverse. As adults enter the generativity versus stagnation stage, they either succeed or fail to leave the last phases of childhood behind and assume responsibility as an adult. Successful completion culminates in a sense of caring about the next generation. Generativity can be achieved by serving as a mentor, trading the self-immersion of youth for helping others.[78] The possibility for generativity versus stagnation exists as a benefit to proteges as well as to mentors. If mentored individuals eventually engage in similar relationships as mentors, they could achieve further success in completing their life stages by entering generativity.

Volunteerism and Mentoring

The potential positive outcomes for all actors involved in helping relationships has long provided the basis for volunteerism in our country. Many professionals, including public school educators, have learned that, with the help of volunteers, programs can be extended, enhanced, and expanded.[79] The other side of the coin is that volunteers themselves have experienced growth and satisfaction. Volunteer mentors have achieved this growth

and satisfaction from developing new talent, being able to pay back the debt of having a mentor, and having help from their proteges in completing work.[80]

Jensen designed a value-laden model of leisure-time uses. Service to others, of which volunteering is a part, was represented as the most satisfying and beneficial use of leisure. Representing a combination of inner-directed and outer-directed activities, such service provided the chance for both altruism and self-development.[81] In the case of elder mentors, for example, volunteer mentoring programs have provided the old with new roles, particularly for those of little means who have found remaining in their communities and working with young people a desirable option.[82] Volunteering has also afforded citizens a vehicle for using special talents that otherwise would not have been capitalized on and the opportunity for recognition and approval.[83] According to Frey and Noller, ample evidence exists to indicate that the symbiotic linkage represented in a mentoring relationship can be mutually beneficial.[84]

The need for community volunteers has assumed more importance with a swing toward conservatism in our country. An increased emphasis on individual initiative has meant that social concerns have not been confronted as in the past. As social agencies have become overburdened, voluntary community participation has been offered as a way

of addressing social and economic problems and improving quality of life for community members.[85]

Adult education departments have existed as a resource for the initiation of community endeavors to effect educational interventions and outcomes for less fortunate citizenry. Boggs contended that adult education literature supports an involvement by adult educators in community problem-solving.[86] The implementation of mentoring programs for adult education populations can be viewed as one example of the incorporation in adult education programming of volunteerism for the purpose of addressing social concerns. The possibility exists that elements of mentoring could enhance educational opportunity within the community.[87] Volunteer programs, including mentoring programs, will not offer a panacea in dealing with groups such as adolescent parents. However, rapidly escalating demands for services and decreasing resources render this concept of "people helping people" potentially instrumental in providing needy groups, and volunteers, with a special quality of life.[88]

Importance of Mentors' Qualities in Formal Mentorships

In its strictest sense, mentoring traditionally has required a natural formation of the relationship. Mentorships were the result of informal liaisons or chemistry between two people. Planned mentoring responsibilities emerged in business and industry as there developed the belief that leadership could not be left to

chance. A previous reliance on the forming of spontaneous liaisons gave way to formal policies.[89] By the same token, mentoring programs were implemented in educational and other helping agencies to assure the completion of developmental tasks in students and clients. The latest applications of the concept have usually included assigned mentors and required participation by the proteges.

What has appeared to be most important with regard to the success of formal mentoring relationships are the characteristics of the mentors.[90] The importance of the qualities of the mentor has been reiterated throughout the literature. The research of Alleman, Cochran, Doverspike, and Newman indicated that mentoring qualities have more to do with behaviors than with innate attributes of select individuals. In the correlational study of Alleman et al., one question was whether mentors and nonmentors behaved differently. Results revealed that mentors and nonmentors did exhibit different behaviors. Difference in behavior accounted for 21.9 percent of the variance between groups. Alleman, Cochran, Doverspike, and Newman did not specify which behaviors of mentors toward proteges were included in the instrument used but indicated that the behaviors had been derived from the literature.[91]

The guide to mentoring young women developed by the Center for Sex Equity in Portland, Oregon, noted that contrived relationships provide the opportunity for a mutual

commitment to the relationship from the beginning. In more formal mentorships, objectives based on the protege's needs and the mentor's ability to meet those needs can be formulated.[92] According to the guide, however, the effectiveness of the mentors depends on the possession of certain traits. The guide stressed that mentors should be well-established workers with the self-confidence to provide mature guidance to the protege. The willingness to make a time commitment is considered essential. The guide suggested the following personal characteristics which would enable mentors to be appropriate role models:

1. Self-awareness and self-confidence with regard to both work and interactions with others.
2. High standards and expectations of oneself and one's colleagues.
3. Enthusiasm and a sense of humor.
4. Clear and effective communications skills, including the ability to express a point, defend a position, and confront hard issues without becoming overly aggressive or judgmental.[93]

The choice of characteristics are in concurrence with the findings of Frey and Noller, who concluded that great promise exists for using mentors in a variety of situations in which individuals have aspirations and needs and in which there are those who could offer support, guidance, knowledge, opportunity, and recognition.[94]

Intergenerational programs utilizing elder mentors, and previously referred to in this study, have depended on the characteristics of continuity and consistency which

elders provide. Many at-risk youth, including teen moms, have experienced relationships with adults (often their parents) who let them down, exhibited erratic behavior, and were merely sources of turmoil.[95] A number of authors echoed Levinson's correlation of good mentoring and good parenting.[96] Anderson and Shannon advocated a kind of relationship in which the mentor would be a good substitute parent for what they termed an "adult child."[97] Noller also compared mentoring to parenting. In line with the research of Alleman et al., regarding the importance of behavior versus personality, Noller noted the necessity for utilizing guidelines and practices. Noller emphasized that being chosen a mentor would not make one an expert. Rather, just as a parent must prepare for the role, effective mentoring is encouraged when effective strategies are followed.[98]

Bellflower conducted a survey of mentored gifted students in an effort to identify traits valued in such relationships. Findings indicated that securing mentors with certain talents or skills who were willing to work with a student was not enough. Instead, the nurturing qualities of the mentor that imply a personal and friendship aspect to the relationship were valued.[99] A descriptive-correlational study to analyze the success of the Ohio Cooperative Extension Services mentoring system for first-year agents described a planned program of mentorship. Researchers concluded that with proper guidance a successful system can

be established and maintained. However, the study found that the key to the success of a mentorship was the selection of mentors who were dedicated and willing to commit their time toward building an open and trusting relationship.[100] The Vermont Mentor Program was designed to assist newly employed trade and industrial education instructors. In Fuller's evaluation of this program, he characterized the mentor as the force behind the program. Mentors who participated in the Vermont Mentor Program were required to be master educators who commanded respect from other educators and the community.[101]

The literature review revealed numerous applications of mentoring programs in educational settings and, for the most part, praise for the benefits accrued. However, Flaxman, Ascher, and Harrington concluded in their study of mentoring programs for disadvantaged and tenacious youth that planned mentoring programs should be considered a "modest intervention."[102] Flaxman et al. did accede to the fact that mentoring could improve the social potential for disadvantaged and tenacious youth by providing resources these young people otherwise would not have. Likewise, they admitted that mentoring can give this population some psychosocial support in the development of new behaviors, attitudes, and ambitions.[103] Flaxman, Ascher, and Harrington criticized the literature regarding mentor programs for several reasons. Since their definition of

mentoring presupposed an interpersonal attachment, they felt the term was used loosely for a variety of program initiatives that were more helping relationships than mentoring. Flaxman et al. were concerned also because mentoring often was only one programmatic intervention among many. Obviously, mentoring in combination with other interventions made it hard to determine the effects of mentoring alone. Flaxman, Ascher, and Harrington criticized many of the mentoring programs for lack of descriptions of program components and lack of specific goals.[104]

Few experimental studies have been conducted to determine the effects of such mentoring programs, especially on the personal career development of teen mothers in a job training program. Given the lack of appropriate role models for these young women, identification of community members who could be matched with participants based on the mentors' expertise and the students' needs to facilitate their personal career development and motivation for full participation in TAPPS appeared to be appropriate. This study examined the effects of such a mentorship endeavor. Further, the study addressed some of the criticisms of previous studies of mentoring programs. A definition of mentoring based on those functions identified in the literature as appropriate for the goals and objectives of the program was used. Another asset of the study was the fact that goals and objectives were clearly outlined to the

mentors with activities to address them. Finally, the study attempted to provide empirical evidence regarding the effects of the mentoring program over and above a number of other components offered to teen mothers in a job training program.

Mentoring has received acclaim as instrumental in fostering the personal career development of both men and women. A review of the literature indicated that mentoring is being used increasingly to enhance the personal career development of high-risk groups, including teen mothers. However, research regarding the effects of mentoring programs for at-risk students is scarce. When evaluations are provided, they often are based on reflective observations of the programmers. Often it simply has been assumed that a concept well-grounded in learning theory would naturally benefit high-risk students. To provide more objective information as to the benefits of mentoring teen mothers in a job training program, the following hypotheses were tested.

Research Hypotheses

1. The mean scores of teen mothers in a job training program who have been randomly assigned to mentors will be significantly higher than the mean scores of teen mothers not randomly assigned to mentors on a test of personal career development variables of problem solving, personal interaction, and coping skills, as measured by the Sixteen Personality Factor Questionnaire.

2. The mean scores of teen mothers in a job training program who have been randomly assigned to mentors will

be significantly higher than the mean scores of teen mothers not randomly assigned to mentors on a test of motivation for study and work, as measured by the Salience Inventory.

3. The mean percentages of attendance of teen mothers in a job training program who have been randomly assigned to mentors will be significantly higher than the mean percentages of attendance of teen mothers not randomly assigned to mentors, as measured by a comparison of number of hours in the program and attendance records of participants.

4. The retention rate of teen mothers in a job training program who have been randomly assigned to mentors will be significantly higher than the retention rate of teen mothers not randomly assigned to mentors, as measured by number of each group completing the program.

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CHAPTER III

METHODS AND PROCEDURES

This chapter will include discussion of sample and setting, design of study, instrumentation, data collection procedures, and method of analysis of data.

Purpose

The purpose of this study was to determine the effects of mentoring on the personal career development, attendance, and retention of teen mothers in a job training program. The study was conducted within the Teen-Age Parent Program of Skillbuilding (TAPPS), a special project of the Chesapeake Public Schools Adult Continuing Education Department, Virginia Public School System.

Sample and Setting

The sample for this study was the thirty voluntary participants of the 1990-1991 Teen-Age Parent Program of Skillbuilding (TAPPS). This intervention was offered by the Chesapeake Public Schools Adult Continuing Education Department, a comprehensive urban adult education department providing a variety of educational services to some 2,000 citizens per year. As mentioned in Chapter I, Chesapeake is an urban area in the southeastern corner of Virginia.

Chesapeake is part of the Norfolk-Virginia Beach-Newport News Metropolitan Statistical Area, the 27th largest metropolitan market in the country. The mentoring program and study of the effects thereof was implemented in the third year of operation of TAPPS. All students were residents of Chesapeake except one, who was from Virginia Beach. Participants ranged in age from fifteen years to twenty-one years. Most of the students were seventeen and eighteen years old. Ten of the thirty participants were married. Nineteen were white and eleven were black. All were high school dropouts although three had obtained their GED Certificates prior to enrolling in TAPPS. Four teen mothers had completed the 7th grade, seven had completed the 8th grade, four had completed the 9th grade, eight had completed the 10th grade, and seven had completed the 11th grade. All students had earned less than $5,000 the previous year, and thirteen were receiving Aid to Dependent Children.

Research Design

To investigate the effects of mentoring on the dependent variable personal career development (problem solving, personal interaction, and coping skills, as they relate to motivation for study and work), a pretest-posttest control-group design was used. Although this variable deals with the affective domain, the threat of mortality made it advisable to utilize a pretest, especially since a

considerable amount of time, five months, elapsed between pretests and posttests. The dependent variables, attendance and retention, were assessed using a posttest-only control-group design.

Students were interviewed in July and August of 1990 and enrolled in TAPPS based on qualifications delineated in the project proposal. Young women up to age twenty-one who were parents and dropouts and most in need were selected. The teen parent program began in September, 1990, with participants attending classes Monday through Thursday. Students received two hours of GED Preparation and two hours of job training each day. The job training options were computer technology, office technology, and certified nursing assistant programs. Participants received an allocation of $8 per day of attendance as reimbursement for child care and transportation. Individual and group counseling were available for students, and support groups based on a commonality of interests were offered. A variety of workshops and seminars were also presented throughout the project, including stress management, personal career development, communications, appropriate dress, job search and resume preparation, interviewing skills, financial aid for higher education, and gender equity.

In October students were matched on GED Pretest scores. Matching involved pairing students who had comparable scores on the GED Pretest. Students from each

pair were then randomly assigned to either the experimental or control group. GED Pretests are routinely administered to all TAPPS students to aid in planning appropriate GED preparation instruction. The GED Pretest scores were selected for the matching procedure because of the variables being tested in the study. The personal career development variables of problem solving, personal interaction, and coping skills, as they relate to motivation for study and work, and attendance and attrition are related to the issue of participation in adult education programs.

A basic tenet of adult education theory is that amount of formal schooling has more influence than any other variable in determining whether adults will participate in educational experiences. Young people who have advanced furthest in the formal educational system are usually the most active learners later on. In addition, students who have experienced failure in educational endeavors often find it difficult to overcome their past negative experiences with education.[1] As a result, they lack the personal career development skills required to participate fully in new educational experiences. This study deals with the effects of mentoring on the personal career development variables that relate to full participation in a job training program offered through the adult education department. Thus, educational attainment would be appropriate for equating the control and experimental groups. The GED is recognized as a

valid and reliable measure of past educational achievement. After the matching procedure and random assignment were completed, students were administered pretests of the personal career development variables of problem solving, personal interaction, and coping skills (The Sixteen Personality Factor Questionnaire) and motivation for study and work (The Salience Inventory).

Description of the Mentoring Program

Mentors were selected from the community based on their expertise and attributes as role models for teen parents. The guidebook, Hand in Hand: Mentoring Young Women, Guide for Planning, Implementing, & Evaluating a Mentoring Program, was developed by the Center for Sex Equity in Portland, Oregon. Its development was part of a two-year project funded by the Women's Educational Equity Act Program, informally known as the Mentor Project. The guidebook included the following qualifications for mentors which were used in the selection of mentors for this study:

1. Willingness to invest time and energy in the professional development of a student
2. Conviction of or belief in the potential of young women to contribute to the work force
3. Some measure of experience, skill, advancement, recognition, or achievement in one's own occupation or career
4. Awareness of and confidence in one's style of interaction and work
5. High standards and expectations of oneself and one's work colleagues

6. Enthusiasm and a sense of humor

7. Clear and effective communication skills, including the ability to express a point, defend a position, and confront "hard" issues without getting overly agressive or judgmental[2]

In addition, administrators of TAPPS designed the program and have implemented it since its inception in 1988. Therefore, programmers were cognizant of the attributes necessary for positive interaction with this population, such as the ability to remain nonjudgmental and refrain from assigning personal values to proteges.

A pool of possible candidates for mentoring teen parents had already been identified through contacts made by the adult education department with other agencies in the area. Presentations had been made regarding TAPPS and other adult education programs to area businesses and professional organizations to garner support for the community's undereducated citizens. Also, administrators in the Adult Continuing Education Department have served as educators in the community for years and have established many reciprocally beneficial relationships. Letters were sent to a group of women who had been identified as possible mentors based on the qualifications suggested in the Oregon Mentor Project and outlined above. Potential mentors were invited to attend an orientation meeting for volunteer mentors for the teen parent program. During this meeting they were advised that fifteen mentors would be required for the TAPPS program then in progress but that mentors would be needed

for other adult education programs and for future teen parent programs. Mentors were selected and matched with students based on expertise of mentors and needs of students, personal compatibility, and geographical proximity.

All mentors were women. They included the Treasurer of the city of Chesapeake, a supervisor of guidance and counseling, a counselor from a local community college, a secretary, a teacher, a guidance director, an assistant principal who holds a Ph.D., two nurses, a former participant of TAPPS who successfully completed the program and is in a federal apprenticeship program, three civil service employees, a computer programmer and instructor, and a community resource supervisor who works with teenagers.

Mentors participated in the orientation session in October, 1990, at which time they received information regarding the mentoring process and the objectives of this mentoring endeavor. Mentors were advised that the goals of the program would be to increase students' personal career development and attendance and retention in TAPPS. Stated objectives included increasing students' problem solving, personal interaction, and coping skills as they relate to motivation for study and work and full participation in TAPPS.

The agenda included a welcome and introductory remarks by the Director of Adult Continuing Education; background on

the purpose of the mentoring program and description of the population; general role and functions of mentors; sharing of information by mentors, including reflections on their own mentors, comments on why they were interested in mentoring, and fears and concerns regarding mentoring; logistics of the mentoring program for TAPPS participants; and information on mentoring activities. Mentors were not informed that they would be participating in an experiment.

A handout titled "Characteristics of Mentors" addressed the topics, "What is a Mentor?" and "Why a Mentor Is Important," as well as "The Qualities a Mentor Needs."[3] A logistics handout dealt with the assignment of mentors and proteges; making initial contacts; duration of the mentoring program; frequency of contacts; what the first meeting should involve; the substance of subsequent meetings and activities to address proteges' personal career development, motivation for study and work, and full participation in TAPPS; and follow-up activities.

A handout of tips for being an effective mentor was also provided. Examples of suggestions included: alertness to nonverbal clues, getting to know the students as individuals, being a good listener, answering questions directly, being consistent, and realizing that there are no failures in a mentorship.[4] Mentors were also given a list of behaviors that support learning, such as active listening, perception checking, relevant questioning,

informing, and sharing a viewpoint honestly regarding values and biases. Conversely, limiting behaviors were also addressed--giving advice, interpreting others' motives, approval or disapproval on personal grounds, emotional obligations, denying another's feelings, and commands and orders.[5] Suggestions for productive conversations were also provided. Some suggested were: favorite ways to spend time, a typical day, biggest accomplishment or biggest challenge since a previous meeting, something the mentor does not yet know about the protege, and important people in the protege's life.[6] The last handout addressed topics regarding the mentor's work which the mentor could discuss with her protege. Examples of how the personal career development and motivation for study and work of the proteges could be fostered included: providing a general description of the mentor's job; discussing job responsibilities, equipment and tools used on the job, working hours and salary range, and personal qualities needed for the mentor's job; and attitudes and values important to the mentor and reflected in her work, among others.[7]

Mentors were reminded during the orientation meeting that at-risk students could be at risk for mentoring as well and were encouraged to take the initiative to make the mentorship work. Mentors were also told to contact administrators of the project at any time for help if they

had difficulty interacting with proteges. They were advised that followup activities would be conducted to monitor the progress of the mentorships and to provide assistance as needed. The objectives of the program were reiterated. Mentors were reminded that the focus of their interactions should be on increasing the personal career development variables of problem solving, personal interaction, and coping skills as they relate to motivation for study and work and specifically to increasing full participation in TAPPS.

Mentors were telephoned the weekend after the orientation meeting with the names of their proteges and pertinent information about them. They were encouraged to contact them during the next week. Thereafter, mentors were to make at least two contacts per week, one telephone conversation and one meeting with protege. However, mentors were encouraged to increase time spent with proteges if possible. Interactions were to focus on problem solving, personal interaction, and coping skills, as they relate to motivation for study and work and full participation in TAPPS.

In early November, a letter was sent to congratulate mentors on their involvement in TAPPS. They were asked to contact administrators of the program if they had been unable to interact with their proteges. The importance of adhering to the schedule of contacts was again emphasized.

The goal of fostering full participation in TAPPS was reiterated, and they were reminded that they were to be addressing the areas of problem solving, personal interaction, and coping skills, as they relate to motivation to attend school and secure employment. Mentors were asked to keep an accurate record of all contacts made. They were also advised that a meeting of mentors would be held after Thanksgiving, at which time mentors would be asked to share any techniques found to be especially productive with their proteges. A handout of hypothetical incidents that mentors might encounter was enclosed with this correspondence. In addition, mentors were telephoned during the month and reminded of the areas of personal career development on which they were to be concentrating. Mentors were also provided reinforcement regarding the importance of fostering motivation for full participation in TAPPS.

A meeting of mentors was held on November 22. At this time a handout of the goals and objectives of the mentoring program previously discussed was distributed. The objectives addressed the problem solving, personal interaction, and coping skills variables and included suggested activities to accomplish them. For example, to improve the problem-solving skills of the protege, one suggestion was that the mentor assist the protege in investigating child care arrangements that must be considered when the protege obtains employment. To improve

the personal interaction skills of the protege, one suggestion was that the mentor meet with protege and child during the holidays, present a small gift to the child, and model appropriate behavior between adult and child. To improve the coping skills of protege, one suggestion was to focus on the use of a calendar, lists, and other time management tools. To improve the motivation for study and work of the protege, one suggestion was to take the protege to the mentor's worksite or some other worksite to help initiate protege into the world of work.

In addition to telephone calls made to mentors, in December individual Christmas cards were sent to thank them for their participation in the TAPPS mentoring program. As an incentive to interact with proteges, they were advised that they would be reimbursed for any costs up to $10 incurred in activities during the month of December.

On January 10, mentors were sent a letter inviting them to lunch at a local restaurant the following week in appreciation of their efforts in the mentorship program. They were encouraged to step up their activities to increase the personal career development of these young women. Mentors were advised that during the luncheon meeting, the possibility of providing on-the-job experiences for their proteges would be discussed. They were also reminded to continue to keep records of all contacts made.

At the January 17 luncheon meeting of mentors, objectives to be accomplished by February 15 were distributed. Again, the personal career development variables were addressed. Examples of activities to accomplish the objectives were: Mentor will initiate a self-inventory of assets and liabilities with regard to obtaining employment by the protege.[8] Mentor will utilize resources such as videotapes, presentations, and other resources which relate to the world of work, in conjunction with on-the-job experiences. Mentors received a handout titled "Planning to Get a Job." This handout included exercises for mentor and protege to assess the protege's assets and to conduct an inventory of assets and liabilities of the protege with regard to personality and attitudes, education, skills, and social relationships.[9] In addition, information as to what employers look for with regard to personal appearance and attitude was addressed in the handouts, as were tips on personal appearance and attitudes when job hunting[10] and effective use of the telephone.[11] Mentors were also given forms to encourage and facilitate the recording of mentorship activities.

On February 5, mentors were sent a letter and enclosed materials to utilize in interacting with proteges. A series of questions relating to how the protege would handle herself in a variety of situations was provided. These were questions that proteges should ask themselves from time to

time to make sure they are dealing with people, problems, and successes in effective ways. For example, one group of questions was: What do you do when someone or something makes you really mad?, How do you handle harrassment (someone giving you a hard time)?, What do you do with people who say things that put you down?[12] Two articles relating to mentoring were also enclosed: "Mentoring: An Age Old Practice in a Knowledge-Based Society"[13] and "Mentoring: A Promise for the Future."[14] Mentors were also asked to return records of mentoring activities for the months of November, December, and January. They were informed that another luncheon meeting would be held on February 20.

The February 20 luncheon meeting served as a time for discussing individual mentorships, with no formal guidelines for the get-together. Mentors were reminded that the mentorships would be officially ending the first week in April and that time was of the essence in improving the personal career development and motivation for study and work of their proteges.

In March, personal letters relating the progress of the proteges were sent to the mentors. In addition, phone conversations between mentors and administrators centered on possibilities for employment or assistance in obtaining financial aid for proteges to continue their education.

The mentoring program lasted some five months of the nine-month TAPPS program. At the end of March students were administered posttests of personal career development (problem solving, personal interaction, and coping skills) and motivation for study and work.

Students had been informed only that community support for TAPPS was being solicited and that some participants would be contacted by community members. The control group received all the support services of TAPPS except the mentoring program. Services for this group included individual and group counseling; child care and transportation allocations; and workshops, seminars, and support groups that addressed preemployability and employability skills, gender equity, and life skills management. The experimental group also received those support services as well as the mentoring program. The study sought to determine if the addition of mentoring as a form of support was useful over and above the other support mechanisms offered in TAPPS.

Mentors were sent letters of thanks in April and told that the formal mentoring program for this group was officially over. However, the women were encouraged to continue the relationships if they so desired. Personal notes on the current status of their proteges with regard to success in the program were included. Additional copies of the forms for recording any contacts with proteges were

enclosed in an effort to garner as much information as possible regarding the mentorships. Logs of activities were used to ascertain whether mentors had adhered to the guidelines of the program, both with regard to frequency of interaction and activities for accomplishing the goals and objectives of the program.

Data Collection

As mentioned previously, upon enrollment, students were administered the GED Pretest, the scores of which were used in the matching procedure. All students were administered a pretest and posttest of personal career development relating to the problem solving, personal interaction, and coping skills variables. The pretest was administered in October, 1990, and the posttest was administered at the end of March, 1991.

The Sixteen Personality Factor Questionnaire, which was used to measure the personal career development variables of problem solving, personal interaction, and coping skills, is a global representation of an individual's coping style, ability to perceive certain specific environmental requisites for personal behavior accurately, and reactive stance to an ever-fluid and transactional environment. Items are related to the career-oriented personality of the respondent. The sixteen personality factors measured to determine whether students score low or high on problem solving, personal interaction, and coping

skills rest within the context of general theory of personality.[15] Comprehensive coverage of personality by the Sixteen Personality Factor Questionnaire rests upon measurement of sixteen functionally independent and psychologically meaningful dimensions isolated and replicated in more than forty years of factor-analytic research.[16] More than thirty-six factor-analytic investigations have been conducted, and more than 10,000 individuals have been involved in exploring and replicating the psychometric scales under a variety of conditions.[17] The average (across primary scales and samples) short-interval reliability for Form A is .80. Similarly, the average long-interval reliability is .52 (eight-year interval).[18] Sten scores, which are obtained from raw scores, are derived from significantly high-low attribute patterns.[19] The sixteen dimensions are essentially independent. Any item in the test contributes to the score on one and only one factor. Experimentally obtained correlations are small.[20] Combinations of individual personal attributes can be used to suggest respondents' probable reactions with regard to the variables of problem solving, personal interaction, and coping skills.[21]

The personal career development variable, motivation for study and work, was measured by the Salience Inventory (SI), an inventory scored for participation in, commitment to, and value for the various life roles of student, worker,

homemaker, leisurite, and citizen.[22] However, average scores for participation, commitment, and value expectations with regard to study and work were the focus of this research study. Students were administered the pretest in October, 1990, and the posttest in late March, 1991.

The SI was developed as a tool for both career development researchers and practitioners. It was designed for both national and cross-national use,[23] and its psychometric qualities render it useful for individual counseling and surveys.[24] Salience Inventory scales are all very reliable with alpha coefficients in the .80s and .90s.[25] Two measures of reliability were computed for this form: internal consistency (alpha coefficients) for high school, college, and adult samples and stability (test-retest) for college population. Alphas for all three populations were above .80.[26] The SI development methods have assured content validity. Efforts were made to have items common among adolescents but also meaningful to adults and other items which would permit some populations, such as adults, to show higher levels on the participation, commitment, and values scales.[27] Construct and concurrent validity are shown by intercorrelations of the scales for high school, college, and adult samples. In a sample of 574 high school students, correlations between participation and commitment scales were .75 for study and .49 for work. Correlations between participation and value expectations

scales were .52 for study and .41 for work, with intercorrelations of other role scales comparable. Although the commitment scale and the value expectations scale both measure commitment and are theoretically similar, they use a different format. Participation scale is theoretically different from commitment and value expectations scales. Good evidence is available from this sample of the convergent and divergent validity of the three scales.[28] Predictive validity cannot be assessed until time has passed and criterion data have been collected, which has already begun.[29]

Attendance was computed based on a ratio of number of hours encompassed by the program to number of hours of attendance for both groups. Accurate records of attendance were kept by all instructors. Retention was computed based on the number of students in each group completing the program.

Analysis of Data

The purpose of this study was to determine if significant differences in personal career development, attendance, and retention were demonstrated by the two subject groups. A two-factor repeated measures analysis of variance was used to analyze the personal career development pretest data and also to analyze personal career development posttest data. Salience Inventory pretest and posttest scores on motivation for study and work for the two groups

were analyzed using a three-factor repeated measures analysis of variance. Attendance data was analyzed using a t-test for related measures. The test for significance of difference between two non-independent proportions was used to analyze retention data. Test of significance was set at the .05 level of probability. The data were reported in narrative and table form.

ENDNOTES

1. K. Patricia Cross, Adults As Learners (San Francisco: Jossey-Bass Publishers, 1988), 54-55.

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3. _____. Hand in Hand: Mentoring Young Women, Book 2, Ideabook for Mentors (Newton, Massachusetts: WEEA Publishing Center, 1988), 7-9.

4. Ibid., 12.

5. U.S. Department of Education, Women's Educational Equity Act Program, Book 1, 60-61.

6. U.S. Department of Education, Women's Educational Equity Act Program, Book 2, 21.

7. Ibid., 15-19.

8. Dorothy Y. Goble, How to Get a Job and Keep It (Austin, Texas: Steck-Vaughn Company, 1990), 1-2.

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10. Ibid., 3.

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13. Martin Gerstein, "Mentoring: An Age Old Practice in a Knowledge-Based Society," Journal of Counseling and Development 64 (1985): 156-157.

14. Barbara R. Frey and Ruth B. Noller, "Mentoring: A Promise for the Future," Journal of Creative Behavior 20, no. 1 (First Quarter 1983): 64.

15. Institute for Personality and Ability Testing, Inc., Administrator's Manual for the Sixteen Personality Factor Questionnaire (Champaign, Illinois: Institute for Personality and Ability Testing, Inc., 1986), 5.

16. Ibid.

17. Ibid., 10.

18. Ibid.

19. Ibid., 5, 7.

20. Ibid., 5.

21. Jerome T. Kapes and Marjorie Moran Mastie, eds., A Counselor's Guide to Career Assessment Instruments (Alexandria, Virginia: The National Career Development Association, 1988), Sixteen PF Personal Career Development Profile (PCDP), by Verne Walter, 238.

22. Dorothy D. Neville and Donald E. Super, The Salience Inventory, Theory, Application, and Research Manual (Research Edition) (Palo Alto, California: Consulting Psychologists Press, 1986), 1.

23. Ibid., 13.

24. Ibid., 1.

25. Ibid., 21.

26. Ibid.

27. Ibid., 24.

28. Ibid., 26.

29. Ibid., 1.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to investigate the effects of mentoring on the personal career development, attendance, and retention of teen mothers in a job training program. The study was conducted within the Chesapeake, Virginia, Public Schools Adult Continuing Education Department.

The subjects of the study were the thirty voluntary participants of the 1990-91 Teen-Age Parent Program of Skillbuilding (TAPPS). Students were matched on GED Pretest scores and then randomly assigned to either the experimental group or control group. The experimental group received a program of mentoring over and above the regular support services of TAPPS. The control group received all support services of TAPPS except the program of mentoring.

Students in both groups were pretested on the personal career development variables of problem solving, personal interaction, and coping skills via the Sixteen Personality Factor Questionnaire. Fourteen matched pairs of students were available for the Sixteen Personality Factor Questionnaire pretest. One student dropped out immediately after being randomly assigned to the mentored group, and the

student matched with her was eliminated. The Salience Inventory was used to test the variables of motivation for study and work. Since this pretest was administered one week after the Sixteen Personality Factor Questionnaire pretest, several more students had dropped out by that time; and eleven matched pairs were available for the Salience Inventory pretest. Scores on both instruments were statistically analyzed with the repeated measures (two factors) analysis of variance. Results were used to determine if random assignment produced equivalent groups.

The means and standard deviations for pretest and posttest personal career development scores on the Sixteen Personality Factor Questionnaire and the Salience Inventory are shown in Table 1.

Pretest and posttest scores on the Sixteen Personality Factor Questionnaire were comparable for mentored and nonmentored groups as were scores on the work scale of the Salience Inventory. However, mentored students scored slightly lower on the study scale of the Salience Inventory pretest. Posttest data on this scale revealed that the mentored group raised their study scores while the nonmentored group's study scores went down. Both groups improved from pretest to posttest with regard to the work scale, with the mentored group scoring slightly higher than the nonmentored group.

TABLE 1

MEANS AND STANDARD DEVIATIONS FOR PERSONAL CAREER DEVELOPMENT SCORES

Source	Mentored				Nonmentored			
	Pre $\bar{X}$	Pre SD	Post $\bar{X}$	Post SD	Pre $\bar{X}$	Pre SD	Post $\bar{X}$	Post SD
16 PF								
PS	5.00	1.01	5.00	1.40	6.00	1.05	6.00	.88
PI	6.00	.61	6.00	.57	6.00	.86	6.00	.79
CS	6.00	.98	6.00	1.10	6.00	1.35	6.00	1.70
Total	5.67	.87	5.67	1.02	6.00	1.09	6.00	1.12
SI								
Study	7.37	1.15	8.31	1.34	8.61	1.71	7.64	1.49
Work	8.05	1.35	8.78	1.65	8.03	1.14	8.42	1.37
Total	7.71	1.25	8.55	1.00	8.32	1.42	8.03	1.43

Table 2 reports results of the repeated measures (two factors) analysis of variance of the problem solving, personal interaction, and coping skills scales of the Sixteen Personality Factor Questionnaire pretest for the mentored and nonmentored groups.

Table 3 reports results of a repeated measures (two factors) analysis of variance of motivation for study and work scales of the Salience Inventory pretest for the mentored and nonmentored groups.

TABLE 2

REPEATED MEASURES: TWO FACTORS ANALYSIS OF VARIANCE OF SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE PRETEST

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F Ratio
Total	82.70	83	-	-
Subjects	17.50	13	-	-
Ment/Non	2.01	1	2.01	1.20*
PS/PI/CS	1.08	2	1.08	1.52*
Ment/Non X PS/PI/CS	.15	2	.15	.20*
Error Ment/Non	21.82	13	1.68	-
Error PS/PI/CS	18.50	26	.71	-
Error Ment/Non X PS/PI/CS	20.36	26	.78	-

*Not significant

TABLE 3

REPEATED MEASURES: TWO FACTORS ANALYSIS OF VARIANCE OF SALIENCE INVENTORY PRETEST

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F Ratio
Total	82.13	43	-	-
Subjects	28.44	10	-	-
Ment/Non	4.07	1	4.07	1.37*
Study/Work	.03	1	.03	.04*
Ment/Non X Study/Work	4.40	1	4.40	5.06**
Error Ment/Non	29.65	10	2.97	-
Error Study/Work	6.87	10	.69	-
Error Ment/Non X Study/Work	8.68	10	.87	-

* Not significant
** $p < .05$

As stated previously, pretest personal career development scores on both the Sixteen Personality Factor Questionnaire and the Salience Inventory were subjected to repeated measures (two factors) analysis of variance to determine if random assignment produced equivalent groups. Results of the ANOVA on the Sixteen Personality Factor Questionnaire revealed no significant difference between the experimental group and the control group with regard to personal career development variables measured by that instrument. Examination of the scores by the researcher confirmed comparable mean scores for the two groups on the Sixteen Personality Factor Questionnaire. The conclusion, therefore, was that random assignment had produced similar experimental and control groups with regard to the personal career development variables of problem solving, personal interaction, and coping skills. However, statistical analysis of the Salience Inventory personal career development pretest revealed a significant interaction between the two factors mentored/nonmentored and study/work. This indicated that one of the groups scored significantly higher on one of the scales. After an examination of descriptive statistics for this data contained in Table 1, it was concluded that the two groups were not equivalent with regard to motivation for study. While motivation for work scores for both groups were similar, the mentored group

had lower motivation for study scores than the nonmentored group before the experiment.

To investigate the hypotheses of this study, students' personal career development skills were measured by the Sixteen Personality Factor Questionnaire posttest and the Salience Inventory posttest. The Sixteen Personality Factor Questionnaire measured problem solving, personal interaction, and coping skills. The Salience Inventory measured motivation for study and work.

Percentages of attendance and retention rates were also investigated. Records of attendance for students in both groups were compiled and compared. Retention data was also gathered. Analysis of retention data compared the proportion of students who were retained in each group. This comparison was made to ascertain if the retention and withdrawal rates of the teen mothers were affected by the mentoring program.

Posttests of the Sixteen Personality Factor Questionnaire and the Salience Inventory were administered at the end of March, 1991, when the mentoring program ended. Hypotheses and data analysis follow.

Personal Career Development

Hypothesis one stated: The mean scores of teen mothers in a job training program who have been randomly assigned to mentors will be significantly higher than the mean scores of teen mothers not randomly assigned to mentors

on a test of the personal career development variables of problem solving, personal interaction, and coping skills, as measured by the Sixteen Personality Factor Questionnaire.

Table 4 contains the results of a repeated measures (two factors) analysis of variance on the scores of the three subscales of the Sixteen Personality Factor Questionnaire posttest. Twelve mentored students and ten nonmentored students took the Sixteen Personality Factor Questionnaire posttest. Therefore, scores of only ten matched pairs of students could be entered into the ANOVA.

TABLE 4

REPEATED MEASURES: TWO FACTORS ANALYSIS OF VARIANCE OF SIXTEEN PERSONALITY FACTOR QUESTIONNAIRE POSTTEST

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F Ratio
Total	81.00	59	-	-
Subjects	9.50	9	-	-
Ment/Non	.40	1	.40	.17*
PS/PI/CS	4.50	2	4.50	4.74**
Ment/Non X PS/PI/CS	1.05	2	1.05	.89*
Error Ment/Non	21.75	9	2.42	-
Error PS/PI/CS	17.07	18	.95	-
Error Ment/Non X PS/PI/CS	21.20	18	1.18	-

* Not significant
** $p < .05$

The Sixteen Personality Factor Questionnaire measures whether students score low or high on problem solving, personal interaction, and coping skills by measuring sixteen functionally independent and psychologically meaningful dimensions. Combinations of individual personal attributes reported as stanine scores are used to suggest reactions with regard to the variables of problem solving, personal interaction, and coping skills. Results showed no significant difference between mentored and nonmentored students on problem solving, personal interaction, and coping skills. Also of interest was whether there was any interaction between mentored and nonmentored groups and subscales. In conclusion, the results revealed no statistically significant difference between the mentored and nonmentored groups and no significant interaction between mentored and nonmentored groups and the problem solving/personal interaction/coping skills subscales. Although a significant difference in average scores for mentored and nonmentored groups across the subscales of problem solving, personal interaction, and coping skills was found, this was of no interest in this particular study.

Hypothesis two stated: The mean scores of teen mothers in a job training program who have been randomly assigned to mentors will be significantly higher than the mean scores of teen mothers not randomly assigned to mentors

on a test of motivation for study and work, as measured by the Salience Inventory.

Table 5 reports the results of a repeated measures (two factors) analysis of variance on the scores of the two scales of the Salience Inventory posttest. As with the Sixteen Personality Factor Questionnaire, twelve mentored and ten nonmentored students took the Salience Inventory. Therefore, only ten matched pairs of students' scores were entered into the ANOVA. The Salience Inventory measures participation in, commitment to, and value for the various life roles of student, worker, homemaker, leisurite, and citizen. Average scores for participation, commitment, and value expectations with regard to study and work were the focus of this study. Results showed no significant difference between mentored and nonmentored students on motivation for study and work. In this instance it was also of interest to ascertain whether any interaction occurred between mentored and nonmentored groups and Salience Inventory scales. No statistical significance between the two groups and no significant interaction between mentored and nonmentored groups and motivation for study and work scales were revealed.

Table 6 reports the results of a repeated measures (three factors) analysis of variance of the factors, mentored/nonmentored, pretest/posttest, and study/work. As mentioned previously, the repeated measures (two factors)

TABLE 5

REPEATED MEASURES: TWO FACTORS ANALYSIS OF VARIANCE OF SALIENCE INVENTORY POSTTEST

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F Ratio
Total	84.24	39	-	-
Subjects	13.33	9	-	-
Ment/Non	2.69	1	2.69	.61*
Study/Work	3.89	1	3.89	3.73*
Ment/Non X Study/Work	.24	1	.24	.14*
Error Ment/Non	39.98	9	4.44	-
Error Study/Work	9.40	9	1.04	-
Error Ment/Non X Study/Work	14.71	9	1.63	-

* Not significant

analysis of variance for Salience Inventory pretest data revealed that the control group was higher on the study or work scale, even after random assignment, before the experiment began. An examination of the descriptive statistics for Salience Inventory pretest scales indicated that nonmentored students scored higher on the study scale than mentored students. After the experiment, descriptive posttest statistics revealed that the nonmentored group's scores on motivation for study decreased while the mentored group's scores increased. The two-factor repeated measures analysis of Salience Inventory posttest data revealed no significant difference between the two groups after the

TABLE 6

REPEATED MEASURES: THREE FACTORS ANALYSIS OF VARIANCE OF SALIENCE INVENTORY PRETEST AND POSTTEST

Source of Variation	Sums of Squares	Degrees of Freedom	Mean Squares	F Ratio
Total	163.45	79	-	-
Subjects	9.65	9	-	-
Ment/Non	.09	1	.09	.03*
Pre/Post	2.99	1	2.99	1.03*
Study/Work	2.23	1	2.23	2.37*
Ment/Non X Pre/Post	6.90	1	6.90	1.40*
Ment/Non X Study/Work	1.36	1	1.36	1.34*
Pre/Post X Study/Work	1.69	1	1.69	1.95*
Ment/Non X Pre/Post X Study/Work	3.43	1	3.43	2.20*
Error Ment/Non	25.18	9	2.80	-
Error Pre/Post	26.17	9	2.91	-
Error Study/Work	8.48	9	.94	-
Error Ment/Non X Pre/Post	44.30	9	4.92	-
Error Ment/Non X Study/Work	9.17	9	1.02	-
Error Pre/Post X Study/Work	7.80	9	.87	-
Error Ment/Non X Pre/Post X Study/Work	14.01	9	1.56	-

*Not significant

experiment. However, given the fact that the nonmentored group was signficantly higher on the motivation for study

scale before the experiment and the fact that mentored students' study scores increased from pretest to posttest, further statistical analysis was needed. Therefore, the three factors, mentored/nonmentored, pretest/posttest scores on the Salience Inventory, and study/work, were entered into a three-factor repeated measures analysis of variance. Results of this analysis indicated no significant difference with regard to mentored and nonmentored groups, pretest and posttest scores, and motivation for study and work scales. Also of interest was whether there was any interaction between mentored/nonmentored groups and pretest/posttest scores, mentored/nonmentored groups and study/work scales, pretest/posttest scores and study/work scales, and mentored/nonmentored groups, pretest/posttest scores, and study/work scales. No significant interaction was found for any of these factors. Therefore, despite the fact that mentored students scored lower than nonmentored students on the Salience Inventory pretest study scale yet higher on the posttest after receiving the mentoring program, the difference in scores on the study scale between the two groups was not significant.

Attendance

Hypothesis three stated: The mean percentages of attendance of teen mothers in a job training program who have been randomly assigned to mentors will be significantly higher than the mean percentages of attendance of teen

mothers not randomly assigned to mentors, as measured by a comparison of number of hours in program and attendance records of participants.

Table 7 reports results of attendance data related to the mentored and nonmentored groups. Although eight students dropped out of TAPPS, attendance records were available for all students. All 30 students' attendance data (15 matched pairs) were analyzed. A t-test for related measures was used to statistically analyze attendance percentages. Using df 14, a t of .2976 was obtained. Since the t value that is significant at the .05 level for 14 df is 2.145, it was concluded that the mentoring program did not improve the attendance percentages of the teen mothers.

TABLE 7

MEANS AND STANDARD DEVIATIONS FOR PERCENTAGES ATTENDANCE OF MENTORED GROUP AND NONMENTORED GROUP

	$\overline{X}$	SD
Mentored	.44	.28
Nonmentored	.45	.28

Retention

Hypothesis four stated: The retention rate of teen mothers in a job training program who have been randomly assigned to mentors will be significantly higher than the

retention rate of teen mothers not randomly assigned to mentors, as measured by number of each group completing the program.

The study sought then to determine whether there was a significant difference between the proportion of students in each group who continued enrollment in TAPPS.

Table 8 reports retention and dropout data for the mentored and nonmentored groups. A test for the significant difference between two non-independent proportions, a chi-

TABLE 8

RETENTION/DROPOUT IN MENTORED AND NONMENTORED GROUPS

	Mentored		
Nonmentored	Retained	Dropped	Totals
Retained	7	3	10
Dropped	5	0	5
Totals	12	3	15

square analysis, was utilized to compare the sample retained in the mentored group and the sample retained in the nonmentored group. Since the two proportions are based on matched individuals, they are not independent of one another. The test is an application of the 2 X 2 contingency table and was used to determine whether there

was a significant difference in retention for the two groups, mentored and nonmentored, among a sample of thirty individuals. The mentored group retained 12 individuals, or 80 percent, while the nonmentored group retained 10 individuals, or 67 percent. An evaluation of observed and expected frequencies with regard to retention and dropout rates of the matched pairs yielded a chi-square of .50 which for df=1 was not significant at the .05 level. The conclusion then was that the level of retention for mentored and nonmentored groups did not differ.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This final chapter includes a summary of the study, conclusions based on the findings, and recommendations for further study.

Summary

Problem

The purpose of this study was to determine the effects of mentoring on the personal career development, attendance, and retention of teen mothers in a job training program.

Design

The study was conducted within a special project of the Chesapeake Public Schools Adult Continuing Education Department, Virginia Public School System. The 1990-91 Teen-Age Parent Program of Skillbuilding (TAPPS) served young women up to age twenty-one who were teen parents and dropouts. To facilitate attainment of the objectives of TAPPS, a mentoring program was initiated to increase the personal career development, attendance, and retention of students. Although a variety of support services are already an integral part of TAPPS, administrators felt students were not realizing their full potential.

Inadequate personal career development skills had been manifested by a lack of problem solving, personal interaction, and coping skills; a lack of motivation for study and work; sporadic attendance; and dropping out by some students.

The mentoring program used a goal-oriented approach and utilized community volunteers. Mentors were encouraged to engage in activities which focused on the problem solving, personal interaction, and coping skills of students as they relate to motivation for study and work and full participation in TAPPS (attendance and retention). The experimental treatment included an orientation session to prepare mentors for interacting with teen mothers. Mentors were apprised of the intrinsic and extrinsic barriers to participation experienced by this at-risk population. Ongoing support was provided by the Adult Continuing Education Department, along with incentives for active participation. Guidelines and pertinent handouts were provided each month, and monthly meetings were held to assist mentors in their interactions with proteges. Strong emphasis was placed on the importance of frequency of interaction and initiative by the mentors. Mentors were contacted frequently by administators and encouraged to appeal for assistance as needed. Suggestions for activities related to the objectives of problem solving, personal interaction, and coping skills as they relate to motivation

for study and work and full participation in TAPPS were provided throughout the duration of the mentoring program. The objectives were reiterated in meetings, handouts, and other contacts with mentors.

The subjects were the thirty volunteer participants of the 1990-91 Teen-Age Parent Program of Skillbuilding (TAPPS). Background data with regard to marital status, socioeconomic status, previous schooling, GED pretest scores, and other pertinent information were available for students. Students were matched on GED Pretest scores. The GED Pretest measures past educational achievement, which has been shown to correlate highly with participation in adult education programs. Matched pairs were then randomly assigned to either the experimental group or control group.

Students were administered the Sixteen Personality Factor Questionnaire and the Salience Inventory pretests. Scores on the scales of both were statistically analyzed using the repeated measures (two factors) analysis of variance. Results confirmed that random assignment had produced equivalent groups on the personal career development variables of problem solving, personal interaction, and coping skills as measured by the Sixteen Personality Factor Questionnaire. Results also indicated that students were comparable with regard to motivation for work, but not for motivation for study, as measured by the Salience Inventory.

Posttests of the Sixteen Personality Factor Questionnaire and the Salience Inventory were administered at the end of the program of mentoring. Repeated measures (two factors) analysis of variance was the statistical technique used to analyze the Sixteen Personality Factor Questionnaire and the Salience Inventory. In addition, a repeated measures (three factors) analysis of variance was utilized to test the interaction of the three factors, mentored and nonmentored groups, pretest and posttest scores, and motivation for study and work scales. F ratios computed on scores were used to accept or reject hypotheses one and two.

Student daily attendance and retention information were also collected. A t-test for related measures was the statistical technique used to analyze attendance data with the level of probability set at the .05 level. The test for significance of difference between two non-independent proportions, a chi-square analysis, was the statistical technique for analyzing the retention data. The test for significance was set at the .05 level of probability.

Results

The results of the study as they pertained to the hypotheses were as follows:

Hypothesis one discussed the personal career development skills of problem solving, personal interaction, and coping skills of the mentored and nonmentored groups.

Findings showed that there was no statistically significant difference between mentored and nonmentored students across the three subscales of problem solving, personal interaction, and coping skills of the Sixteen Personality Factor Questionnaire. Findings imply that the mentoring program produced no changes in the problem solving, personal interaction, and coping skills of the teen mothers.

Hypothesis two discussed the motivation for study and work of the mentored and nonmentored groups. Again, findings revealed no significant difference between mentored and nonmentored students across the two scales of study and work of the Salience Inventory. Despite the fact that mentored students' scores on motivation for study increased while nonmentored students' scores decreased, findings imply that the mentoring program produced no change in the motivation for study and work of the teen mothers.

Hypothesis three examined the differences in the percentages of attendance of the mentored group and the nonmentored group. Findings showed that there was no significant difference between percentages of attendance of mentored and nonmentored students. Hypothesis three is therefore rejected since findings imply that the mentoring program did not produce higher rates of attendance by mentored students.

Hypothesis four discussed the retention and withdrawal rates of mentored and nonmentored students. Although the

mentored group's retention rate was 80 percent versus the 67 percent rate of retention of the nonmentored group, findings showed that the proportion of mentored students who remained in the TAPPS program was not significantly greater than the proportion of monmentored students who continued enrollment.

Conclusions

Data obtained during this study do not support the theory that a program of mentoring implemented for students of the 1990-91 TAPPS project increased their personal career development, attendance and retention. Findings with regard to problem solving, personal interaction, and coping skills; motivation for study and work; attendance; and retention revealed no significant difference between mentored and nonmentored students.

As indicated by the review of related literature, praise for the concept of mentoring has proliferated in recent years. Only a few authors expressed skepticism as to the benefits of assigning mentors to at-risk groups. Most advocated the use of mentors to fill the void of durable adult contacts these individuals face. Advocates of mentoring view it as a source of socialization and development for those who otherwise could fall victim to deleterious influences. The use of volunteer mentors is seen by many as a means of supplanting a current popular emphasis on individual initiative with community involvement. A proactive approach by citizens seeks to

directly attack factors that isolate at-risk populations in an effort to improve quality of life for the whole community.

Findings with regard to mentoring programs have been based largely on perceptions of administrators and participants. In the few cases in which evaluations have been conducted, the reflective nature of the conclusions, rather than findings based on objective research data, have made it difficult to ascertain with real assurance the effects of mentoring programs.

In drawing conclusions with regard to the mentoring program implemented within the 1990-91 Teen-Age Parent Program of Skillbuilding, it is important to focus on both the strengths and limitations of the study.

This study utilized a research design which addressed some of the criticisms of previous research on mentoring. As noted in the review of the literature, Flaxman, Ascher, and Harrington outlined some major flaws in mentoring research in their analysis of the literature on the subject.

One weakness cited by Flaxman et al. was the loose definition of mentoring applied in program initiatives. A definition of mentoring, say Flaxman, Ascher, and Harrington, should presuppose an interpersonal attachment of sufficient intensity that identification occurs between mentor and protege. The interpersonal attachment should be in conjunction with concrete and practical help.

Interpersonal attachment was strongly emphasized in the TAPPS mentoring program. The mentoring program lasted five months in an effort to allow adequate time for identification. Guidelines suggested that mentors have at least two contacts per week with proteges, and activities focused on ways to increase the personal interaction between pairs while addressing concrete and practical issues. Mentors were assigned only one protege, and the intent was to foster a relationship that went beyond the helping/caring nature of many such arrangements. Mentors and proteges were matched on interests and needs of proteges and ability of mentors to address them.

The mix of mentoring with other program components was identified as another drawback in the evaluation of mentoring interventions. The experimental nature of this study permitted the isolation of the variable of mentoring so that results would not be confounded with other components of the TAPPS program. Utilizing an experimental design assured that evaluation of the mentoring program would be based on uncontaminated data subjected to tests of significance. This removed any tendency to presuppose that because of the positive outcomes generally associated with mentoring, it would necessarily be effective.

Finally, circumscribed versus broad goals were formulated for the mentoring program. Clearly stated

objectives and goals were the basis of the evaluation of the mentoring program.

No significant findings were revealed in this study. The lack of significance tends to add credence to the view expressed by a few authors that mentoring for at-risk students may not make a substantial difference in their psychosocial development. Before the concept of mentoring for teen mothers is rejected, however, it is important to consider the limitations of this experiment.

Perhaps the most obvious limitation was the small sample size. A limited number of teen parents are served by the TAPPS project each year due to funding limitations. The study necessarily included those students who were inducted into the program. Increasing the size of the sample possibly could have contributed to the power of the research findings.

As stated, every effort was made to ensure that an interpersonal attachment between mentor and protege would form. The steps taken were outlined in the description of the mentoring program. Communications with mentors and records of their contacts with students indicate that mentors did not adhere closely to the guidelines for achieving the objectives of the program. Even those who could be considered superior mentors still fell short of engaging in the activities recommended to increase the personal career development, attendance, and retention of

their proteges. Records indicate that, by and large, mentors did not engage in sufficient interactions to foster the interpersonal relationships considered necessary for true mentorships to succeed as recommended in the program guidelines. Also, mentors more often participated in activities that were convenient and related to their areas of expertise rather than focusing on the activities suggested in the mentoring guidelines. A number of benefits did accrue to students, including interaction with intact families and employment opportunities. However, positive outcomes did not combine to produce significant results with regard to the variables tested.

The at-risk nature of the population being studied served to limit the study as well. For instance, in some cases mentors consistently reported difficulty in making contact with proteges. Parenting adolescents face both situational and dispositional obstacles. Economic problems sometimes resulted in hindrances to interaction, such as telephones being disconnected. A lack of social skills in some proteges extended to missing appointments with mentors or failing to inform mentors of changes in plans. Volunteer mentors were understandably discouraged despite the fact that they had been warned that teen mothers would probably be at risk for mentoring. In short, the very behaviors the mentoring program sought to influence served to limit the opportunity for impact by the mentors.

Since volunteers were utilized, selection of mentors was limited to those who indicated a desire to participate. Although every effort was made to identify women who would exemplify the attributes of superior mentors, having a larger pool of mentors from which to select possibly could have improved the program. In conjunction with this, administrators were reluctant to bring to bear excessive pressure on volunteer mentors to accomplish the objectives of the program. Instead, incentives which included luncheon meetings and frequent communication were utilized to motivate mentors. On another note, those invited to participate were women whose personal career development was considerered to be exemplary so that teen mothers could emulate them. Mentors were busy women who had a number of commitments besides their mentorships, possibly explaining the lack of adherence to the guidelines of the program by some. Perhaps a comprehensive mentoring program such as the one attempted in this study is somewhat overambitious. If this is the case, programming could be modified so that goals and objectives are more within the capabilities of the mentors.

Another factor to be considered, however, is simply the nature of volunteerism. Conversations with experienced administrators who have utilized volunteers have revealed negative as well as positive aspects of volunteer relationships. Administrators of TAPPS recognized that in

this study more than a sense of altruism would be needed to motivate the volunteers. To that end, programmers tried throughout the program to establish incentives for the mentors. In some instances, mentors viewed involvement in the program as a means for further educational or professional development--a motivating factor. Findings in this study reiterate the value of providing incentives beyond any personal rewards of mentoring. It should be noted that, although the researcher was disappointed in the level of commitment of the mentors, the Director of Adult Continuing Education viewed it as a highly successful volunteer endeavor. The director based this viewpoint on over thirty years of experience using volunteers in the public schools in elementary through adult education programs.

The fact that mentoring has not been clearly conceptualized was another limiting factor of the study. Many questions are still unanswered with regard to what mentoring actually is and what it should be. Some authors have suggested that mentoring programs should focus largely on the resources that volunteers could bring to the mentorship. In some of the mentorships in this study, provision of resources became the focus of the mentorship. Several mentors obtained employment for their proteges or assisted students with obtaining financial aid to continue their education. These contributions were definitely within

the scope of the definition utilized in this study and the activities recommended for accomplishing the objectives. However, the basis of this study was that changes had to be wrought with regard to the psychosocial functioning of the teen mothers, that provision of resources would not be enough. They needed to learn problem-solving, personal interaction, and coping skills and increase their motivation for study and work, attributes considered essential for maintaining employment or enrollment in higher education. Otherwise, any resources provided could slip away in the face of students' inability to maintain them. Possibly, however, mentors did not have the background to provide the type of interaction which would enhance psychosocial development. Furthermore, mentoring has traditionally evolved out of a working relationship in which a more experienced person is able to provide guidance to the less experienced apprentice. In other words, the mentor has knowledge that directly relates to the successful on-the-job performance of the mentored. Under these circumstances, the protege can more readily relate to the concrete assistance being provided by the mentor, a condition which strengthens the bond between the two.

Several results of mentoring were measured in this study. Because mentoring has traditionally been connected with the career development of men and women and more lately with the personal well being of individuals in a variety of

situations, personal career development was selected as a variable of interest. The focus was on problem solving, personal interaction, and coping skills as they relate to motivation for study and work. These factors seemed to be consistently lacking in participants of the previous TAPPS program and were identified through a review of the literature as the focus of other mentoring programs. Attendance and retention were also selected as variables because of their obvious connection with the other variables. Selection of these variables provided the opportunity not only for measurement by two very different paper-and-pencil instruments but through records of participation in TAPPS as well. The question remains as to whether other goals and objectives should have been established and other effects of mentoring measured. Further experiments in which limiting factors are eliminated should be conducted to determine the most appropriate variables for testing.

The study of the effects of the mentoring program was conducted during its first year of implementation. Almost any intervention can be improved with time. Many of the limitations discussed heretofore are simply inherent in volunteer mentoring programs and are unlikely to vary no matter how experienced the administrators. Conceivably, however, selection of mentors, their orientation to the

process, and program design could be improved with experience.

The fact that an experiment as to the effects of mentoring was being conducted could also be considered a limitation. Utilization of mentors for all participants in TAPPS would have permitted administrators to arrange social gatherings of mentors and proteges as a group. Organized group functions could have contributed to formation of the relationships. As it was, sensitivity to the control group had to be a priority, negating any obvious social activities for mentors and proteges as a group.

Information surfaced during the study to indicate that the factors of the Sixteen Personality Factor Questionnaire may be embedded in personality to the extent that differences attributable to mentoring were not revealed. The long-term reliabilities of the scales suggest that these personality characteristics are very stable and hence difficult to change. However, the Sixteen Personality Factor Questionnaire was recommended as an appropriate instrument for the purposes of this research; and a search of available measures for testing the variables of interest did not produce any better alternatives.

Sheer demographics also played a role in the outcome of the mentoring program. For instance, one student lived in a remote area of Chesapeake and had no reliable transportation. The student's assigned mentor found it

impossible to interact with her except by phone and eventually withdrew from the mentoring program. A replacement was sought but none felt they would be able to make contact with her. As a result, the student received practically no mentoring. In some cases school and work schedules of mentors and proteges limited opportunities for interaction.

Despite the limitations presented and the lack of significant findings in the study, a number of anecdotal incidents serve to indicate that the mentoring program did benefit some students.

One student was randomly assigned to mentoring but dropped out almost immediately after the program began. Her mentor persisted in contacting her, sending her notes and eventually learning of her employment in a local bar. The mentor continued to call her, even at the bar, and was able to arrange meetings with the student and her son. In December the student called to say that she wished to return to the program. The protege's attendance for the remainder of the program was almost perfect.

An elected official in Chesapeake served as the mentor for another student. Although jobs for students were difficult to obtain because of students' lack of experience and limited skills, the mentor hired her protege for part-time employment and eventually offered her a full-time position once her skill level improved.

Mentors helped with child care arrangements, sometimes personally babysitting for important events such as the GED examination; provided transportation for the GED examination; and arranged for on-the-job experiences in their offices. Several mentors overcame the barriers of lack of telephones and reliable transportation by making home visits when unable to contact students.

Some mentors invited proteges into their homes during the Christmas season and provided clothing and other essentials for their proteges' children. Several mentors have continued their relationships with proteges beyond the official termination of the program.

Administrators of programs such as TAPPS have learned that successes are often small. When dealing with high-risk populations whose life chances are modest, even small successes can produce positive effects. Another acknowledgment by those who operate such programs is that success is not always readily evident. In fact, years may pass before success is communicated; and often communication is quite by accident. Students of such programs don't usually bother to inform administrators of later achievements or even feel that anyone cares. Administrators also recognize that the rewards of their efforts are often reaped by future generations.

The importance of conducting studies in which specifics are tested and measured cannot be overstated.

More information with regard to the significant effects of mentoring interventions is desperately needed. It is important, however, to examine the small successes with an end to making them greater and more readily discernible. Then appropriate variables can be identified and tested so that findings are validated.

RECOMMENDATIONS

Recommendations for Program Implementation

The lack of significant findings with regard to the dependent variables of interest in this study behooves administrators to exercise caution in automatically assuming that mentoring benefits at-risk populations such as teen mothers. On the other hand, positive results from the mentoring program for the students of the Teen-Age Parent Program of Skillbuilding suggest that reflective observations of administrators of mentoring programs must be taken into consideration. An examination of the limitations of this study confirm that results of the present study do not obviate its use in programming for at-risk students such as teen mothers.

Increasingly dire circumstances of the educationally and economically disadvantaged in our country mandate the consideration of alternatives for enhancing their quality of life. Organizational features of American society have left a number of groups, including parenting adolescents, with

few or unacceptable options for support and self-sufficiency. Impossible demands are being placed on service organizations who minister to these individuals. Alternative forms of support for women in transition, such as teen mothers, must be found if they are to become productive members of the community.

The plausibility of using community volunteers to assist less fortunate citizenry has been demonstrated since our country's inception. However, over the past twenty years there has been increased emphasis on individual effort--an emphasis that has been to the detriment of the educationally and economically disadvantaged. It has become increasingly apparent to members of the human service field that not everyone has the means "to pull themselves up by their bootstraps." The truth is that groups with limited educational skills whose economic circumstances deter their absorption in the mainstream of American society need assistance. The United States has a history of utilizing the more experienced to assist in the personal and career development of the uninitiated. The success of these traditions provides incentive for seeking ways to effectively incorporate them into education and training programs for high-risk students.

The following recommendations should be considered in implementing mentoring programs for teen mothers in a job training program.

Administrators should seek to form a clear conceptualization of mentoring--of what it can and cannot do for high-risk populations. True mentorships traditionally have presupposed a close interpersonal relationship that results in identification between mentor and protege. However, this represents the optimum in mentorships. There are a wide range of useful relationships that can be mutually beneficial that have come to be considered mentorships. What is important is clarification of the expectations of the mentoring program and how results are to be achieved. This should be an integral part of the planning process. It may seem to be just a matter of semantics, but the term mentoring connotes to many outcomes that may not be achievable in short-term programs for high-risk individuals such as teen mothers. Outcomes of this mentoring study suggest that mentoring in its strictest sense may be inappropriate for teen mothers. The reality may be that true mentorships are beneficial to professional women but are not well suited to groups who lack the maturity and social skills to enter successfully into such relationships; and volunteer mentors may not possess the counseling skills or other necessary expertise that could make such arrangements work. However, the idea of community volunteers offering their wealth of experience and resources in many ways should not be discounted. Only through

experimentation with different forms of mentoring can a clear conceptualization of its potential be formed.

Mentoring should be utilized largely as a support service in a program such as TAPPS. Mentoring should not be viewed as a panacea for curing the ills of high-risk students. Rather, it appears to be a useful tool in conjunction with other effective programming, including professional counseling. As other professionals involved in serving at-risk populations have pointed out, mentoring cannot be a substitute for educational achievement or social skills. Instead, mentoring should be viewed as one avenue for attaining a productive life. If a mentor secures a job for a high-risk student who lacks the education and skills to perform, a positive situation could quickly become negative. The mentor can best be utilized to reinforce what is taught in the classroom, in workshops and seminars, or in counseling sessions, particularly in short-term mentoring initiatives.

Results of this study substantiate the fact that mentors from myriad occupations and lifestyles should be considered. In this study, mentor selection was limited to professional women in the community who were considered exemplary role models for teen mothers. The women were extremely motivated and, for the most part, had very good intentions. Not unlike the teen mothers, however, they sometimes had difficulty translating intentions into

actions. In their case, this was due to very busy schedules. As with many motivated and achieving individuals, the mentors tended to be involved in a number of endeavors which placed unrealistic demands on their time. When telephoned, they would often respond that they had been planning to connect with their proteges and would do so immediately. Although mentors needed a little pressure, it was extremely important that exertion of pressure be perceived as support. In a sense it was important to "mentor" the volunteer mentors, and the more frequent the contacts the better. Although professional women make good role models for teen mothers, perhaps others would have fewer commitments and more time.

Another valid consideration is whether professional women are the best choice for relating to high-risk groups such as teen mothers. At least one mentor, a professional counselor, had a difficult time relating to her protege who was "from a different socioeconomic background," to borrow her words. Conversely, the mentor who was a secretary was able to form a friendship with her protege to the extent that the student felt free to call her on a variety of issues and concerns and even asked if she could accompany the mentor to church services. Therefore, a very valid consideration should be the fit between students and mentors. Factors such as demographics naturally play an important part in matching mentors and proteges.

Opportunities for meeting are necessary if identification is to occur.

In some instances, it would be difficult to explain why it was felt the mentor and protege would be a good match, or why the relationship did or did not produce positive results. Some of the pairs were obviously well suited for each other--a student highly motivated to go on to college and a community college counselor; a nursing student and a school nurse; a student who lived in the same neighborhood as the mentor's mother and eventually utilized the mentor's grandmother as a babysitter.

The mentor who was a school nurse probably adhered most closely to the guidelines of the program. She informed us that her contacts with the protege were largely monologues since her protege was very shy. However, the mentor's knowledge with regard to health issues was extremely useful since her protege was pregnant at the time. The mentor checked out films and provided other information regarding pregnancy and child care. The mentor often met with the protege and her "older" boyfriend and took the initiative to discuss birth control and other health-related issues with the two. After the protege had her child, her phone was disconnected and there was doubt as to whether she would return to school. The student's mentor continued to make home visits until the student returned.

An extremely service-oriented teacher from one of the local high schools continued to mentor her protege even when she dropped out. Eventually the mentor successfully effected the student's re-enrollment in TAPPS.

Surprisingly, the most nurturing mentor was a computer operator/instructor. The mentor contacted administrators frequently and tried to stay active in all aspects of her protege's life. Interestingly enough, the mentorship began with a very slow start; but once she experienced success in helping her protege work out personal problems, the woman became one of the most active mentors. She worked diligently to help her student secure employment when the protege separated from her husband and moved into her own apartment. She assisted with the student's toddler and arranged outings with her own children and the student and her son. The mentor encouraged her protege to enroll in other computer classes which the mentor taught and recently reported that the student attends regularly.

It is also recommended that other possibilities for mentors be entertained. One alternative might involve the use of a small business or a bank in which the whole organization would be involved in mentoring the student. The arrangement would provide the student with opportunities for personal interaction with a number of employees so inclined. The alternative would also address the time factor already discussed and provide a chance for finding

the best fit between student and mentor. Other employees could simply provide exposure to the world of work. The arrangement could incorporate the concept of providing resources in that on-the-job experience or part-time employment might be available.

The use of elder mentors exists as another alternative with positives that could accrue to mentor and protege. Although no elder mentors were utilized in this study, they hold a wealth of possibility for young women with children. Elder mentors would have time for service to needy individuals and their children that practicing professionals lack. Selection criteria could be such that women retired from the workforce could be recruited, thus providing contributions to students' personal career development.

An attempt was made in this study to include students from previous TAPPS programs who have achieved success in their lives. A former TAPPS student was recruited who would have been an excellent role model. The teen mother expressed great enthusiasm for assisting someone in similar circumstances but had the misfortune of being matched with a student who exited the program before the mentoring initiative began. The use of former students would represent one application of the peer mentoring approach.

The mentoring program could be designed to address the notion that mentors' primary function be to provide resources to students. As stated in the conclusions, the

mentors responded in varying degrees to suggestions for interacting with proteges. Divergent approaches were evident in records regarding frequency of contact and participation in activities to accomplish the objectives. Records of contacts, which also delineated activities engaged in, indicated that most mentors interacted at their own convenience and participated in activities within the scope of their experience. Experts contend that true mentoring requires an intensity of contact which must be of sufficient duration for identification to occur. It is therefore extremely important that mentors agree to commit to a certain amount of time. A time commitment was emphasized to the mentors in this study. Apparently, however, they did not understand fully that consistent communication with proteges was critical for accomplishing the objectives of the mentoring program. Perhaps mentors would have been better able to respond to requests for more concrete help in the form of provision of resources. Although it would be more time consuming, and perhaps not practical in a program in which an experimental study was being conducted, the program could be designed to tap the resources of the individual mentors. Mentors and proteges could be matched on the needs of students and the resources the mentors could bring to the relationship. General guidelines for interactions and activities could be provided, but conceivably each mentor and protege would be

involved in different goals and objectives. The mentor would be working within her realm of expertise and would possibly be more committed to the endeavor. A more individualized plan could also facilitate the interpersonal attachment which requires intensity and continuation.

If the individualized plan were followed, results sought would be of a more practical nature, and measurement of the effects would center around specifics of the relationship. For instance, in the case of the mentorship between the community college counselor and the highly motivated student, the goal would be to enroll the student in college with objectives such as completing high school course requirements or obtaining financial assistance and activities to accomplish the same. Establishing goals and objectives would still be of utmost importance.

The plan would address another factor that was evident during this research on mentoring. Students were more interested in interacting with their mentors when they felt they were gaining something concrete from the relationship. Because of sensitivity for the control group, little was said by administrators about the mentoring program. Students were simply told that support from the community was being solicited and that students were randomly selected to work with any interested participants. However, students from both groups concluded that the mentors were there to help students obtain jobs. Conjecture was probably prompted

when one mentor employed her protege almost immediately after they met. When it was realized that community members might be a vehicle for employment, students became much more interested in interacting with mentors and some members of the control group requested similar help. If mentors and students could be paired with the goal of satisfying some concrete need of the student, this might provide a basis for the relationship. Then once the relationship was established and a modicum of interpersonal attachment evolved, psychosocial and other developmental needs could be part of the focus of the relationship.

The effectiveness of the program would possibly have been enhanced if all students had been mentored. The experimental design of this study necessitated a control group. Having all students involved in a mentoring program would make it possible for arranged social functions between mentors and proteges. Luncheons were held for mentors and proved to motivate some mentors and were useful for disseminating information. Including students in these activities would have emphasized the importance of the mentoring effort within the TAPPS program. Students and mentors alike would have received clarification of the purpose of the mentoring program. Seeing other mentors and students together could have been a motivating factor for both sides of the mentorship. Involving all students would have allowed administrators to inform students initially

that participation in the mentorships was as much a part of TAPPS as GED Preparation or a career development seminar. Students could also be involved in planning the mentoring program based on their perceptions of how the mentors could be of assistance. Involvement in the planning process could also be extended to including the mentors. Mentors could provide input as to how they envision their participation and assistance as mentors. Full participation could be more easily fostered as students and mentors acquired ownership of the endeavor.

The results of this study confirm the need for very careful planning and tremendous forethought as to the implementation of mentoring programs for teen mothers in a job training program. Suggestions for implementing effective programs based on information gleaned in the review of the literature and the results of this study are provided. The importance of understanding the concept of mentoring and how such relationships can be utilized for helping high-risk students is emphasized. Also stressed is the importance of realistic goals and objectives achievable in the short term. One recommendation is that experimentation with a variety of kinds of relationships involving community members be conducted. Interactions that only approximate the traditional concept of mentoring should not be eschewed since they may produce unanticipated results or eventually may develop into true mentorships. Cases of

long-term mentorships, in which there exists the promise for the compatibility that mentoring in its strictest sense requires, may in truth be rare in programs for at-risk students. The time, effort, and expenditures that would be necessary to establish more traditional mentoring relationships may not be worth the return.

The lack of significance with regard to the results of this study suggests caution in implementing mentoring programs for high-risk students such as teen mothers. At the same time, positive outcomes indicate that too much caution could be tantamount to "throwing away the baby with the bath water."

Recommendations for Further Study

The paucity of research data with regard to mentoring programs in general, and in job training programs for teen mothers specifically, indicates a need for replication of this study within other such initiatives. The study should also be replicated in future TAPPS programs using variations in the program design suggested in Recommendations for Program Implementation. Replication of the study with a larger sample would also be an asset since the small sample size possibly contributed to the lack of significance in this study. The use of other dependent variables as delineated in Recommendations for Program Implementation should be considered as well. The purpose is to determine

appropriate variables for testing the effects of mentoring programs for teen mothers in a job training program.

A longitudinal study to determine the long-term effects of the mentoring program on the personal career development of teen mothers should be conducted. The purpose is to determine if positive effects not evident in the short term would be manifested in the long term.

The effects of mentoring on women in pregnancy prevention programs should be investigated. The purpose is to determine if positive effects are realized in young women who are vulnerable for entry into teen parenting programs.

Qualitative research in the form of case studies of successful mentorships, especially with teen mothers, should be conducted. The purpose is to determine which qualities of mentors are most effective in different circumstances and which strategies are most successful.

Research should be conducted to further categorize different levels of mentoring. The purpose is to determine when the term is appropriate for describing the relationship.

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