To the Graduate Council:

I am submitting herewith a dissertation written by Brenda Gail Earl Owensby entitled "Dependency and Identity Foreclosure Among Pregnant Appalachian Adolescents." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

Schuyler W. Huck

Schuyler W. Huck, Major Professor

We have read this dissertation and recommend its acceptance:

Accepted for the Council:

Vice Provost and
Dean of the Graduate School

DEPENDENCY AND IDENTITY FORECLOSURE AMONG PREGNANT APPALACHIAN ADOLESCENTS

A Dissertation

Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Brenda Gail Earl Owensby

December 1985

DEDICATION

I want to dedicate this dissertation to my family, especially to the following members:

My sisters, Sheila Earl, Kim Greenway and Daphne Click, all of whom have supported and assisted me throughout my academic career.

My father, Eulas E. Earl, who has encouraged me throughout my life and has reminded me at critical times that I could accomplish anything to which I aspired.

My stepfather, Charles H. Rorex, who has helped me in a variety of ways and from whom I have learned many lessons not taught in a university.

My mother, Maxine Rorex, from whom I learned the importance of caring and the rewards of helping others. She, perhaps more than anyone else, is responsible for me entering a helping profession.

My husband, Rob Owensby, who is special beyond words.

All of these people have contributed significantly to my life and my work on this degree. They are all very special and continue to have a great deal to contribute. I am grateful they shared a part of their lives with me. I love and respect each of these people as I am certain that they love and respect me. With this foundation, I can go forward and hopefully help others to love and respect themselves.

ACKNOWLEDGMENTS

This dissertation is a culmination of my graduate research which was completed only with the help of a number of people. I want to thank the chair of my committee, Sky Huck, for his assistance throughout the dissertation process. I also want to thank Karen Swander for her support and encouragement, as well as Gary Klukken for his assistance. Drs. DeRidder, Dietz and Newton all contributed in very special ways and I would like to thank them. I want to thank the professionals involved in the collection of my data, Mark Roland, Alan Sims, Becky Ellis and Casey Feldmeier, as well as the adolescents and their families who participated in my study. I also want to thank Drs. Nash, McIllwain, and Meara for their assistance and support.

I want to thank my family for their support. My sister, Sheila Earl, typed my draft and I certainly appreciate her assistance. I also want to thank my husband, Rob Owensby. His patience, his willingness to carry more than his share of the work so that I could complete my dissertation, his belief in my abilities and his acceptance of my frailties were invaluable contributions to my academic accomplishments. If an acknowledgments page is meant to be an opportunity to express my gratitude for assistance rendered to me in completing my dissertation, mine would be incomplete if I did not express my appreciation to God. In Him all things are possible and I am quite certain that this dissertation would not be complete at this time without His assistance.

ABSTRACT

Adolescent pregnancy continues to be a problem in Tennessee. In 1984, approximately seventeen thousand Tennessee teenagers became pregnant even though over a decade before Tennessee had adopted one of the most liberal laws in the nation concerning the dispensing of contraceptives to minors. Past research indicates that knowledge of contraceptive methods is not adequate to prevent teen pregnancies. Currently, researchers are being encouraged to look at the problem from a developmental perspective as well as from an interpersonal, behavioral perspective.

The purpose of this study was to examine interpersonal and developmental characteristics that may distinguish pregnant adolescents from adolescents who have never been pregnant. The areas of specific interest are the psychological characteristic of dependency and the developmental concept of identity foreclosure. In this study, dependency was defined as the degree to which a person relies on others emotionally. Identity foreclosure was defined as the premature commitment to an adult identity without proceeding through a sufficient investigatory phase or "crisis."

The Interpersonal Behavior Survey and The Objective Measure of Ego-Identity Status were administered to thirty-four female adolescents from the rural counties of East Tennessee. Seventeen were pregnant or had recently delivered and seventeen had never experienced a pregnancy. Comparing the two groups on the variables

of dependency and identity foreclosure, the pregnant group was found, on the average, to be more dependent than the nulliparous group; the groups, however, did not differ significantly regarding identity foreclosure.

The results concerning dependency support past research. However, the results of the identity foreclosure data do not support previous findings concerning adolescents and identity foreclosure. Recommendations for future research and possible implications for policies and programs dealing with adolescent pregnancy were discussed.

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

Adolescent pregnancy continues to be a problem in Tennessee. In the eastern region of Tennessee, the pregnancy rate for teens is even higher than the state average (Tennessee Children's Service Commission, 1985). In 1984, approximately seventeen thousand Tennessee teenagers became pregnant even though, over a decade before, Tennessee had adopted one of the most liberal laws in the nation concerning the dispensing of contraceptives to minors. Obviously, factors other than the availability of contraceptives must be involved.

I. ADOLESCENT PREGNANCY

Teen pregnancy has been declared as "One of the most significant social problems facing the nation today" (Johnson, Rosenblaum, & Simons, 1985). The problem affects the teen, her baby, and society in general.

In the United States, approximately one million teenagers, 15 to 19 years of age, become pregnant each year (Alan Guttmacher Institute, 1976). The United States leads almost all developed nations in the world concerning the rate of teen pregnancy (Jones, et al., 1985). A news release from the Alan Guttmacher Institute in March of 1985 declared the "U. S. is the only developed country

where teenage pregnancy has been increasing in recent years." Even more troublesome are their figures that indicate that the largest difference between the U. S. and other developed countries reflected in the figures for the adolescents most prone to have increased difficulties, those girls under 15 years of age. It is well documented that pregnant teenagers are high risks medically, socially, educationally, and vocationally (Moore & Burt, 1982). In addition, their babies are also at risk (Menken, 1981).

Adolescent pregnancy has been characterized as a socio-economic problem with medical consequences (Hutchins, Kendall, & Rubino, 1979). However, even this description falls far short of capturing the magnitude and complexity of the problem. Medical complications most often mentioned in the course of an adolescent's pregnancy include toxemia, anemia, preeclamsia, prolonged labor, and premature labor (Bonham & Placek, 1978; Hayes & Crovitz, 1979; Menken, 1972, 1975; Mgoka & Mati, 1980). Adolescent mothers are from 15 to 92 percent more likely to suffer from these complications than mothers in their early twenties (Alan Guttmacher Institute, 1981). Miscarriages and the incidence of stillbirths are also higher for pregnant adolescents (Menken, 1975).

Babies of adolescent mothers are also more likely to face significant medical risks than babies born to older mothers. They are more likely to be premature, to have low APGAR scores, and to die in the first month and first year of life (Jekel, Harrison, Bancroft, Tyler, & Klerman, 1975; Menken, 1975). They are also more

likely to be low birth weight babies. Low birth weight--that is, less than five and one-half pounds--is not only cited as a major cause of infant mortality, but also as a significant contributor to long-term problems such as mental retardation, cerebral palsy, epilepsy, other birth injuries and neurological impairments (Alan Guttmacher Institute, 1981; Klerman & Jekel, 1973).

Socially, the pregnant adolescent also faces tremendous difficulties. Furstenberg (1976) cites numerous studies that support his findings that pregnant adolescents who marry are more than twice as likely to face divorce than their nonpregnant classmates who marry. Research indicates that teens who marry find themselves in very unstable relationships (Bumpass & Sweet, 1972; Card & Wise, 1978; Furstenberg, 1976). Very often, the father of the child does marry the teen mother, only to drop out of school and face long-term unemployment and the subsequent dissolution of his marriage. Adolescent mothers who are married are more likely to drop out of school than mothers who remain single and are also more likely to have a subsequent pregnancy than adolescents who do not marry (Furstenberg, 1981a). Most published studies also indicate that at least half of all teen mothers will experience another pregnancy within 36 months of the birth of their first child (Furstenberg, 1981a).

Educationally, the pregnant adolescent is also at a disadvantage. In a rather comprehensive study by Moore and Waite (1977), the birth of a child was the most significant variable in whether an

adolescent completed school. Findings from this study also indicate that adolescent mothers fall significantly behind former classmates who delayed child-bearing in their educational attainment. This deficit remains throughout the life of the adolescent mother. Naturally, curtailing one's education prematurely has a negative impact on her future vocational achievement.

The cost of teen pregnancy could be summarized in several ways. Over eight billion dollars in one year was spent on various services for mothers and children (from families receiving Aid to Families with Dependent Children) in which the mother started as a pregnant teen (Moore & Burt, 1982). The emotional cost to the teen and her family may very well be beyond imagination. Information provided by the Tennessee Department of Health and Environment (1985) indicates that even the suicide rate is seven times higher for pregnant teens than is to be expected.

In the literature dealing with teen pregnancy, a particular quote was cited time and time again. Campbell (1968) stated:

> The girl who has an illegitimate child at the age of 16 suddenly has 90 percent of her life's script written for her. She will probably drop out of school, even if someone else in her family helps to take care of the baby; she will probably not be able to find a steady job that pays enough to provide for herself and her child; she may feel impelled to marry someone else she might not otherwise have chosen. Her life choices are few, and most of them are bad. Had she been able to delay the first child, her prospects might have been quite different . . . (p. 236).

To a future counseling psychologist, the thought of having one's life script written at the tender age of 16 is simply not acceptable.

II. PURPOSE OF STUDY

The purpose of this study is to examine various interpersonal and developmental characteristics that may distinguish pregnant adolescents from adolescents who have never been pregnant. The areas of specific interest are the psychological characteristic of dependency and the developmental concept of identity foreclosure. In this study, dependency will be defined as the degree to which a person relies on others emotionally. Behaviors indicative of dependency include letting others have a dominant role in decision-making, feeling powerless and helpless, fearing the loss of others' support and seeking attention. Identity foreclosure is defined as the premature commitment to an adult identity without proceeding through a sufficient investigatory phase or "crisis."

CHAPTER II

REVIEW OF RELEVANT LITERATURE

I. FACTORS INFLUENCING ADOLESCENT PREGNANCY

Past research indicates that knowledge of contraceptive methods simply is not adequate to prevent teen pregnancies (DeAmicis, Klorman, Hess, & McAnarney, 1981; Lieberman, 1981). Although social scientists have suggested that attitudes must be changed to enhance the use of contraceptives, recent research indicates that even when positive attitudes exist concerning the use of contraceptives, congruent behavior is no more likely to occur on the part of the adolescents with positive attitudes than is likely to occur with adolescents who continue to hold a negative attitude concerning the use of contraceptives (Zabin, Hirsch, Smith, & Hardy, 1984).

Perhaps investigating areas other than contraception and attitudes concerning contraception would provide a more fruitful area of research in determining a possible solution to the continuing problem of teenage pregnancy. Factors such as self-concept, family dynamics, personality characteristics and interpersonal skill have more recently been addressed as possible issues related to teen pregnancy (Landy, Schubert, Cleland, Clark, & Montgomery, 1983; Colletta, Hadler, & Gregg, 1981; Patten, 1981).

In an extensive review of the literature concerning teenage pregnancy and motherhood, over 250 articles from medical, public

health and social work journals were identified (Phipps-Yonas, 1980). Although this subject appears well represented in professional journals, few objective studies have been conducted and even fewer from a developmental perspective. Phipps-Yonas (1980) contends that major psychology journals continue to ignore the topic even though research seems to be increasing in the area of adolescent pregnancy and motherhood. Psychologists have been encouraged to conduct research addressing the developmental issues of adolescents, the antecedents and consequences of teenage childbearing, as well as evaluative aspects of current programs oriented to the problem of adolescent pregnancy (Hale & Freese, 1980).

As mentioned previously, knowledge of how to prevent pregnancy is not sufficient to insure that pregnancy does not occur, even though the majority of pregnant adolescents state that they had no desire to become pregnant (Presser, 1974). Past research has emphasized sexual activity and contraceptive behavior of adolescents (Zelnik & Kantner, 1977, 1978a, 1978b, 1979). Currently, researchers are being encouraged to look at the problem from a developmental, life-span perspective as well as from an interpersonal, behavioral perspective (Jorgensen, 1983).

II. APPALACHIAN CONSIDERATIONS

The rural counties of East Tennessee used in this study are a part of Central Appalachia. Central Appalachia is generally considered to have the most severe problems of any of the Appalachian region

(Appalachian Regional Commission, 1983). These include isolation, rugged terrain, extreme poverty, poor health care, land erosion and flooding, and unstable mining economy and/or poor farm land, polluted streams, high illiteracy, high proportions of the very young and the very old, poor housing, and for many of the people, little hope for the future.

The problems associated with Appalachia may well have had an impact on the lack of psychological research in that region. In a search of the literature from 1967 through the early 1980s, not a single article was published in any American Psychological Association Journal concerning Appalachian children and families (Melton & Scalora, 1984). In a computer search spanning twenty years and including citations from the Comprehensive Dissertation Index, ERIC, PsychINFO, Social Scisearch, and Sociological Abstracts, only two articles were found that focused on mental health services in the Appalachian region (Melton & Scalora, 1984). These authors have suggested that this may indicate a relatively low value placed by psychologists on learning about the region, or it may reflect an inattention to rural communities in general which is common on the part of psychologists (Childs & Melton, 1983). Another possibility is that basic characteristics of Central Appalachia present seemingly insurmountable problems for researchers. Among these are the general inaccessability of the region including difficulties in traveling in the region, as well as difficulties in gaining the trust of isolated, poorly educated residents.

Although economic conditions improved in the early seventies, the recession and foreign imports took their toll on the Apalachian region (Appalachian Regional Commission, 1983). The Appalachian Regional Commission asserts that there have certainly been improvements over the years in the Appalachian region. However, Ralph Widner cautions that "Any assessment of the Appalachian program must begin in humility. There are millions of people in Appalachia who do not have access to good education, or to decent health, or to an adequate job, and who still live below the level of acceptable income" (Kendrick & Maher, 1985, p. 41).

Appalachia has been characterized as a "region of contradictions: rich yet poor; exploited yet underdeveloped; scarred yet beautiful" (Kendrick & Maher, 1985, p. 7). This characterization of the Appalachian region may also be an appropriate characterization of the Appalachian people. This may be a factor well worth noting as one reads the remainder of this study.

III. IDENTITY FORECLOSURE

Erikson (1968) describes adolescence in view of technological advances as being an even more "marked and conscious period and... almost a way of life between childhood and adulthood" (p. 128). He also asserts the need for adolescents to deal with crises of earlier years as they attempt to develop their identity. The identity formation of pregnant adolescents studied within Erikson's framework of resolving the task of developing an identity suggests differences in

identity formation between pregnant and non-pregnant adolescents (Protinsky, Sporakowski, & Atkins, 1982).

Marcia (1966) theorizes that individuals can reach four states concerning their identity. Similar to Erikson's (1968) position, Marcia states that individuals face a "crisis" or choice points. He also includes commitment as a part of the process of identity development. Candida Lutes (1981) describes Marcia's four states very clearly.

> Those who have reached no commitment and are experiencing no crisis are considered "identity diffused." Those who are in crisis but have not yet achieved a commitment are considered to be in "moratorium." Individuals who have made commitment without experiencing a crisis are said to be "foreclosed," and those who have reached a point of commitment following crisis are said to be "achievers" (p. 809).

Lutes (1981) found that persons involved in early marriage were more likely to be identity foreclosed. This would support Marcia's view that foreclosure occurs when individuals are so uncomfortable with uncertainty that they make choices without lengthy consideration and very often select socially desirable responses in an effort to reduce anxiety.

Considering the complexity of today's world and the numerous options available for adolescents, perhaps being a mother is a role female teens think they could adopt without addressing the various options to which they have been exposed. This may be particularly true since motherhood is still considered by many to be the epitome of achievement in a woman's life (Klerman, 1978). Foreclosed

individuals are also considered to be more stereotypical in their behavior and are viewed as more concerned with social desirability (Orlofsky, Marcia & Lesser, 1973). Although not all researchers agree, Marcia & Friedman (1970) have suggested that being "identity foreclosed" may be an effective adaptation for females in our society.

Concerning the Appalachian culture, identity foreclosure would seem to present a probable occurrence for adolescents. Exposed to a wide range of options through the media, but isolated from the mainstream, adolescents might adopt prematurely a role in which they had some knowledge, adequate exposure and which was viewed as a socially acceptable adult role, i.e. Motherhood (Presser, 1974).

IV. DEPENDENCY

Dependency has surfaced as a characteristic common to many pregnant adolescents and teen mothers (Landy, Schubert, Cleland, Clark, & Montgomery, 1983; Vincent, 1960). Women have also been found to be more dependent than men and this seems to be especially prevalent in Appalachia (Hernandez, Powell, Mauger, & Adkinson, 1980; Mauger, 1984). The close-knit structure of Appalachian families may also play a part in the similarities in relationship behaviors found between parent and child (Mauger, Zoss-Hernandez, Powell, & Adkinson, 1981).

Researchers have suggested a relationship between teenage pregnancy and parent-child relationships (Landy et al., 1983). In

the Landy et al. study, the girls were found to have a "close symbiotic relationship" (p. 691) with their mother and appeared to want to reconstruct their mother-daughter relationship with their own daughter. This study also found pregnant adolescents to be more dependent in their relationships, needing protection and reassurance from those around them. Therefore, these authors suggest psychological motivations are essential characteristics of teenage pregnancy.

Mental health professionals have suggested that females are trained in pathological dependency (Bardwick, 1971). Therapists indicate that being a dependent person may be an adaptive mechanism for females (Lerner, 1982). For the adolescent female, at a time when traditional values are so strong, dependency may serve this function of adaption. Higher dependency scores found among mothers from rural areas have been interpreted to be a function of the dependent lifestyle characteristic of a rural subculture (Fu et al., 1984). Not only were these rural mothers found to be dependent personally, but they also fostered dependency in their adolescent daughters.

V. RESEARCH QUESTIONS

Research concerning various psychological characteristics of pregnant, Appalachian adolescents is almost nonexistent. The present study approaches this issue by addressing two basic questions. The first concerns the relationship of dependency and adolescent pregnancy. The second question addresses the issue of identity foreclosure.

The first question is simply, "Concerning the emotional characteristic of dependency, do Appalachian adolescents who are pregnant or who have recently delivered differ from Appalachian adolescents who have never been pregnant?" Although there may be insufficient research to predict that there would be a significant difference in dependency between these groups, this researcher's professional experience with rural, pregnant, Appalachian adolescents is that, as a group, they are painfully dependent. This dependency seems to be centered within their families of origin. However, if they marry, as at least half do, many times they exchange a dependent relationship with their mother for a dependent relationship with their spouse. Emotional dependency is very often a pervasive feature of these adolescents' lives.

The second question deals with the identity development of the adolescents specifically regarding the concept of identity foreclosure. Do Appalachian adolescents who are pregnant or who have recently delivered differ from Appalachian adolescents who have never been pregnant regarding their identity foreclosure? Identity foreclosure is more difficult to ascertain in that overt behavior may or may not be indicative of the choices and commitments these pregnant adolescents are making or have made. Since foreclosure involves political and religious aspects in addition to occupational issues, very often adolescents do not openly discuss their decisions or commitments in these areas. Quite honestly, counselors typically do not explore political or religious orientations. However, seeing pregnant

adolescents embrace the idea of motherhood so completely, and their families encouraging the adolescent to adopt the role of motherhood so enthusiastically, predicting that these adolescents would display a greater degree of identity foreclosure is reasonable.

VI. LIMITATIONS

Reference has been made to the Appalachian culture and the role it may play in adolescent pregnancy, identity foreclosure and dependency. Adolescence can be defined by various criteria: physical, developmental, mental or cultural. Proefrock (1983) suggests that when the cultural concept of adolescence changes, the psychological concept is affected. This can present difficulties in comparing psychological studies seemingly conducted on similar populations, but in a different cultural context. American adolescents are exposed to a broader world as a result of the media. Appalachian adolescents, although physically isolated from the cultural mainstream of this country, have nonetheless been exposed to various lifestyles through television. It would seem that this would be a consideration in conducting research involving Appalachian adolescents.

Fiona Wilson (1980) reminds researchers that, due to the social aspect of adolescent pregnancy,

> it is important to remember that those characteristics which define girls as "at risk" in one social setting are not necessarily the same as those in another setting. To extrapolate incautiously from one

> environment to another is to apply a crude disease model to adolescent pregnancy, by assuming that the causative agents (and therefore the "cure") are independent of the environment (p. 151).

As a result of the questions raised by studies concerning psychological motivation and identity issues associated with teen pregnancy (Landy et al., 1983; Lutes, 1981), this study will address dependency and identity foreclosure among pregnant Appalachian adolescents. Considering Wilson's (1980) warning concerning inappropriate generalization, the scope of this study is intended to be limited to pregnant adolescents in Appalachia.

CHAPTER III

METHOD

I. SAMPLE SIZE

A sample size of 34 was selected for this study. This selection was derived from the utilization of power analysis guidelines (Cohen, 1969). Using Cohen's (1969) guidelines, a medium effect size of .5 and a medium power of .80 was selected as appropriate for this study. An alpha level of .10 was established as well. Consequently, using the power analysis guidelines, a cell size of 17 was indicated. This cell size is acceptable for testing both hypotheses since the same statistical analysis was used.

II. SUBJECTS

The subjects of this study are 34 females between the ages of 14 and 18 who are current residents of rural counties in East Tennessee. The subjects were identified through a federal project concerned with the care of pregnant adolescents and the prevention of teen pregnancy. Although the services of this project are open to all pregnant adolescents and their families in the counties being served by the project, the majority of adolescents involved with the project and/or included in this study would generally be considered to be living at or below the poverty level. Consequently, rather than simply identifying these adolescents as being from a "rural"

environment, a more accurate description might be that the majority are from a "rural impoverished" environment. Although the majority are not on public assistance, their standard of living would be well below that of the average American.

Adolescents were contacted individually by the project's counselors. Half of the adolescents were pregnant or had recently delivered a child and half had never experienced a pregnancy. In the interest of clarity, the group will be identified as "pregnant" if the adolescents in the group are pregnant or have recently delivered. The group will be identified as "nulliparous" if the adolescents in the group have never been pregnant.

All subjects were informed that their participation was voluntary and that they could withdraw from the study at any time with no adverse effects. When appropriate, parental consent was obtained in addition to the adolescent's consent. All participants were assured that their anonymity would be protected in any resulting reports. The participants were given the option of receiving feedback concerning their individual results and the vast majority took advantage of this option.

III. PROCEDURE

The Interpersonal Behavior Survey (Mauger, Adkinson, Zoss, Firestone, & Hook, 1980) and Objective Measure of Ego-Identity Status (Adams, Shea, & Fitch, 1979) were administered to each adolescent individually by counselors who had received training concerning the

administration of these particular instruments. Each subject was permitted to mail the answer sheets directly to the investigator if she so desired. Feedback was made available to the adolescents if they indicated that they wanted feedback regardless of whether they gave their answer sheets to the counselor or whether they mailed them directly to the investigator. The subjects were given an identifying number that was also placed on the answer sheets so that feedback could be available to them without the investigator having access to their names.

IV. INSTRUMENTATION

The Interpersonal Behavior Survey (IBS) is a self-report instrument developed to distinguish between assertive and aggressive behaviors (Mauger & Adkinson, 1980). Assertive behavior is identified as being directed toward a desired goal. Individuals who are assertive view others with a positive attitude. On the other hand, aggressive behavior is seen as originating from negative, hostile feelings toward other people. Goal attainment for an aggressive person may simply be a rationalization for their own aggressive behavior. Rather than overt behavior being the key to differentiating between assertive and aggressive behavior, very often the intention of the individual involved must be known in order to correctly discriminate between aggressive or assertive response classes. Therefore, a "self-report inventory is an ideal instrument for sampling individuals' intentions through their verbal behavior" (Mauger & Adkinson, 1980, p. 1).

The reliability of the IBS was established using the test-retest format over 2-day and 10-week periods. Each scale's reliability was measured separately with none showing a significant difference between the two test administrations. The reliability coefficients ranged from .71 to .94 with a mean of .89 for both the 2-day and 10-week periods. The validity of the IBS was established with the use of factor analytic studies as well as correlating the IBS with several well-known personality inventories (Mauger & Adkinson, 1980). These inventories include the California Psychological Inventory (Gough, 1975), the Edwards Personal Preference Schedule (Edwards, 1959), the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1951), the Buss-Durkee Hostility Inventory (Buss & Durkee, 1957), the Eysenck Personality Questionnaire (Eysenck & Eysenck, 1975) and the Tennessee Self-Concept Scale (Fitts, 1965), and specific assertiveness assessment instruments (Galassi, DeLo, Galassi, & Bastien; Rathus, 1973).

The IBS also includes items which reflect the degree to which an individual is dependent on others (Adkinson, 1979). This characteristic of emotional dependency has an individual scale included in the relationship category of the IBS. This scale was rationally derived. The content areas included by this scale are: decision-making, autonomy, attention-seeking behaviors, powerlessness and helplessness, close friends and family, fear of losing support, dependent on others' feelings, sympathy-seeking, and affection needs. Internal consistency item analysis based on the multitrait-multimethod

matrix procedure was used. The coefficient alpha reliability of the dependency scale was .86. The dependency scale was validated separately by correlating it with the Interpersonal Behavior Survey (Mauger & Adkinson, 1980), the California Personality Inventory (Gough, 1975), and the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1951). The range of scores for the dependency scale are 1 to 23. The higher the score, the more dependent the individual is.

Not only has the IBS been used with adolescent populations, as well as Appalachian populations, but this instrument was also validated using adolescent and Appalachian populations (Hernandez, Powell, Mauger, & Adkinson, 1980). Items in the IBS were written in everyday language that requires only a sixth grade reading level to understand. These aspects of the Interpersonal Behavior Survey make it particularly suitable for administration in this study.

The Objective Measure of Ego-Identity Status (OME-IS) is a self-report measure of ego-identity status (Adams, Shea, & Fitch, 1979). The OME-IS contains 24 Likert-type items. When scored, this instrument results in ego-identity categorizations defined by James Marcia (1966) as diffusion, foreclosure, moratorium and identity achievement. The items reflect crisis and commitment in the areas of occupational, political and religious choice as well as activity. The range of scores for foreclosure are from 6 to 36. The higher the score, the closer the individual would be to displaying choices and commitment indicative of an individual who was foreclosed. Since

the OME-IS is as yet unpublished, a copy is included in Appendix A. The scoring instructions are included as Appendix B.

The OME-IS has been validated with men and women and has been compared successfully to a semistructured interview procedured developed by Marcia (1966) known as the Marcia Interview (Adams, Shea, & Fitch, 1979). The range of convergence between the OME-IS and the Marcia Interview was between 70 and 100 percent in a more recent study (Adams, Ryan, Hoffman, Dobson, & Nielson, 1984). The range of convergence reflects how closely the OME-IS measures what the Marcia Interview measures, i.e. identity foreclosure, achievement, moratorium, and diffusion.

The Objective Measure of Ego-Identity Status has several major advantages over the Marcia Interview for this study. The OME-IS offers greater methodological control since rater bias and potential interviewer bias can be held to a minimum. Since the data in this study were collected by counselors who at times might have been working with the subjects, eliminating interviewer bias was exceptionally important. Having Likert type items rather than open-ended sentences also meant that less time was required on the part of each counselor in having the subject complete the instrument.

Unlike the Marcia Interview, the OME-IS has been validated with female, as well as male, populations (Adams & Jones, 1983). Considering the fact that all subjects in this study are female, this was another significant reason for selecting the OME-IS rather than

the Marcia Interview. The final reason for selecting this instrument was that it had also been administered successfully with a rural high school population in the Adams and Jones (1983) study, and this type of setting closely paralleled the setting of the current study.

CHAPTER IV

RESULTS

I. OVERVIEW

The dependency and identity foreclosure data were analyzed using the independent-samples t-test. The t-test was selected because the researcher was interested in the average level in each group on each dependent variable. This being the case, raw scores were used for analysis for both variables. Although the Objective Measure of Ego-Identity Status was originally designed to place individuals in one of four categories of identity formation, researchers generally agree with Erikson (1956) in recognizing that identity formation is an evolving process (Adams & Montemayer, 1983). Matteson (1977) has also suggested that classifying individuals into categories limits the measurement of the variable along a continuum. Since comparisons of average levels was the primary focus of the present study, raw score data were used to more accurately detect differences between the pregnant group and the nulliparous group regarding identity foreclosure.

Assumptions underlying the t-test include the independence of observations, homogeneity of variance, randomness of the sample of the population of interest and normality. Since the t-test is robust to non-normality (Cohen, 1965) this assumption was not a concern of the researcher. The t-test is also robust to the

heterogeneity of variance when the sample sizes are equal which was the case for the current study (Cohen, 1965). The remaining assumptions of a random sample and the independence of observations were met by the researcher in this study.

II. DEPENDENCY

The score range possible for the dependency data was from 1 to 23. The actual range of dependency scores was from 10 to 20 for the pregnant group and from 7 to 17 for the nulliparous group (the higher the score, the higher degree of dependency). The results of the t-test were significant at the preselected alpha level of .10. These results indicate that there is a difference in the level of dependency between the pregnant and the nulliparous groups. The average level of dependency for the pregnant group is significantly higher than that of the nulliparous group. Table I summarizes the results of the t-test on the variable of dependency. Figure 1 is a visual representation of the range, mean and standard deviations for both groups in regard to the dependency variable.

III. IDENTITY FORECLOSURE

The possible range of scores for the foreclosure items was from 6 to 36. The actual range was from 12 to 23 for the pregnant group and from 9 to 25 for the nulliparous group. As the score increases on this variable, the likelihood of the adolescent

TABLE I

LEVEL OF DEPENDENCY OF PREGNANT AND NULLIPAROUS APPALACHIAN ADOLESCENTS

Group	n	m	SD	t
Pregnant	17	14.76	3.4	1.86*
Nulliparous	17	12.71	2.8	

*Significant at $\alpha = .10$.

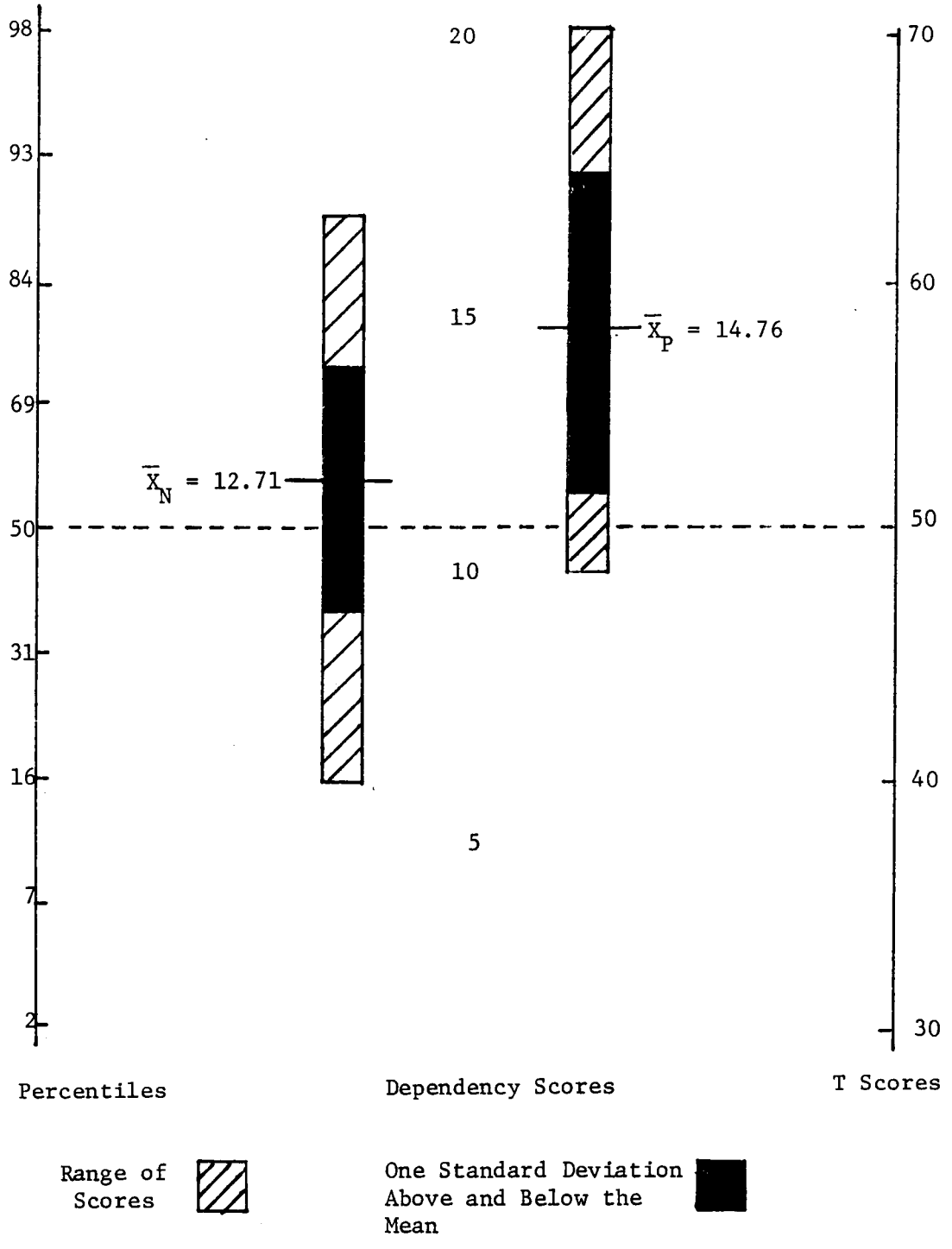

Figure 1. Dependency scores.

exhibiting characteristics associated with identity foreclosure also increases. The results of this study indicate that there is not a significant difference between pregnant adolescents and nulliparous adolescents regarding their level of identity foreclosure. Specific information concerning the analysis of the identity foreclosure data is contained in Table II.

TABLE II

LEVEL OF IDENTITY FORECLOSURE OF PREGNANT AND NULLIPAROUS APPALACHIAN ADOLESCENTS

Group	n	m	SD	t
Pregnant	17	17.18	4.1	.36
Nulliparous	17	16.94	4.1	

CHAPTER V

DISCUSSION

I. GENERAL CONCLUSIONS

The results of this study indicate that there may indeed be a relationship between emotional dependency and adolescent pregnancy. However, this study does not demonstrate a similar relationship between identity foreclosure and adolescent pregnancy.

One of the conclusions that can be drawn from the results of this study is that Appalachian adolescents who are pregnant or who have recently delivered are more emotionally dependent than Appalachian adolescents who have never been pregnant. This supports one of the hypotheses of this study as well as much of the literature concerning adolescent pregnancy and the psychological characteristic of dependency.

The findings in this study did not support the other hypothesis concerning identity foreclosure. Pregnant or recently delivered Appalachian adolescents were not more likely to demonstrate commitment or choices indicative of identity foreclosure than were Appalachian adolescents who had never experienced a pregnancy.

II. IMPLICATIONS

The implications for this study will be addressed in two parts. First, a discussion of the implications of the dependency

hypothesis which was supported, and then, a discussion of the identity foreclosure hypothesis which was not supported by the results of this study.

The results of this study concerning emotional dependency do support much of the research already conducted and cited in this current study concerning pregnant adolescents (Landy, Schubert, Cleland, Clark, & Montgomery, 1983; Vincent, 1960). Since Appalachian and rural women have been found to be more dependent than women in general (Hernandez, Powell, Mauger & Adkinson, 1980; Mauger, 1984), the fact that the pregnant adolescents in this study would be significantly higher in dependency than rural, Appalachian nulliparous adolescents speaks specifically to the variable of pregnancy. Obviously pregnancy can be viewed as a differentiating variable concerning the level of emotional dependency for rural, Appalachian adolescents. However, the question remains as to whether the level of emotional dependency can be a predictor of pregnancy among adolescents.

Lerner (1983) has suggested that females are particularly vulnerable to feelings of anxiety in "regard to making their own declaration of independence from their first family" (p. 701). She cautions that patients viewed as pathologically dependent may have a very accurate perception that their most significant relationships have little flexibility concerning the patients' attempts to grow less dependent. Likewise, the dependent person may have also recognized that "her passive-dependent stance serves a protective

function for other family members" (p. 701). This may be what the adolescents in this study are demonstrating.

Since fostering dependency has been found to be predominant in childrearing practices among rural mothers (Fu et al., 1984) and would consequently be transmitted to succeeding generations as a behavioral norm (Sussman, 1974), this study helps to explain the cyclical nature of adolescent pregnancy. Studies concerning teen pregnancy have repeatedly noted the characteristic of parents of pregnant adolescents starting as teen parents themselves (Alan Guttmacher Institute, 1981).

Implications for the results of the identity foreclosure analysis are not so clearcut. Identity foreclosure was not found to be a differentiating variable between pregnant and nulliparous Appalachian adolescents. In fact the average scores for these two groups were remarkably similar, as was the variability within the two groups. If the Objective Measure of Ego-Identity, the instrument used to assess foreclosure, was adequate for this task, one might consider the following implications.

Although researchers have traditionally been cautioned not to accept the null hypothesis when no significant differences are found, Fagley (1985) has suggested that if certain conditions are met that accepting the null hypothesis may be appropriate when indicated. The conditions that Fagley outlines happen to be the ones this researcher followed in determining an appropriate sample size. This researcher adopted the effect size found typical for

counseling research (Haase, Waechter, & Solomon, 1982) when using Cohen's (1969) guidelines for determining a sample size. Therefore, if the guidelines for power analysis are applied to this study, they will all be met. That being the case, the null hypothesis stating that pregnant Appalachian adolescents do not differ from nulliparous Appalachian adolescents may be accepted.

By accepting the null hypothesis the researcher does not necessarily believe that the mean of the pregnant group is equal to the mean of the nulliparous group exactly. However, there is sufficient evidence to indicate that the population means probably do not differ by an amount equal to or in excess of the selected effect size (.50) of this study. Therefore, if there is a difference, this study indicates that it would be a small, less than noteworthy difference.

If replications of this study duplicate these findings, policies concerning the prevention of adolescent pregnancy could be significantly impacted. Programs oriented to educating parents concerning adolescent development and helping parents develop skills that foster independence may very well be an appropriate intervention into the vicious cycle of adolescent pregnancy.

Educating parents concerning healthy adolescent development offers a limited approach to helping adolescents develop a healthy sense of independence. Skills related to developing independence really start much earlier in life. Therefore, programs oriented to helping parents encourage independence as their children grow

through infancy and childhood may offer the most success.

Unfortunately, parents seem to identify independence as an issue only as their children enter adolescence. Perhaps this is because adolescence is a time when developing independence is a primary task. It may be that since all behaviors in adolescence seem intensified, the parents may just seem to notice it more. Another reason that parents may seem unconcerned about independence until adolescence is that it is only beginning with the teen years that their child may actually have the ability to be independent, at least physically. Adolescents' peers have also taken on a new importance. Although teens rarely exercise total independence at this age, parents may nonetheless feel very threatened during this time. For these reasons, intervention programs may have to be targeted at parents of adolescents, rather than at parents of infants, simply because parents may not see the importance of helping their children develop a healthy sense of independence until they are attempting to understand an adolescent.

Developing independence is a pervasive aspect of adolescence. Adolescent pregnancy is not the only problem that might be helped by addressing this issue. In fact, prevention programs need to be more comprehensive in their approach in that many problems that teens face, such as alcohol and other drug abuse, depression, etc., could be reduced with an effective education and counseling program. Unfortunately, many funding sources want to address one problem at a time rather than combine efforts to truly address the needs of adolescents and their families.

In light of Campbell's (1968) statement suggesting that an adolescent mother's future is almost destined to be totally bleak, counseling psychologists need to become involved in addressing the problem of teen pregnancy. Accepting this type of limitation on any person's future is totally incongruent with the underlying principles of counseling psychology and is consequently unacceptable. Unfortunately, counseling psychologists as a group remain uninvolved in finding a solution to the continuing problem of adolescent pregnancy. This needs to change. Counseling psychologists occupy a unique position in terms of helping people reach toward their potential. Anything that limits one's potential needs to be a primary interest area for professionals in the field of counseling psychology.

III. GENERAL LIMITATIONS

Certain features of this study limit the generalizability of its results. Specific mention has already been made concerning the Appalachian region, therefore generalizations concerning characteristics of pregnant adolescents need to be restricted to adolescents in this region. Likewise, the adolescents in this study were selected from a rural population. This is unlike most of the past research involving pregnant teens (Phipps-Yonas, 1980) and needs to be considered when interpreting the results. All of the subjects in this study were Caucasian. This happens to be a feature common to many of the rural counties in East Tennessee, but it is also

unlike many studies concerning adolescent pregnancy and therefore may be a significant limitation in the generalizability of this study.

The instruments were administered by several counselors. Usually these counselors did have a significant relationship with the pregnant or recently delivered adolescent. This was normally not the case for the nulliparous adolescents. It is conceivable that this could have had an influence on the findings contained in this study.

There was no effort made to control for the marital status of the subjects in this study. This was a conscious decision on the part of the researcher in an effort to remove adolescent pregnancy from the issue of premarital sexual activity. Having individuals in the pregnant group who were both married and single may be a limiting factor when looking at the results of the identity foreclosed analysis. This is particularly true in view of Lutes (1981) finding that indicates persons involved in an early marriage are more likely to be identity foreclosed than individuals not so involved. However, the similarities of the foreclosure scores (the means being less than one raw score apart and the standard deviations being almost identical) would indicate that these groups may be more alike on this variable than simply a nonsignificant finding would indicate.

Another possibility is that the instrument selected was not adequate to determine foreclosure in this setting. Although the

Objective Measure of Ego-Identity Status has been used quite extensively on female adolescents and rural adolescents as previously cited, the possibility that the instrument was inadequate or inappropriate for this study is a possibility. Since Marcia adapted his interview to incorporate sexuality questions on the female version of his assessment instrument in recognition of an additional area of crisis and commitment for females (Marcia & Friedman, 1970), adding this component to the OME-IS might be helpful to future research. Matteson (1975) has suggested that looking at each content area (occupational, religious, political and sexual) may be more appropriate in determining identity formation rather than simply looking at identity categories. Longitudinal studies may be the most productive in examining identity formation since developing an identity actually involves a continuing process over an extended period of time.

IV. FUTURE RESEARCH

The present study is an initial attempt to determine whether there are differences between pregnant or recently delivered Appalachian adolescents and nulliparous Appalachian adolescents concerning the characteristics of emotional dependency and identity foreclosure. Replications using similar populations would be helpful in developing recommendations for changes in policies or treatment programs.

Future research could be designed to control for marital status of the subjects, as well as educational status. This may be particularly helpful in looking at Caucasian populations since Caucasian adolescents who become pregnant are much more likely to marry than black adolescents who become pregnant (Zelnik, Kanter, & Ford, 1981). Marriage has also been cited as a disadvantage in terms of the adolescents' educational attainment with adolescents who marry twice as likely to drop out of school as those who do not (Moore, Hofferth, Caldwell, & Waite, 1979). Predictions as to the results of studies controlling for these factors are complicated by the fact that marriage and educational status seem so interrelated. However, one might suggest that pregnant adolescents who marry would be more dependent and more likely to be identity foreclosed than pregnant adolescents who did not marry.

Adolescent mothers who now have toddlers might also present some interesting comparisons for future researchers. If they follow the path of previously cited research, one might expect them to be raising the child without the support of a husband, regardless of whether they had married or not. The focus could be on whether they were less dependent emotionally than adolescents who had not had the opportunity to develop such an independent stance. Whether raising a child would encourage the development of an achievement identity would also be helpful information. It is reasonable to believe that they would probably be less dependent than adolescents who had not been in a position of having another individual dependent

on them. However, in terms of identity foreclosure, maintaining the role of motherhood might not increase their likelihood of questioning their role in sufficient detail for them to move from a foreclosed identity to an achieved identity.

Studies that include a more diverse group of subjects would increase the generalizability of similar studies. These studies could include comparisons of urban and rural groups, as well as Caucasian and minority groups. Since adolescent pregnancy has been found to be less disruptive for black adolescents than for Caucasian adolescents, the researcher may find less difference between pregnant and nulliparous adolescents on several variables including dependency (Moore & Waite, 1977).

Research concerning dependency and identity foreclosure that compares adolescents who carry their pregnancies to term with adolescents who choose not to carry to term might also be helpful. This type of study might result in additional insight into characteristics that are predictive of adolescent pregnancy.

Including parents in future studies could increase the information currently available concerning the similarity of characteristics that they may have in common with their pregnant or nulliparous daughters. This may be particularly helpful in determining future interventions designed to prevent teen pregnancy. Due to the importance of the parents in the psychological development of their children, one might expect that there would be several variables that would offer additional information concerning the

formation of an identity status. Females in homes where dependency is viewed as an acceptable, and perhaps preferred characteristic for women, would be expected to be more dependent than females from homes with a different set of expectations.

The role of the baby's father merits greater attention. Very often his role is very confusing. Parents of the pregnant adolescent may still be in a position to determine the extent of his involvement with the child (Furstenberg, 1981). The teen female may be trying to continue a relationship with the baby's father and maintain her relationship with her parents. How this potential conflict impacts on the identity development of the pregnant teen and the baby's father may be helpful information to have when developing future programs designed to enhance the quality of family life. The level of dependency demonstrated by both adolescents would also be helpful information to have in working with the families involved in a teen pregnancy. Predictions as to how the role of the teen father impacts on identity foreclosure and dependency would be mere guesswork since current research into the male's role in adolescent pregnancy is so limited. However, one might expect that the role of the baby's father would have less of an impact on the female teen than that of her parents.

Some of the information available as a result of the administration of the Interpersonal Behavior Survey suggests that other areas of potential interest include research into the area of aggressiveness on the part of rural Appalachian adolescents,

particularly physical and passive aggressiveness. Scores on the IBS for pregnant adolescents indicate that they were very willing to ask for help and able to refuse demands. This is contrary to the stereotype of Appalachian adolescents and warrants further study.

Longitudinal studies are definitely indicated for several reasons. Since identity formation is a developmental process, attempting to measure identity formation at any one point in time is necessarily limited. Likewise, a longitudinal study could also address the impact of having and caring for a child on the adolescent's development. To more accurately reflect the relationship between the teen's parents and the teen, a study over time could measure the relationship as it evolved. Optimally, this could start with the birth of a child and continue until a grandchild was born. This would be quite an undertaking, but would provide a wealth of information concerning child development, parenting behavior and attitudes, as well as information concerning the evolution of the family and the development of its members.

This study was meant to be a beginning. The researcher of this study believes that good research raises more questions than it answers. However, the researcher also believes that research results should be applied whenever possible to improve policies or treatment oriented to the questions being addressed. In both of these regards, this study has been a fruitful beginning.

LIST OF REFERENCES

LIST OF REFERENCES

Adams, G. R. & Jones, R. M. (1983). Female adolescents' identity development: Age comparisons and perceived child-rearing experience. Developmental Psychology, 19, 249-256.

Adams, G. R. & Montemayer, R. (1983). Identity formation during early adolescents. Journal of Early Adolescence, 3, 193-202.

Adams, G. R., Ryan, J. H., Hoffman, J. J., Dobson, W. R., & Nielsen, E. C. (1984). Ego identity status, conformity and personality in late adolescence. Journal of Personality and Social Psychology, 47, 1091-1104.

Adams, G. R., Shea, J. A., & Fitch, S. A. (1979). Toward the development of an objective measure of ego-identity status. Journal of Youth and Adolescence, 8, 223-237.

Adkinson, D. R. (1979). Construction and validation of a rationally derived measure of interpersonal dependency. Unpublished master's thesis, Georgia State University, Atlanta.

Alan Guttmacher Institute. (1976). Eleven million teenagers--What can be done about the epidemic of adolescent pregnancies in the U. S. New York: Author.

Alan Guttmacher Institute. (1981). Teenage pregnancy: The problem that hasn't gone away. New York: Author.

Alan Guttmacher Institute. (1985, March). News. Available from The Alan Guttmacher Institute, 360 Park Avenue South, New York, New York 10010.

Appalachian Regional Commission. (1983). Appalachia: The economic outlook through the eighties. Appalachia: Journal of the Appalachian Regional Commission, 17(2), 1-14.

Bardwick, J. (1971). Psychology of women. New York: Harper and Row.

Bonham, G. S. & Placek, P. J. (1978). The relationship of maternal health, infant health, and socio-demographic factors to fertility. Public Health Reports, 93, 283-292.

Bumpass, L. L. & Sweet, J. A. (1972). Differentials in marital instability: 1970. American Sociological Review, 37, 754-766.

Buss, A. H. & Durkee, A. (1957). An inventory for assessing different kinds of hostility. Journal of Consulting Psychology, 21, 343-349.

Campbell, A. A. (1968). The role of family planning in the reduction of poverty. Journal of Marriage and Family, 30, 236-246.

Card, J. J. & Wise, L. L. (1978). Teenage mothers and teenage fathers: The impact of early childbearing on the parents' personal and professional lives. Family Planning Perspectives, 10, 199-205.

Childs, A. W. & Melton, G. B. (Eds.). (1983). Rural psychology. New York: Plenum Press.

Cohen, J. (1965). Some statistical issues in psychological research. In B. B. Wolman (Ed.), Handbook of Clinical Psychology. New York: McGraw-Hill, 95-121.

Cohen, J. (1969). Statistical power analysis for the behavioral sciences. New York: Academic Press.

Colletta, N. D., Hadler, S. & Gregg, C. H. (1981). How adolescents cope with the problems of early motherhood. Adolescence, 16, 499-512.

DeAmicis, L. A., Klorman, R., Hess, D. W. & McAnarney, E. R. (1981). A comparison of unwed pregnant teenagers and nulligravid sexually active adolescents seeking contraception. Adolescence, 16, 11-20.

Edwards, A. L. (1959). Manual of the Edwards Personal Preference Schedule. New York: The Psychological Corporation.

Erikson, E. H., Identity: Youth and crisis. (1968). New York: W. W. Norton & Company.

Eysenck, H. J. & Eysenck, S. B. G. (1975). Manual for the Eysenck Personality Questionnaire. San Diego: Educational and Industrial Testing Service.

Fagley, N. S. (1985). Applied statistical power analysis and the interpretation of nonsignificant results by research consumers. Journal of Counseling Psychology, 32, 391-396.

Fitts, W. H. (1965). Tennessee Self-Concept Scale manual. Counselor Recordings and Tests, 1965.

Fu, V. R., Hinkle, D. E., Shoffer, S., Martin, S., Carter, E., Clark, A., Culley, P., Disney, G., Ercanli, G., Glover, E., Kenney, M., Lewis, H., Moak, S., Stalling, S., & Wakefield, T. (1984). Maternal dependency and childrearing attitudes among mothers of adolescent females. Adolescence, 19, 795-804.

Furstenberg, F. F., Jr. (1976). Unplanned parenthood: The social consequences of teenage childbearing. New York: The Free Press.

Furstenberg, F. F., Jr. (1981). The social consequences of teenage parenthood. In F. F. Furstenberg, Jr., R. Lincoln, & J. Menken (Eds.), Teenage Sexuality, Pregnancy and Childbearing (pp. 184-210). Philadelphia: University of Pennsylvania Press.

Furstenberg, F. F., Jr. (1981). Implicating the family: Teenage parenthood and kinship involvement. In T. Odoms (Ed.), Teenage Pregnancy in a Family Context. Philadelphia: Temple University Press.

Galassi, J. P., DeLo, J. P. S., Galassi, M. D., & Bastien, S. (1974). The College Self-Expression Scale: A measure of assertiveness. Behavior Therapy, 5, 165-171.

Gough, H. G. (1975). California Psychological Inventory Manual. Palo Alto, CA: Consulting Psychologists Press.

Haase, R. F., Waechter, D. M. & Solomon, G. S. (1982). How significant is a significant difference? Average effect size of research in counseling psychology. Journal of Counseling Psychology, 29, 58-65.

Hale, C. B. and Freese, M. P. (1980). Adolescent pregnancy: The unmet need for psychological research. (Report No. CG014658). Washington, D.C.: Southeastern Psychological Association. (ERIC Document Reproduction Service No. ED 192 202).

Hathaway, S. R. & McKinley, J. C. (1951). Minnesota Multiphasic Personality Inventory Manual. New York: The Psychological Corporation.

Hayes, L. & Crovitz, E. (1979). Adolescent pregnancy. Southern Medical Journal, 72, 869-874.

Hernandez, S. K., Powell, J. L., Mauger, P. A. and Adkinson, D. R. (1980). Self-reported assertive and aggressive behaviors of rural Appalachian residents. Presented at the APA Convention, Montreal, Canada.

Hutchins, F. L., Kendall, N. and Rubino, J. (1979). Experience with teenage pregnancy. Journal of the American College of Obstetricians and Gynecologists, 54, 1-5.

Jekel, J. F., Harrison, J. T., Bancroft, D. R. E., Tyler, N. C., & Klerman, L. V. (1975). A comparison of health of index and subsequent babies born to school age mothers. American Journal of Public Health, 65, 370-374.

Johnson, K., Rosenbaum, S., & Simons, J. (1985). The data book: The nations, states, and cities. Washington: Children's Defense Fund.

Jones, E. F., Forrest, J. D., Goldman, N., Henshaw, S. K., Lincoln, R., Rosoff, J. I., Westoff, C. F., & Wulf, D. (1985). Teenage pregnancy in developed countries: Determinants and policy implications. Family Planning Perspectives, 17, 53-63.

Jorgenson, S. R. (1983). Beyond adolescent pregnancy: Research frontiers for early adolescent sexuality. Journal of Early Adolescence, 3, 141-155.

Kendrick, E. F. and Maher, J. F. (1985). Appalachia--Twenty years of progress (Special issue). Appalachia: Journal of the Appalachian Regional Commission, 18(3).

Klerman, L. V. (1978). Adolescent pregnancy: The need for new policies and programs. Journal of School Health, 45, 263-267.

Klerman, L. V. & Jekel, J. F. (1973). School-age mothers: Problems, programs and policy. Hamden: Linett.

Landy, S., Schubert, J., Cleland, J. F., Clark, C. and Montgomery, J. S. (1983). Teenage pregnancy: Family syndrome? Adolescence, 18, 679-694.

Lerner, H. E. (1983). Female dependency in context: Some theoretical and technical considerations. American Journal of Orthopsychiatry, 53, 697-705.

Lieberman, J. J. (1981). Locus of control as related to birth control knowledge, attitudes and practices. Adolescence, 16, 1-10.

Lutes, C. J. (1981). Early marriage and identity foreclosure. Adolescence, 16, 809-815.

Marcia, J. E. (1966). Development and validation of ego identity status. Journal of Personality and Social Psychology, 3, 551-558.

Marcia, J. E. & Friedman, M. L. (1970). Ego identity status in college women. Journal of Personality, 38, 249-263.

Matteson, D. R. (1975). Adolescence today: Sex roles and the search for identity. Homewood, IL: Dorsey.

Matteson, D. R. (1977). Exploration and commitment: Sex differences and methodological problems in the use of identity status categories. Journal of Youth and Adolescence, 6, 353-374.

Mauger, P. A. (1984). (Dependency in rural Appalachia). Unpublished raw data.

Mauger, P. A. and Adkinson, D. R. (1980). Interpersonal Behavior Survey (IBS) manual. Los Angeles: Western Psychological Services.

Mauger, P. A., Adkinson, D. R., Zoss, S. K., Firestone, G., & Hook, J. D. (1980). Interpersonal Behavior Survey (IBS) administration booklet. Los Angeles: Western Psychological Services.

Mauger, P. A., Zoss-Hernandez, S. K., Powell, J. L. and Adkinson, D. R. (1981, March). Trends in self-reports of assertive and aggressive behaviors across generations of rural Appalachian families. Paper presented at the Southeastern Psychological Association Conference, Atlanta, GA.

Melton, G. B. & Scalora, M. J. (1984, June). Social Science research on Appalachian children and families: Have we learned anything since the Great Society? Paper presented at the Fifth Annual Conference on Appalachian Children and Families, Morehead, KY.

Menken, J. (1972). The health and social consequences of teenage childbearing. Family Planning Perspectives, 4, 45-53.

Menken, J. (1975). The health and demographic consequences of adolescent pregnancy and childbearing. in C. Chilman (Ed.), Adolescent Pregnancy and Childbearing. Washington, D.C.: Government Printing Office.

Menken, J. (1981). The health and social consequences of teenage childbearing. In F. F. Furstenberg, Jr., R. Lincoln, & J. Menken (Eds.), Teenage Sexuality Pregnancy, and Childbearing. Philadelphia: University of Pennsylvania Press.

Moore, K. A. & Burt, M. R. (1982). Private crisis, public cost: Policy perspectives on teenage childbearing. Washington, D.C.: The Urban Institute.

Moore, K. A., Hofferth, S. L., Caldwell, S. B., & Waite, L. J. (1979). Teenage motherhood--Social and economic consequences. Washington, D.C.: The Urban Institute.

Moore, K. A. & Waite, L. J. (1977). Early childbearing and educational attainment. Family Planning Perspectives, 9, 220-225.

Nyoka, W. M. & Mati, J. K. G. (1980). Obstetric aspects of adolescent pregnancy. The East African Medical Journal, 57(2), 124-130.

Orlofsky, J. L., Marcia, J. E., & Lesser, I. M. (1973). Ego identity status and the intimacy vs. isolation crisis of young adulthood. Journal of Personality and Social Psychology, 27, 211-219.

Patten, M. A. (1981). Self concept and self esteem: Factors in adolescent pregnancy. Adolescence, 16, 765-775.

Phipps-Yonas, S. (1980). Teenage pregnancy and motherhood: A review of the literature. American Journal of Orthopsychiatry, 50, 403-431.

Presser, H. (1974). Early motherhood: Ignorance or bliss? Family Planning Perspectives, 6, 8-14.

Proefrock, D. W. (1983). The uncertainty principle in adolescent research. Adolescence, 18, 339-343.

Protinsky, H., Sporakowski, M. & Atkins, P. (1982). Identity formation: Pregnant and non-pregnant adolescents. Adolescence, 17, 73-80.

Rathus, S. A. (1973). A 30-item schedule for assessing assertive behavior. Behavior Therapy, 4, 398-406.

Sussman, M. B. (1974). Family, kinship and bureaucracy in M. B. Sussman (Ed.), Sourcebook in Marriage and Family. Boston: Houghton, 233-250.

Tennessee Children's Services Commission. (1985). Spectrum. (Available from Tennessee Children's Services Commission, 1600 James K. Polk Building, Nashville, TN 37219.)

Tennessee Department of Health and Environment. (1985). Get the Facts. (Available from the Tennessee Department of Health and Environment, Bureau of Health Services, 100 Ninth Avenue North, Nashville, TN 37219-5405.)

Vincent, C. E. (1960). Unwed mothers and the adoption market: Psychological and familial factors. Marriage and Family Living, 22(2), 112-118.

Wilson, F. (1980). Antecedents of adolescent pregnancy. Journal of Biosocial Science, 12, 141-152.

Zabin, L. S., Hirsch, M. B., Smith, E. A., & Hardy, J. B. (1984). Adolescent sexual attitudes and behavior: Are they consistent? Family Planning Perspectives, 16, 181-185.

Zeinik, M. & Kantner, J. F. (1977). Sexual and contraceptive experience of young unmarried women in the United States, 1976 and 1971. Family Planning Perspectives, 9, 55-71.

Zeinik, M. & Kantner, J. F. (1978). Contraceptive patterns and premarital pregnancy among women aged 15-19 in 1976. Family Planning Perspectives, 10, 135-142.

Zeinik, M. & Kantner, J. F. (1978). First pregnancies to women aged 15-19: 1976 and 1971. Family Planning Perspectives, 10, 11-20.

Zeinik, M. & Kantner, J. F. (1979). Reasons for non-use of contraception by sexually active women aged 15-19. Family Planning Perspectives, 11, 289-296.

Zeinik, M., Kantner, J. F., & Ford, K. (1981). Sex and pregnancy in adolescence. Beverly Hills: Sage Publications, Inc.

APPENDICES

APPENDIX A

THE OBJECTIVE MEASURE OF EGO-IDENTITY STATUS

Sex: Male_____ Female_____ Religious Preference_____

Instructions: Read each item and indicate to what degree it fits your own impressions as to how it best reflects your thoughts and feelings.

1. I haven't really considered politics. They just don't excite me much.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

2. I might have thought about a lot of different things but there's never really been a decision since my parents said what they wanted.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

3. When it comes to religion I just haven't found any that I'm really into myself.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

4. My parents had it decided a long time ago what I should go into and I'm following their plans.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

5. There are so many different political parties and ideals. I can't decide which to follow until I figure it all out.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

6. I don't give religion much thought and it doesn't bother me one way or the other.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

7. I guess I'm pretty much like my folks when it comes to politics. I follow what they do in terms of voting and such.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

8. I haven't chosen the occupation I really want to get into, but I'm working toward becoming a_____until something better comes along.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

9. A person's faith is unique to each individual. I've considered and reconsidered it myself and know what I can believe.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

10. It took me a long time to decide but now I know for sure what direction to move in for a career.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

11. I really never was involved in politics enough to have to make a firm stand one way or the other.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

12. I'm not so sure what religion means to me. I'd like to make up my mind but I'm not done looking yet.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

13. I've thought my political beliefs through and realize I may or may not agree with many of my parent's beliefs.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

14. It took me awhile to figure it out, but now I really know what I want for a career.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

15. Religion is confusing to me right now. I keep changing my views on what is right and wrong to me.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

16. I'm sure it will be pretty easy for me to change my occupational goals when something better comes along.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

17. My folks have always had their own political and moral beliefs about issues like abortion and mercy killing and I've always gone along accepting what they have.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

18. I've gone through a period of serious questioning about faith and can now say I understand what I believe in as an individual.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

19. I'm not sure about my political beliefs, but I'm trying to figure out what I can truly believe in.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

20. I just can't decide how capable I am as a person and what jobs I'll be right for.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

21. I attend the same church as my family has always attended. I've never really questioned why.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

22. I just can't decide what to do for an occupation. There are so many that have possibilities.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

23. I've never really questioned my religion. If it's right for my parents it must be right for me.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

24. Politics are something that I can never be too sure about because things change so fast. But I do think it's important to know what I believe in.

Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree

APPENDIX B

OBJECTIVE MEASURE OF EGO-IDENTITY STATUS

SCORING INSTRUCTIONS

OM-EIS SCORING INSTRUCTIONS

DIRECTIONS: Six items have been constructed for each stage of identity subscale. Each subscale has two items reflecting each of the three dimensions of occupation, politics and religion. Items are scored by weighting the "strongly agree" by a value of 6 and the "strongly disagree" with a value of 1. Identity stage subscales are derived by totaling all six items, across the three dimensions, into a summed subscale score. (While occupation, politics and religion scores could be derived for each stage, it should be noted that such a scoring procedure would be experimental in nature, and that the subscales were not originally validated for such a procedure. Therefore, caution should be taken in the analysis of such data.)

For a comprehensive summary of validation attempts on the OM-EIS refer to Adams, G.R., Shea, J.A., & Fitch, S.A. "Toward the Development of an Objective Assessment of Ego-Identity Status." Journal of Youth and Adolescence, 1979, 8, 223-237.

Each item is identified under the appropriate identity stage and the subscale dimension which it is tapping.

	Diffusion	Foreclosure	Moratorium	Identity Achievement
Occupation	8, 16	2, 4	20, 22	10, 14
Politics	1, 11	17, 7	5, 19	13, 24
Religion	3, 6	21, 23	12, 15	9, 18
	6 items	6 items	6 items	6 items

VITA

Brenda Gail Earl Owensby was born in Knoxville, Tennessee on October 1, 1950. After attending several schools as the result of her father's Army career, she graduated from Karns High School in Knoxville in 1968. She graduated from The University of Tennessee, Knoxville in 1972 and was in the first class at The University of Tennessee to commission women in the armed services. She served in the United States Army until 1978 during which time she received her Master's degree with a major in Psychology from Augusta College in 1978. She left active service to pursue her doctorate, but remains in the Army Reserve as a Research and Development Specialist. As a doctoral student, she taught for two years at the university and then began her counseling psychology internship. While completing her internship she began a six-month position with a mental health crisis, and then joined the staff of a non-profit agency as an associate director of a teen pregnancy program. In the fall of 1985, she joined the staff of a credit union as their Director of Training and Personnel. She received her Doctor of Philosophy from The University of Tennessee, Knoxville, in December 1985 with an emphasis in counseling psychology.