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**ACADEMIC AND TRANSITIONAL EXPERIENCES OF  
HIGH SCHOOL AT-RISK YOUTH**

A Thesis in

Workforce Education and Development

by

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## ABSTRACT

This study investigated academic and transitional experiences of at-risk youth with a purpose to establish whether these experiences vary among them by race, race and gender, and race and residence. Of particular interest was whether the experiences of at-risk white males differ from those of other at-risk youth.

Five specific experiences were examined, namely: program of study, high school graduation, dropout, transition to postsecondary, and transition to employment. The main research question that guided the study was: Among at-risk youth, do the academic and transitional experiences vary by race, race and gender, and race and residence?

Data for the study were drawn from the National Longitudinal Survey of Youth (NLSY97). A sub-sample of 837 participants was used. At-risk youth were defined as those from families living below poverty level in the United States and who are at risk of experiencing academic and transitional difficulties as a result of their poor economic backgrounds. Descriptive and multivariate statistics were used to analyze the data. Frequency counts, percentages and Chi-square tests were used in the descriptive analysis and logistic regression and survival analysis were used in the multivariate analyses.

Findings revealed that among at-risk youth there are no variations in high school graduation, dropout, and transition to postsecondary education. In general, at-risk white males are as likely as all other at-risk youth to experience the negative effects of poverty

when faced with equal levels of economic hardships. Their patterns of enrollment in programs vary slightly, but overall all at-risk youth are more likely to follow a general curriculum. The one major exception is that blacks in rural America are significantly less likely to be employed than their white counterparts even when poverty levels are controlled.

It is recommended that while policy makers should continue to support the disproportionately disadvantaged minorities, it is important to recognize that among at-risk youth there are more whites than other racial groups and they are also experiencing similar academic and transitional difficulties that characterize most minorities. The central issue in addressing problems of at-risk youth should be poverty and not race.

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## Chapter 1

### INTRODUCTION

Decades of research have documented the effect of poverty on academic and transitional experiences of youth. A large number of these studies have examined racial differences in academic achievement and transition to adulthood. In nearly all these research, overwhelming focus has been on a comparison between the minorities and the white majority in general. Without doubt, available evidence shows that the white majority have performed better than the minorities both in school and out in the labor market. Additionally, white males have traditionally been advantaged over all other racial and gender categories. Specifically urban white males have enjoyed superiority in American education and adult life. These advantages make it hard to visualize any poverty among the white majority.

#### *Statement of the Problem*

Although a large body of literature has examined racial differences in regard to poverty and educational attainment, no known studies have investigated the fate of poor whites as a subset in the youth population. Much of the previous research on youth at risk and poverty has focused on minority populations. Little attention has been given to the millions of American white youth living in poverty, and also experiencing transitional difficulties that are typical of minority groups. This study focused on white youth from impoverished homes.

### *Background to the Study*

Teenage years are critical years for the successful development of youth as they transition from high school to post-secondary education or to the labor market. It is during these formative years that these young adults make a number of very critical educational and labor market choices. They decide whether to drop out or complete high school, whether to attend college after high school, or whether to enter the labor market upon graduation. These decisions influence their future occupation, earning ability, and social class (Borus, 1984). The amount of education, work experience, and training that they receive during these years do have important influences on their adult lives. Yet, these years are particularly difficult for at-risk youth from poor economic backgrounds.

Three important factors influence youth decisions as they go through high school, namely: school experiences, family background, and the community environment (Barr & Parrett, 2001). These factors interact and shape youth variously throughout their transition years. There is increasing agreement among researchers that young people are not just a universal category and that their transition needs to be understood within that diverse context of peers, school, family, and community (Allat & Yeandle, 1992). Rauscher and Thieme (1998) found that many people still view transition as a single point in time, occurring the day a student leaves the secondary school system. They argue that this view ignores the importance of the high school years in preparing for the transition as well as the early post high school experiences. Instead, they identify transition as a gradual process that lasts at least four years before a student transitions

from secondary to post secondary education or to employment and extends well into their first years after high school. Consequently, ages 14 – 20 are very critical years in the transition process, and it involves students, parents, the community, and school.

Transition has many challenges for all youth and the school has an important role in moderating other influencing factors. Gray and Herr (1998) suggested that a more comprehensive view of transition would encompass the experiences in schooling that ultimately inform the individual's choice making and preparation for work beginning from elementary school through to induction into employment.

In recent years, a lot of attention has been paid to at-risk youth, especially because of their growing numbers. According to Rodgers (2000), large numbers of youth are faced with numerous difficulties as they navigate their life experiences to adulthood. Young people from socially and economically disadvantaged backgrounds face a larger number of challenges that can limit their chances of success in education and employment. Many of these youth are forced to drop out of school, and hence the at-risk youth, as they have popularly been referred to.

The concept of risk is not new in the U.S. education dilemma. Since the mid-1960s, the Elementary and Secondary Education Act (ESEA) has provided funding for programs designed to help students achieve academic success and avoid dropping out. Based on the assumption that risk of educational failure was caused largely by poverty, minority status, and other individual or family characteristics, these programs originally targeted students identified as disadvantaged by virtue of their low economic and social

status (Land & Legters, 2002). However, when *A Nation at Risk* was published (National Commission on Excellence in Education, 1993), analyses of the causes of academic failure broadened and became deeper. Educators, policy makers, and researchers began to examine a variety of other factors confounded with or independent of socioeconomic status.

Several researchers have defined the term “at-risk” differently and these various definitions have been basically tilted toward the specific risk behavior and outcome under investigation, thus the question – “at-risk” of what? Improving America's Schools Act lists factors that qualify a student as “at-risk” to include: children living in high-poverty areas; children with Limited English Proficiency (LEP); migratory children; neglected or delinquent children; homeless children; immigrant children; American Indian children; children with disabilities; refugee children; and children of teen parents. All these factors are related to family background and affect youth variously.

Educators have used the term broadly to refer to those students who may be in danger of dropping out of school due to social, economic, and psychological factors that may place them at a disadvantage in achieving their academic, social, or career goals (Richardson, Casanova, Placier, & Guilfoyle, 1989). According to Feichtner (1989), these family background characteristics make students present the school system with individual and unique challenges because, if not given special attention, they are in danger of dropping out of the school system as a result of academic, social and/or



emotional problems. For Gray and Herr (1998), at-risk youth include high school dropouts, the physically and mentally disabled, and those in poverty.

Chaplin and Hannaway (1996) identify family and school characteristics as most relevant in determining at-risk status because families and schools represent the two societal institutions most responsible for promoting social and economic mobility. Thus, young people are at-risk or educationally disadvantaged, if they have been exposed to inadequate economic conditions or inappropriate educational experiences in their families, schools or communities (Pallas, 1989).

The label “at-risk” generally applies as a signal to educators that such students need extra academic attention or psychological support. Most educators agree that the mission of schools is to provide equal educational opportunities for all students, yet social factors outside schools greatly influence their ability to fulfill this mission (Cromwell, 1997). At-risk youth are more likely than their advantaged peers to drop out of school, experience educational failure, or be involved in activities that are detrimental to their health and safety. Available research shows that children raised in economically disadvantaged families are at greater risk of low academic achievement, behavioral problems, poor health, and have difficulties with adjustments to adulthood (Hale, 1998; Land & Legters, 2002). In general however, whatever the cause of the risk status, all students need to be assisted to realize their full potential. And now with the passage of the No Child Left Behind Act of 2001, more pressure is being put on this group of youth.

It is widely recognized that poverty places youth at greater risk of performing poorly in school. Family structure, household income and parents' education levels are important predictors of student success. Family income and parents education levels are constantly two of the most important factors explaining group differences in educational attainment. The most important factor about families is the extent to which they provide environments that encourage education and the resources that help students develop their scholastic aptitude. Poverty signifies the inability of families to afford the basic necessities for themselves and their children that are required to nourish an educationally healthy environment (Schwarz & Volgy, 1992). This alone has a very huge impact on transitional experiences of youth. High poverty rates have been linked to low levels of educational attainment, which in turn is linked to employment in low wage earning jobs – a status linked to subsistence living and one that generates a vicious circle of poverty (Miller, 2003).

Studies have shown that black and Hispanic children exhibit these characteristics to a greater extent and are three to four times more likely to live in poverty than non-Hispanic white children (Pallas, 1989). According to Cromwell (1997), in 1995 both black and Hispanic children were more than twice as likely as white children to live in poverty. It is worth noting however that even though the poverty rate is lowest for white children, in 1997 there were 5.2 million poor white children and they were the largest group of poor children (Rodgers, 2000).

### *Purpose of the Study*

The purpose of this study was to investigate the academic and transitional experiences of at-risk youth in order to establish whether there are variations among at-risk youth of three racial groups: blacks, Hispanics, and whites. Special focus was on the at-risk white males. The study set out to determine whether their experiences differ from those of other at-risk youth from similar economic backgrounds.

### *Significance of the Study*

High school education serves as a defining moment in an individual's life course. Reform efforts in high school education systems to provide equitable education to all students has led to extensive research on the effects of racial differences on access, learning, and achievement. Estimates suggest that as many as half of today's youth run a moderate to high risk of experiencing school failures due to a variety of challenges that place them at risk (Burt, Resnick & Matheson, 1992). Some students bear multiple risk characteristics and tend to display difficulty in conceptualizing experiences surrounding them, have faulty decision-making abilities, and poor self-concepts (Feichtner, 1989), all of which are detrimental to their overall success in transition to adulthood. Obviously a combination of these challenges increases the risk exponentially. Frank (1996) pointed out that one half of teenage children are at-risk at more than the normal level. Youth affected by multiple challenges are usually at a greater risk than those that face less. American history associates these multiple challenges with black and Hispanic youth, and it is not clear whether among poor white the challenges present less difficulty. This study

contributes to an understanding of the effect of poverty versus race on at-risk youth as it relates to their academic and transitional experiences.

With growing emphasis in federal legislation on the links between secondary and postsecondary education and on related student academic and occupational outcomes reflecting these links (Gray & Herr, 1998); and with the passage of the No Child Left Behind Act of 2001 which emphasizes the need to narrow the gap between the advantaged and the disadvantaged, this study contributes to the existing body of literature concerning at risk youth, and the social problems surrounding their success. It also suggests a new and broader focus at the problems of at-risk youth – namely the need to recognize the presence of poor whites and address their difficulties along with those of the minorities that are already well known.

As the American economy and demographics change, the future of the nation is of critical importance and a close examination of the experiences of all its youth is vital. Little is yet known about the extent to which these trends have affected the white race, especially at-risk white males. The study provides some new insights into the extent to which socioeconomic status contributes to the gap between the racial groups. It also unveils realities about poor whites that have not surfaced substantially in the available literature, and hopefully it should generate further research interest in this subgroup of at-risk youth.

Finally, the interest in rural youth provides the needed balance to the current tendency to focus on urban youth or a generalization in most literature on at-risk youth.

Most studies under this theme have focused on inter-city kids and yet rural youth too have their unique problems. A study of this nature helps policy makers, educators, teachers, parents and all who shape the future of youth to appreciate their problems in their diversity and help them make a transition to useful citizenship. In short, the study contributes new knowledge in the field, adds to available literature on the subject of youth and racial differences, and calls for more research especially on the fate of poor whites in the U.S. population. It is significant to parents, teachers, school administrators, policy makers, and all who care about the future of youth.

### *Research Questions*

This research compared the experiences of at-risk youth of three racial groups, examining variations among them by race, the interaction of race and gender, and the interaction of race and residence. The research questions that guided the study were:

1. Do enrollments in academic, vocational, and general programs vary among at-risk youth by race, race and gender, and race and residence?
2. Are there variations in high school graduation rates among at-risk youth by race, race and gender, and race and residence?
3. Are there variations in dropout rates among at-risk youth by race, race and gender, and race and residence?
4. Do the transition rates to postsecondary education vary among at-risk youth by race, race and gender, and race and residence?

5. Do the transition rates to employment among at-risk youth vary by race, gender, and race and residence?

### *Limitations of the Study*

First of all, the measure of poverty has come under constant criticism in recent years, and researchers are exploring new ways of measuring poverty (Hill & Michael, 2000). There is widespread agreement that the Census Bureau undercounts the poor, primarily because many low-income people live with others or move too frequently to be counted (Rodgers, 2000). This study however uses the current official measure, and as noted, this may not provide an accurate count of the at-risk youth in the U.S. population.

Second, there was a lot of missing data on the variables of interest in the data set used for this study. In the measure of poverty, for example, more than half of the respondents did not respond to the question about their income status and therefore less than half of the data was used in the study. The missing data could affect the extent to which the results of the study can be generalized to the U.S. population of poor youth in the age group under investigation.

Third, self-report data was used to establish the programs that the at-risk youth followed during their high school years. Research has shown that these reports are sometimes not accurate and therefore generally not very reliable because students misperceive their programs and sometimes find it difficult to distinguish clearly between the curriculum tracks they are asked to choose from (Borus, 1984). Research also shows that most vocational students do not report that they are vocational students and as a

result enrollment in vocational programs is very often undercounted (Cooke, 1990). However, because of the nature of the data as provided in the data set it was not possible to extract transcript data, which is considered more reliable, for this study.

### *Definition of Terms*

*At-risk youth.* In this study, at-risk youth are defined as those individuals from economically disadvantaged families, and are at-risk of dropping out of school. Included are those youth born between 1980 and 1984 that participated in the NLSY97 study who originate from families whose incomes are classified as below poverty level and are thus at-risk of dropping out of school because of economic hardships. Poverty status was held constant and other variables were examined that may explain differences in the academic and transitional experiences of at-risk youth from different racial but similar economic backgrounds.

*Poor families.* Families referred to as poor are those that are unable to meet their basic needs and therefore do not provide sufficient environments that foster learning and academic attainment for their children.

*Transition.* Transition is a movement from one state to another. Two transitions were considered namely; transition to postsecondary and transition to employment.

*Transition to postsecondary.* This refers to a change in status from a high school student to a postsecondary student upon high school graduation. The transition event was

determined by enrollment in postsecondary institution. Whether or not they persisted through their postsecondary schooling was beyond the scope of this study.

*Transition to employment.* This refers to a change in status from being a high school student to becoming a full time labor force participant no longer attending school. The transition event was determined by employment status at the time of the interview. Acquisition of a job after high school without the intention of enrolling for any post secondary education immediately indicated a transition to employment. In addition, their labor market experiences over a one-year period after transition was examined.

#### *Assumptions*

First, this study assumed that the interview techniques and questionnaires used in the NLSY97 survey were reliable, and that both the statistical procedures that were used to construct composite variables in the original data were valid and reliable. The source of the data set is credible.

Second, whereas it is known that levels of economic hardships vary even within those living below poverty level, it was assumed in this study that all those families living below poverty level cannot meet their basic needs and therefore have a comparable level of economic hardships. Therefore, status affects the experiences of their children equally.

#### *Conceptual framework*

The basic framework of this study was from the work of Rodgers (2000) and that of Coeyman (2003). Rodgers provided the framework within which this research has



examined the number of poor whites in the American population and Coeyman presented the dilemma about how so little is known about the so many American white poor.

Analyzing American poverty in a new era of reform, Rodgers (2000) reported that in 1997 there were 36 million poor Americans, representing 13.3% of the U.S. total population. At that time, the population structure was such that 73% were whites, 13% were blacks, and 11% were Hispanics. Of the poor 46.4% were whites, 25.6% were blacks and 23% were Hispanics. These data reveal that there are actually more white Americans in the U.S. population of the poor than any of the minority groups – a fact that is little known because of the overall rating of the American white population in a general comparison with the disproportionately poor minorities. In their study, Schwarz and Volgy (1994) reinforced this observation further by showing white males as the largest group of employed heads of households who live in poverty – a group popularly referred to as the working poor.

Coeyman (2003) has pointed out that there is a tendency in research literature to generalize about groups, and render poor white kids invisible. The concern expressed is that focusing on negative experiences for minority students minimizes the on-going problems faced by poor white children as well. On the basis of these observations, this study focused on the poor whites, and especially poor white males, and compares their experiences with those of other poor Americans in other racial and gender categories. Hereafter, the group under study is referred to as at-risk youth.

## Chapter 2

### **LITERATURE REVIEW**

Using the National Longitudinal Survey of Youth (NLSY97) data set, this study aimed at establishing whether there are racial differences in the academic and transitional experiences of at-risk youth. Specifically, the purpose was to establish whether the experiences of at-risk white males differ from that of at-risk youth in other racial and gender categories. Of interest was also whether these experiences varied among at-risk youth by race and residence. In this chapter, literature from related research is reviewed according to the three factors that are largely believed to influence youth experiences, namely: family background, school characteristics, and community environment. Under each factor, the literature related to youth academic experiences, transition to post secondary school experiences, and transition to employment experiences is presented.

#### **Family Background and Youth Experiences**

Sickle (1985) stated that poverty breeds poverty. Poor economic status of parents place students at risk by the many challenges they face as a result of inadequate resources to meet their needs. These students are more likely to have parents who are less healthy, both emotionally and physically, which conditions often lead to parental irritation and depression. Students from these families experience contentious interactions with parents and get fewer parent-supported learning opportunities. According to Rodgers (2000), children are the major victims of American poverty. Poor parents cannot give their children the opportunities for better health and the education needed to succeed in life,

and so the cruel legacy of poverty is passed on from parents to children who cannot then get off the poverty trap (Sickle, 1985).

Most families of at-risk youth cannot afford the essential social and educational resources to enable children succeed. Instead, youngsters from these families often feel inferior, deprived, shamed, frustrated and they show these feelings through vandalism, stealing and other anti-social behavior (Frank, 1996). Research shows that the greater the number of children in a family the more likely the mother is to be depressed, and the less support the children can have. Weissbourd (1996) tells a story of two brothers who came to school on alternate days because they had to share one pair of shoes. This serves to illustrate how severely poverty can affect youth experiences.

Mother-only families have been especially noted for hosting these youth. A majority of all poor children live in families without male figures to model their lives. All children regardless of race or ethnicity have high poverty rates when they live in single parent homes, a demographic trend that has had significant impact on American family structure in recent years and yet very destructive to the youth. Wilson (1996) reported that in 1993, 27% of all children under 18 were living with a single parent. These included 57% of all black kids, 32% of all Hispanic kids, and 21% of all white children. Barr and Paret (2001) found that 87% of all youth in prison are from fatherless families and that youth without fathers are five times more likely than those living with their fathers to be poor. Most of them have come out of unwanted pregnancies. There is strong evidence that children of unwanted pregnancies tend to be less educated, less healthy, and

significantly more dependent on public assistance than other children (Barr & Parrett, 2001).

Data from the Bureau of Census (March, 1998) shows that in 1998 nearly 53% of all white children age 18 or under from single parent homes lived with a mother who was divorced. Sixty percent of the black children in such families lived with mothers who had never married. In general, single parent homes are the major cause of poverty for most youth (Rodgers, 2000). This does not mean that children in two parents families are never at risk. Frank (1996) maintained that even when there are two functioning parents, there are potential difficulties for a number of youth because of low self-esteem, school phobia, peer pressure, experimentation with drugs and alcohol, and many other such conditions that they face. Brooks-Gunn and Duncan (1997) found that students living in homes in poverty below the poverty threshold are 1.3 times more likely than non-poor students to experience emotional or behavioral problems, learning disabilities, and developmental delays, let alone being societal misfits.

Describing disadvantaged youth grown up, Sickel (1985) had this to say:

They have fears not uncommon to all of us: fears of impotence in a world that demands power; fears of inadequacy in an era of specialists and experts; and most importantly, fears of failure in a society that worships success. And, in a society that equates success to material success, they are constantly engaged in a never-ending

battle to maintain their strenuous foothold near the bottom of the social ladder (p. 240).

Black and Hispanic children find themselves entangled in these circumstances year after year to a greater extent than their white peers, but there are also millions of white children experiencing these emotional and psychological difficulties.

### *Family Background and Academic Experiences of Youth*

Whereas researchers have listed several factors that lead to at-risk behavior, family background and economic status are notably the two major causes of school imbalances among youth. Poverty is the most consistently associated indicator of poor academic achievement and school failure (Land & Legters, 2002). The tendency to blame schools alone for children's poor academic performance is now balanced by a critical eye on the family. Students who come from poor economic backgrounds lack the necessary resources to promote their school experiences. As a consequence, poor children are more likely to perform poorly in school and to drop out than children from higher income households. They are also more likely than non-poor students to be poorly prepared for grade level work, to be held back a grade, and to be suspended or expelled from school (Brooks-Gunn & Duncan, 1997).

Studies have shown that racial differences in economic wellbeing have translated into differences in school and other life experiences of the youth from various racial backgrounds. For example, Pallas (1989) asserted that black and Hispanic students frequently score lower on tests than do whites and are more likely to drop out of school

than are whites since most of them are of lowly educated parents who are more likely to live in poverty than their white counterparts.

Also, children who live in single parent homes frequently spend much of their childhood in poverty and they have been found to score lower on tests than children living in two parent homes. According to Barr and Barrett (2001), children living without their fathers are five times more likely to be poor and ten times more likely to be extremely poor. Yet, in 1999 at least 36% of children in the United States did not live with their biological fathers. Children with fathers at home are more likely to stay in school and graduate than those without fathers. However, highly educated mothers provide children with educational resources that less educated mothers cannot, and as a result their children do better in school and stay longer in school than do children of dropout mothers.

The level of education of parents is related to children's achievement and dropout. The 1999 National Assessment of Education Progress (NAEP) assessments also provide evidence that students who reported that the highest level of education of either parent was less than high school graduation scored lower on average on reading, math and science tests than those who reported higher education levels for their parents (Campbell et al., 2000).

Immigrant children tend to score lower on standardized measures of achievement, leave school earlier and be over-age for their grade level (Olsen, 1997). Parents of Hispanic origin who speak Spanish at home are more likely to have lower education than

those who speak English since this is the language of instruction in schools. Many Hispanic children come from non-English language backgrounds and may be at greater risk of not succeeding in school than the native born children (Young & Smith, 1997).

Demographic information however suggests that while black students complete high school at a lower rate than white students, when adjusted for differences in family socioeconomic status, their completion rate is comparable. Hispanic students, however, have lower high school graduation rates than whites and blacks; even when socioeconomic status is taken into consideration (Hale, 1998). Another study however presents contradictory findings and reports that even when parents' income and wealth is comparable, African Americans, Native Americans, Latinos, and immigrants for whom English is not a first language lag behind English-speaking, native-born, white students (Berlak, 2001).

Land and Legters (2002) also contend that mothers' educational attainment has been frequently identified as an indicator of students' academic performance. Recent studies have recognized that fathers also have a role to play in the education of their children. Mothers however play a greater role especially in structuring their children's educational environment both at home and at school. Therefore, mothers who have not completed high school perform less effectively in upbringing their children than those who have. Generally, less educated parents are less able to assist their children with homework, with educational materials and experiences, and with support needed to succeed (Campbell et al., 2000).

### *Dropout Rates Among Youth*

High school dropout rates are a key performance measure for the American education system. Completing high school represents an important life course transition that shapes subsequent life chances of youth (Forste & Tienda, 1992). Those who have education, preferably beyond this level, may access the incredible richness of economic opportunity in the United States, and those who do not have it are doomed to a life of economic servitude (Barr & Parrett, 2001). Unfortunately, nearly one third of the U.S. adult population does not advance beyond high school and this proportion has remained relatively constant for nearly 30 years according to Friedman (2000). It is estimated that approximately one million youth per year leave school without completing their basic educational requirements (Barr & Parrett, 2001).

A number of factors have been found to contribute to early school leaving by youth. Researchers who have investigated the characteristics correlated with a high likelihood of dropping out mention demographic, socioeconomic and institutional characteristics such as (a) being a member of a low-income family (b) having low academic skills (c) having parents who are not high school graduates (d) being single-parent children (e) pursuing alternatives such as paid work or marriage (f) grade retention (g) low self esteem (h) negative attitude toward school, and general alienation from school as evidenced in poor relationships with teachers and peers. Over the years, populations with these characteristics have grown and research has shown that there is a correlation between these population characteristics and being at risk.



Land and Legters (2002) provide further evidence from the National Assessment of Education Progress (NAEP) that dropout rates are inversely related to family income. In 1999, the national event dropout rate for students from poor families was 11% compared to five percent for those from middle income homes, and 2.1% for students from high income families. At that time 33.1% of black and 30.1% of Hispanic children lived below the poverty line, compared to 9.4% of white children. National Council for Education Statistics (NCES) has monitored the number of students who fail to complete high school since the 1970s, and consistently this figure has remained around 11%. This however, differs by racial groups. In 1999, black young adults dropped out at a rate was 12.6%, Hispanic young adults dropped at a rate of 28.6% and white young adults dropped out at a rate of 7.3%.

According to *The Condition of Education 2003*, non-Hispanic blacks and Hispanics are more likely to drop out of high school than are non-Hispanic whites. In 2001, 7% of whites aged 16 to 24 were not enrolled in school and had not completed high school, compared to 11% of non-Hispanic blacks and 27% of Hispanics who had dropped out. This is a constantly reported trend in literature and is attributed to the fact that non-whites have a lower socioeconomic status.

Rumberger (1983) also reported that drop out rates among minorities far exceeds that of whites. Further, that males generally drop out at a rate that exceeds that of females. Among males, the need to contribute to the economic wellbeing of the family is a major factor in the decision to drop out. For females the most given reason is

pregnancy. It is not clear whether this pattern persists across all racial groups. Much of these findings still persist today, but it is also worth noting here that several recent studies have reported lack of interest in school as the most cited reason most teens drop out of school (Barr & Parrett, 2001). Rumberger however points to the interaction of familial and economic factors as a potent force, and asserts that family background accounts for virtually all the racial differences in dropout rates. And therefore when family factors are controlled or taken into consideration, race is no longer predictive of school termination (Wehlage & Rutter, 1986; Wehlage, et al. 1989).

Many researchers agree that poor academic performance is one of the strongest predictors of dropping out of school. Poor grades, regardless of ability, increase student frustration and reduce motivation to stay in school. It is made worse if retention occurs because retention in grade is highly related to dropping out of school. In fact, research indicates that retained students are three times more likely to dropout than non-retained students. In a study of factors fueling the achievement gap, Viadero (2003, November 26) concluded that educational inequalities begin at birth when many black and Hispanic children are born weighing less than doctors consider healthy. Barr and Parret (2001) argue that the importance of early years in children cannot be underestimated and yet increasing numbers of US babies are born without adequate health shelter and nutrition. As toddlers, black and Hispanic children are apt to be read to less often to than their white peers or to have just one parent at home. In schools they end up in larger classes with teachers who are less experienced and less prepared than those who teach white students.

Another predictor of school dropout is truancy. School dropouts have higher rates of school absence than those who stay in school. Attendance problems can be an early signal that the student is disengaging from the schooling process. Sometimes these students are academically able, but are under pressure from other factors affecting their motivation to stay in school. Daily school attendance reflects both student motivation and parental support. Parents' attitudes are clearly related to student engagement in learning and graduation rates. Parents of dropouts are more likely to view school negatively, to have minimal involvement with school and to place little value on school attendance and achievement (Hale, 1998). Also, siblings like parents, are likely to influence a student's decision to drop out of school. Students who have a sibling or siblings who dropped out of school are at much higher risk of dropping out themselves than their counterparts with no such examples to follow (ibid).

Erosion in the quantity and quality of relationships between parents and children is also associated with poor academic performance and drop out. The physical absence of adults in a household, the limited amount of time parents and children spend together, and the corresponding parents inattention to children's activities and welfare adversely affect academic achievement of children. Steinberg (1996) concluded that the amount of time teenagers spend with their parents has a positive effect on reducing stress and that feeling connected to parents provides them with emotional and psychological security they need to develop into adulthood. The absence of parents from home therefore causes imbalances in the life of these youth – yet the poor parents have to do this to earn a living.

Previous research indicates that children growing up in single-parent families are less likely to complete high school and that they have a lower educational attainment. Children from single parent homes perform poorly due in part to parental stress, lack of frequent parental encouragement, less monitoring of school work, less supervision of school activities, and lower parental educational aspirations (Rodgers, 2000). In most cases these parents are less educated themselves and provide no examples to the youth they nurture.

Students who drop out are more likely to perceive the school setting as non-supportive and/or irrelevant. Some researchers suggest that the student's psychological attachment to school and investment in learning are keys to academic and social success, and consequently keys to remaining in school (Barr & Parrett, 2001). Additionally, coming from a poverty household and being unemployed while in school tend to raise the probability of dropping out, other factors held constant (Borus, 1984).

Families from diverse cultures and families whose primary language is not English also face additional barriers to school engagement that appear to place students at-risk for dropping out. School personnel may misunderstand customs and parenting styles as lack of interest in schooling, and fail to identify appropriate and effective means of promoting parent involvement in education. These students are more likely to experience alienation and to disengage from the school setting.

The issue is the kind and quality of learning experienced by the student while in school. When the issue is defined in terms of the experience, it is an issue upon which the

school can act. Wehlage and Rutter (1986) found out in their study that the most powerful determinants of dropout are low expectations and low grades combined with disciplinary problems, most commonly associated with truancy.

Druian and Butler (1987) emphasize that school effects are school effects and they have impact on all pupils equally without regard to socioeconomic conditions. They draw support from American Association of School Administrators (AASA) whose publication in a report by Pine (1985) argue that factors that help students succeed have a similar impact on achievement gains for all groups of students, whether white or black, male or female.

A considerable body of research also suggests that the life outcomes of GED recipients are more like those of dropouts than those of regular high school graduates. Economists James Heckman and Stephen Cameron found that exam-certified high school equivalents are statistically indistinguishable from high school dropouts. Other researchers found moderate benefits for GED recipients, but no one claims that they are truly 'equivalent' to regular high school graduates (Green, 2002).

In general, the literature above suggests that dropping out of school is relatively less harmful for white adolescents than for black or Hispanic youth. Further, white dropouts reported better economic outcomes relative to other groups. Hispanic young adults are notably less likely to have a high school credential (Land & Legters, 2002). Despite these differences, it is important to note that national estimates consistently show that dropping

out of high school is associated with lesser economic success for all adolescents, regardless of race, relative to those who complete high school.

*Family Background and Youth Transition to Postsecondary Education*

In a study of youth transition, Whiteley (2001) described youth at risk as young people who experience difficulty negotiating their life options after completing school and may not engage in further study or employment. However, about one third of young people at risk for low educational attainment persist in high school and enroll in college despite being at risk according to The Condition of Education 2002. Several risk factors are predicted to affect youth transition to college, namely: changing schools two or more times between grades 1 to 8, belonging to low socio-economic quartile, obtaining grades of Cs and below, coming from single parent households, having older siblings who left school, and being held back one or more grades between grade 1 and 8.

Research indicates that educational expectations and attainment vary by race and gender and are shaped by individual factors such as aptitude, peer groups, parental achievements and attitudes, family resources, family size and a broader economic context (Reynolds & Pemberton, 2001). Most research has found that non-Hispanic whites have higher college expectations than ethnic minorities. Whites' advantage, however, in terms of educational aspirations and expectations, disappears after controlling for family resources. Once parents' educational and financial statuses are taken into account, minority youth have significantly higher educational aspirations and expectations than whites. In the Chronicle of Higher Education, Gomstyn (2003) reports that the number of

minority students enrolled in college has doubled since 1980, an increase from two million in 1980 to 4.3 million in 2000. White students' enrollment increased by only 6% in the same period.

Cameron and Heckman (1999) estimated the effects of family income and parents education, among other measures, on the probability that young people of the NLSY completed high school and attended college. They found that family income is the most influential variable for whether students complete high school, and for their level of college preparedness.

Historically gender has played a central role in the formulation of educational goals and eventual attainments. Men traditionally achieved more years of education, and were more likely to attend college after high school and complete a college degree. Women are now more likely to attend college than men and are better prepared. High school girls today have significantly higher expectations than boys, and a growing body of research demonstrates that this new gender gap in education extends to academic performance and preparedness as well (Dortch, 1997; Gose, 1999). It should be interesting to know if this trend varies by race, gender and residence.

Nationally, there has been a shift and growing gender gaps in college enrollment rates and degree attainment rates in the past two decades. Males continue to drop out of high school at rates above that of women. Also, young women now attend college at rates four to seven percentage points higher than those of their young male high school graduate counterparts. For example, among graduates from the classes of 1999 and 2000,

65% of women were enrolled in college in the fall immediately following graduation versus only 60% of the men (Sum, Sullivan, McLaughlin, Motroni, Palma, & Power, 2002).

Family size and structure also influence a wide range of educational outcomes among youth. For example, researchers have long noted the negative relationship between family size and a wide range of outcomes, including postsecondary education enrollment. In families where there are many siblings, parents' interpersonal and economic resources are significantly diluted, leading to lower average scholastic achievements and years of education for children of large families (Downey, 1995). Of course, in such cases only a few can move ahead and with limited motivation.

The presence and marital status of parents further shape children's educational attainment. Children who are members of intact families with two biological parents make better grades than other children and are more likely to finish high school and attend college. They tend to have greater parental support and motivation to succeed and be like their parents, who in most cases, are well to do parents. Among the black community, Wilson (1996) suggests that rates of marriage are positively correlated with levels of education. Educated black women are more likely to marry than women with less education. The reverse is true for white women for whom less education correlates with higher rates of marriage.

Today's youth perceive that the chances of securing good paying long-term employment are strongly tied to a college degree, and therefore set their goals high



regardless of their current family resources or community context. However, black and Hispanic youth have higher dropout rate and lower probabilities of moving from high school directly to college than do whites, but these differences are not due to race and ethnicity; when family background, attitude and schooling variables are taken into account, minorities are no more likely than whites to drop out of school or not to continue on to college (Borus, 1984).

### *Family Background and Transition to Employment*

Existing research findings suggest that family socio-economic status is related to career development and career choices of children (Gray & Herr, 1998). The transition of young adults to employment has become more difficult for many young adults over the past two decades, especially among at-risk youth who often find themselves with low levels of education, fewer skills and less relevant experience.

In their assessment of youth motivation to work, Mortimer and Oesterle (2000) found that about 75% of the youth said they sought work to buy what they needed, but an increasing number reported working to save money for their future education. Many other young people from low-income families have traditionally worked to help support their families, but research indicates that among employed youth, the majority comes from families of higher economic status. This suggests that in addition to being poor and at-risk of educational failure, the poor youth cannot even comfortably take refuge in the labor market.

Coleman (1988) uses educational attainment as a measure of human capital within a family, arguing that higher levels of parental education generates higher levels of social capital, which is likely to foster children's human capital development. Coleman further suggests that in addition to family, social capital is found within the community, which implies that more educated parents build social capital within their communities from which their children benefit as well. Extending this framework to analysis of labor market participation of the youth, one would expect that those with better social capital in family and community would have greater access to information through networks, and consequently greater opportunities for employment than those who are lacking social capital.

Some youth with serious difficulties in entering the labor market find themselves chronically underemployed or unemployed for long after entry into adulthood because they lack both the social capital and the experience of full-time employment, which deny them credibility with employers since they have no identity as workers. The employment status of parents may influence youth employment through providing increased access to jobs and general attitudes towards working. Family connections can increase a youth's job opportunities. Pabilonia (1999) found that youth who worked were more likely to come from a family with higher socio-economic status as measured by parents' education levels, parents' employment status, and parental income.

Data from the Current Population Survey show that black and Hispanic youth have much higher unemployment rates than white youths (U.S. Department of Labor,

Bureau of Labor Statistics, 2000). Socioeconomic differences are associated with differences in information one acquires about work, the types of work experiences one has access to, and the development of occupational stereotypes that shape their interests (Gray & Herr, 1998). It is reported that there is a substantial minority of American youth primarily from poor economic backgrounds who are permanently scared by their unsuccessful experiences in making school to work transitions.

Latino youth, however, in general tend to be relatively successful in the labor market, even though they are mainly in low-wage low-skill jobs, in comparison to white and black youth. They have higher earnings at that level because they work longer hours (Fry & Lowell, 2002). The work orientation of Hispanic youth is also apparent among high school dropouts. Fifty-six percent of Hispanic high school dropouts hold jobs, in comparison to forty-nine percent of white dropouts.

In a study of the need for teaching youth about the labor market, Passmore, Ay and Geer (1982) concluded that underprivileged youth lack information common to their more privileged counterparts. This is what Coleman (1988) found six years later and is probably still true today. Because the poor have no strong networks as a result of their low social capital, they have no adequate and important sources of information to take advantage of society offers. Garcia and Aralos (1982) found that Hispanic youth tend to rely on informal methods of job search that yield lower paying jobs with less occupationally mobile positions.

## **School Characteristics and Youth Experiences**

### *School and Academic Experiences of Youth*

School characteristics that have been identified to influence academic experiences of youth include factors such as school level poverty, class and school size, school climate and culture, and school policies such as retention, suspensions and expulsions (Land & legters, 2002). Concentration of students living in poverty within a school negatively relates to academic achievement even after accounting for family income (Lippman, Burns, & McArthur, 1996). Students in high poverty schools tend to have lower grades, and are more likely to be retained than students in low poverty schools. Students in schools with low socio economic status are less likely to graduate on time from high school, more likely to live in poverty, and more likely to be unemployed later in life compared to students from schools with better economic endowments. High poverty schools tend to have fewer financial resources than low poverty schools and pay teachers less resulting in low morale for teachers and low achievement for students (Young & Smith, 1997).

Research has identified significant factors in schools (eg. behavior of principals, teachers, students, parents) that they have found to be more powerful than factors relating to socio-economic level and racial data (Barr & Parrett, 2001). Available research suggests that a good school can intervene to overcome the negative effects of poverty and dysfunctional families and ensure that all children regardless of their background can learn effectively and obtain high standards of achievement (Barr & Parrett, 2001). Other

scholars however believe that school alone cannot do much to solve the complex problems of at-risk youth and they call for a combined look at issues related to school, family and community together (Weissbourd, 1996).

Another school characteristic that affects youth is class size. Large classes have been known to affect student' academic achievement especially those from poor families who need close attention in class. On average students in small classes had superior academic performance than those in large classes. Small class size may provide more one-on-one contact with the teacher, more opportunities per student to participate in learning activities, fewer distractions, and fewer opportunities for students to disengage unnoticed (Land & Legters, 2002).

Researchers have also found that school location is related to student academic achievement. Students who attend urban schools are at a greater risk of poor academic performance than students who attend rural schools. This is also because urban schools tend to be larger, with larger class sizes, and more likely to serve students of low socio-economic status (Lippman, Burns & McArthur, 1996).

In another study to find out the effect of teacher expectations on achievement, Sanders and Jordan (2000), using NELS: 88 data, found that teacher expectations, as well as teacher supportiveness, in Grades 10 and 12 positively predicted Grade 12 test scores and cumulative grade point average. Teachers generally expect low performance from poor children and these attitudes have been found to affect the academic performance of poor children. Yet, as McWhorter (2000, p. 238) put it, "the only way to build confidence

is to achieve with no more but fewer challenges to doing so than one's peers." Teachers' expectations of each child's performance, regardless of race, determine the level of confidence that a child builds and the motivation to work and achieve.

School policies such as tracking where students are grouped by ability segregate low achievers, a disproportionate number of whom are poor and black or Hispanic. These policies also provide low track students with a substandard education, let alone the fact that the label alone harms their self-esteem (Bracey, 2003).

Another school policy known to be detrimental to at-risk youth is retention. While researchers, educators, and the public in the U.S. continue to debate the merits and demerits of retention as opposed to social promotion, research indicates that retention is related to a greater rate of school dropout, and that poor, black and Hispanic students are at greater risk of retention (Roderick, 1995). Interestingly, although some individuals view retention as a failure on the part of students to learn and behave, others contend that it more accurately reflects a failure on the part of teachers and schools to educate students.

School suspensions and expulsions may also place students at a greater risk of educational failure. Gordon, Piana and Keleher (2000) noted that minority students, especially black males, are disproportionately suspended and expelled from schools. This exclusion from school increases the likelihood of such students being retained, and eventually dropping out of school.

*School and Youth Transition to Post Secondary Education*

A number of school characteristics have been found to influence youth transition to post secondary education. Borus (1984) concluded that many of the factors associated with dropping out of school also influence the decision to go to post secondary education. For example, academic achievement of students has been constantly reported to predict college attendance or dropout depending on whether it is high or low. Students who perform well are more likely to take college preparatory courses in high school than poor performing students. Schools that provide adequate reading materials and a conducive learning environment will prepare students better for post secondary education than those that have minimum offers. Students who do not repeat grades are more likely to attend post secondary education than those who do. Those from smaller schools, with low student teacher ratios are likely to perform better. And students who get encouragement from their teachers are more likely to exploit their potential than students who have no source of inspiration (Gordon, Piana & Keleher, 2000; Land & Legters, 2002; Sanders & Jordan, 2000).

Hispanics have become the largest minority group and now represent 13% of the country's population. About half of the Hispanic population over 18 is foreign born and received some of their education outside the U.S. and are far less likely to complete high school and be eligible to attend college than the native born Hispanics and other students. Even when Hispanics enter college they have a difficult time staying because institutions have not fostered inclusive environments where students from different racial and ethnic

backgrounds can interact and are comfortable with each other. The Chronicle further reports that a large number of Hispanic students are still the first in their families to complete high school and have no familial role models, mentors or sponsors to help them along (Views of six experts: The Chronicle Review, Chronicle of Higher Education, Section B, November 28, 2003). These confounding difficulties make the Hispanic youth generally more vulnerable to being at-risk than other racial groups.

### *School and Youth Transition to Employment*

Combining school and work has been found helpful in accelerating transition to employment (Tiemeyer, 1991). The economic benefit for students who work while in high school is well established. Researchers have found that, in addition to immediate earnings, there is a positive relationship between the amount of high school work experience and employment or earnings a few years later. Jobs that provide greater opportunity for students to use and develop their skills while in high school also can have beneficial effects on their future employment and earnings. In particular, students' opportunities to acquire skills at work can have a substantial effect on their development of an intrinsic positive orientation toward work, especially if they work in their senior year as opposed to earlier (Stern, Stone, Hopkins & McMillion, 1990).

In a study of racial differences in transition to stable employment, Tiemeyer (1991) found out that black males were less likely to combine work and school, less likely to transition to stable employment, and experience higher exit rates than whites. Many studies have also found that school curriculum impacts employment outcomes. Students



who enroll in vocational programs have easier access to employment in their fields of training, they are more likely to enjoy higher earnings in the short run, and are more likely to be satisfied than non-vocational high school graduates (Borus, 1984). Even though it is known that there is a higher proportion of black than Hispanics or whites enrolled in these programs, studies show that in general they work fewer hours and earn less than their peers.

Over 50% of youth work while in high school and a number of studies have been conducted on the effect of their work on schooling experiences. Critics have advanced that work is not beneficial to the academic wellbeing of students. The major potential cost of student jobs is their negative impact on academic achievement, but research findings vary significantly on the extent of this claim. Most evidence indicates that high school students working more than 20 hours a week suffer academically: they have lower grades, do less homework, are more likely to drop out, or are less likely to complete postsecondary education. Students who work fewer hours seem to suffer fewer negative consequences (Stern, Finkelstein, Stone, Latting, & Dornsife, 1995).

Other critics of youth employment argue that early employment experiences may curb human capital, merely leading these youth into “dead-end jobs” with little chance of upward mobility. For example, Chaplin and Hannaway (1996) argue that it encourages youth to drop out of school, and that this effect is particularly pronounced for at-risk youth with limited educational ambition and learning difficulties. For these youth, work

investment becomes quite attractive especially when their disinterest in school makes it unlikely that they can succeed in college.

Part of the underlying rationale for human capital development theory is the notion that individuals are motivated to invest in personal development in order to maximize their economic returns in the labor market. Youth therefore may choose to work during high school because they view it as an opportunity to gain practical skills and training; others see it as an opportunity to gain access to networks, and others use it as an entry point to enter post-high school employment.

### **Community Environment and Youth Experiences**

#### *Community and Youth Academic Attainment*

The neighborhoods in which at-risk youth live are often characterized by social disorganization, with high rates of crime, many unemployed adults, and a society that does not monitor its youth (Brooks-Gunn & Duncan, 1997). A caring united community in which academic achievement is strongly emphasized and expected appears most beneficial for students in high poverty schools. Unfortunately, the reverse is usually true in communities of poor neighborhoods.

#### *Community and Youth Transition to Post Secondary*

Local economic context has also been reported to affect educational attainment. Unemployment rates and qualifications of the local labor force are two important aspects

of the local economic context that are likely to affect youth's college expectations. Areas of high unemployment rates may be indicative of economically poor communities that can limit youth educational attainment through lower schooling quality or fewer school resources (Roscigno, 1998), and through fostering a cultural context that disregards higher education (Macleod, 1995). On the other hand, unfavorable local job markets may reduce the opportunity costs of postponing employment and in fact promote educational attainment.

The social characteristics or qualification of members of the local labor market, especially the prevalence of members with college degrees, may also influence the rate at which students attend college. A highly educated labor force might indicate that the local job market contains many desirable jobs, or more broadly, it might denote a strong community norm of obtaining a college education. In both cases, lucrative job markets are strong community norms; the prevalence of college degrees in the community should be positively related to educational expectations and attainments. Gomstyn (2003) reports a possibility that persistent race-based differences in participation rates may be tied to socio-economic gaps between white and minority communities.

One push factor that might reinforce youth's plans to attend college rests in deteriorating job prospects for workers with a high school education or less. The expansion of the service economy and low wage low skill jobs with little job security coupled with the continued decline of classic "blue collar" jobs in manufacturing and

transportation may serve as a generalized impetus among high school youth to continue education beyond high school (Danziger & Golfschalk, 1995).

### *Community and Youth Transition to Employment*

Communities sometimes entice youth to employment and distract them from pursuing further education. According to the Fair Labor Standards Act (FLSA), the minimum age at which youth can legally work is age 14. Although many youth ages 12 and 13 find employment typically in freelance jobs, most youth start work while in high school. In communities where high-wage low-skill jobs are available, youth are attracted out of the school system because they can earn a living without any further education. Evidence from NLSY97 shows that 57% of youth are employed at 14 years, 64 % get employment while age 15, and 58% work at age 16 (Bureau of labor statistics 1999; 2000). In communities where educational advantage is clear, students may work in high school but still aim high at better jobs with better pay and social status. As they grow older, and shaped by experiences surrounding them, they begin to think about future careers and embrace work responsibility as a way to develop human capital. The opposite of this happens in communities that do not emphasize education.

According to Wilson (1996) blacks reside in neighborhoods and engage in social networks and households that are less conducive to employment than Hispanic and white. Employers assert that they procrastinate, are lazy, belligerent, dangerous, have high rates of tardiness and absenteeism, carry bad employment histories, and are drug users. Interestingly, complaints made by black employers do not differ significantly from that of

whites – ruling out a possibility of bias in assessment and discrimination as is usually assumed. In his conclusion of the analysis of industrialization and the alteration of race relations, Wilson (1980) emphasized that unlike in previous periods of American race relations, economic class is increasingly a more important factor than race in determining job placement for blacks.

In summary, the literature review presented above shows that overall, white youth enjoy better academic experiences, are more likely to transition to post secondary education, and enjoy better labor market experiences than other racial groups. The literature also points to the fact that there are a few mixed conclusions about whether academic and transitional experiences differ among black, Hispanic, and white youth when economic status is controlled for. Thus, the central question of this study was whether these youth have similar experiences if their family economic backgrounds are leveled.

## Chapter 3

### **METHODOLOGY**

The purpose of this study was to establish whether there are differences in the academic and transitional experiences of high school black, Hispanic and white at-risk youth. Of particular interest was whether differences exist between at-risk white males and other at-risk youth groups. In this chapter methods that were used in the study are described. The chapter provides details on the data used in the empirical analysis, including the nature of the survey, data collection, sample characteristics, variables, and data analysis methods.

#### **Data for the Study**

Data for this study were from the NLSY97 survey sponsored and directed by the U.S. Bureau of Labor Statistics and conducted by the National Opinion Research Center (NORC) at the University of Chicago and the Center for Human Resource Research (CHRR) at The Ohio State University. The survey, which was the sixth and newest in the NLS program, included 8,984 individuals who were born in the U.S. during the years 1980 to 1984, and were between the ages of 12 and 16 by end of December 31, 1996. According to *NLSY97 User's Guide* (2002) and the *NLS Handbook* (2002), the primary purpose of the NLSY97 was to collect data on youth labor force experiences and investments in education. These data were collected in order to help researchers analyze students' high school experiences and transitions to work and adulthood. However, the

survey also included, among others, data on the youths' family and community backgrounds.

### *Data Collection*

During the initial interview period, interviewers visited randomly selected households to identify all youths eligible for the NLSY97. All household residents aged 12 to 16 as of December, 1996, were considered eligible, including those who were away at school, hospital, correctional facility, or other type of institution. If an eligible youth lived in a household, one of the youth's parents was also asked to participate in the study, thus generating data on youth family background as well.

A variety of survey instruments were used to gather the data. The screener, household roster and non-resident roster questionnaire were used to identify youths eligible for the survey and collected demographic information on household occupants and key non-resident relatives during the initial survey round. The youth questionnaire, administered each round was designed to seek information about a number of topics including employment, schooling, family background, attitudes and behaviors. Parent questionnaire was used to interview one of the youth's parents in the first round about the youth's history and status and key aspects of the parents' own life. School and transcript surveys collected information about schools in the sample areas and academic records of the respondents.

### *The Sampling Techniques*

Two samples were drawn – a cross-sectional sample representative of the U.S. population born between 1980 and 1984 and a supplemental sample of black and Hispanic youths in that age range. The cohort was selected using the two sampling procedures in order to meet the survey design requirement of providing sufficient numbers of black and Hispanic respondents for statistical analysis. This over-sample of the black and Hispanics allowed for representative analysis across race. Overall sample size and composition of the first four rounds is shown in Table 1.

Individual sample weights created by NORC permitted comparisons between the full NLSY97 sample, which included both the cross-sectional sample and the over-sample, and the national population in the same age range. After round 1, initial sampling weights for the entire sample were constructed to adjust for differential non-response, and for the black and Hispanic over-samples. These weights provided the researcher with an estimate of the number of individuals in the United States represented by each respondent's answers. Individual case weights were assigned to produce group population estimates when used in tabulations. NORC calculated the weights after each survey round to account for non-interviews in that round. This study used round four survey data.



Table 1

*Racial and Gender Composition of NLSY97 Sample*

Gender	Black	Hispanic	White	Mixed	Total
Round 1					
Male	1169	977	2413	40	4599
Female	1166	924	2252	43	4385
Total	2335	1901	4665	83	8984
Round 2					
Male	1103	904	2238	38	4283
Female	1101	868	2095	39	4103
Total	2204	1772	4333	77	8386
Round 3					
Male	1062	876	2193	39	4170
Female	1071	853	2076	39	4039
Total	2133	1729	4269	78	8209
Round 4					
Male	1065	862	2153	37	4117
Female	1059	837	2027	41	3964
Total	2124	1699	4180	78	8081

Source: Adapted from *NLSY97 Users' Guide* (2002).

*The Study Sample*

The target group in this study was youth who are at risk of educational failure due to poverty. At-risk youth, as defined here, refers to those from impoverished homes whose total household incomes fall below the official poverty level in the United States. According to the official measure, the ratio of the family's before-tax income to its threshold indicates its poverty status. If the ratio is less than 1.0, the family is classified as poor. For example, Clemetson (2003) indicated that the poverty threshold for a family of four is \$18,392 and for individuals is \$9,183. Using the official measure, a sub-sample

of 837 youth (un-weighted data) considered at-risk due to poor economic backgrounds was drawn to establish differences in academic and transitional experiences between the at-risk racial categories. Only the blacks, Hispanics, and whites were included in the sample. In the population, only 20% of whites were found to be poor (at-risk), but nearly 58% of the poor were whites, representing more than all the poor minorities put together. By round four, most of these young people had either dropped out or completed high school and had made decisions to continue to postsecondary education or to join the labor market.

### **The Variables**

This section provides a description of the variables that were used in the study.

#### *The Independent Variables*

For reasons given, the following independent variables were selected for use in this study that sought to establish variations in the academic and transitional experiences of at-risk youth:

*Race.* The variable race was the central focus of this study that sought to establish whether there are racial differences in the academic and transitional experiences of at-risk youth. It included three racial categories namely: blacks, Hispanics, and whites. Blacks refer to Americans of African origin, Hispanics are those whose ethnicity is Hispanic, and whites refer to white non-Hispanics. In the descriptive statistics, the variable was used as categorized; but it was dummy coded for multivariate analysis, with whites as the reference category.

*Gender.* This referred to whether the respondent was male or female. Gender was important in the study because this study was interested in establishing whether the experiences of poor white males differ from other at-risk youth categories. Race by gender differences were analyzed in both the descriptive and multivariate analysis. In the multivariate analysis the males were coded 0 and the females were coded 1.

*Residence.* The residence variable measured whether the respondent resided in rural or urban area. It was based upon the definition used by the U.S. Census Bureau (Center for Human Resource Research, p.95, 1998). Accordingly, urban places were those with a population of at least 2,500 residents, all others below that were considered rural. This variable was important in the study because the study also sought to explain whether the interaction of race and residence caused any differences in the experiences of these at-risk youth. Rural residence was coded 0 and urban residence was assigned a code of 1.

*Mothers' education.* This referred to a measure of the highest level of education attained by the respondent's biological mother. This variable was included in the study because it was believed that parents' education had a considerable influence on education of children. Because of the large missing data on fathers' education, only mothers' education was used to analyze the effect of parents' education on youth academic and transitional experiences. The variable mother's education named MOED was recoded and categorized into three categories: less than high school, high school only, and post

high school. In the multivariate analysis, the variable was dummy coded and the category of mothers with less than high school education was used as the reference category.

*Peer influence.* This variable was used to determine the degree to which the number of friends planning to attend college influenced youth decisions and behavior in their academic and transitional experiences. Percentage ranges were given as choices in the questionnaire, and respondents were asked to indicate what percentage of their friends planned to attend college. For purposes of analysis this variable was recoded into two categories, namely: less than 50% and 50% or more.

*Weeks worked.* This variable used employment history data to measure the total number of weeks worked at an employee type job during the survey year. The data survey distinguished between jobs in which the respondent had an on-going relationship with an employer and other types of jobs. Employee type jobs were used in this study, and respondents were asked to indicate how many weeks they worked. This was used to explain variations in the amount of time spent working by the youth.

### *The Dependent Variables*

Six dependent variables were used in multivariate analysis of the research problem of this study; namely: program of study, high school graduation, dropout, transition to postsecondary education, and transition to employment, and duration of non-employment. Detailed descriptions of the variables are as follows:

*Program.* This referred to the program that the respondent self-reported he or she attended. The program categories examined were: general, academic, and vocational. This was used as a dependent variable because it was one of the academic experiences under investigation. However, it was also used as an independent variable in many of the multivariate analysis of other dependent variables because of its significance in this study. The variable was dummy coded with general education as the reference category.

*High school graduation.* This referred to whether or not the youth had graduated from high school. The variable used to measure graduation was enrollment status. Those who indicated having graduated with either a diploma or GED were considered having graduated whether they were still enrolled in any institution or not. Those who did not have any high school certification were considered youth who did not graduate. Those who graduated were coded 1 and those who did not graduate were assigned a code of 0.

*Dropout.* This referred to whether one completed high school or dropped out before completing the 12<sup>th</sup> grade. It included only those who were not enrolled in school and had not completed high school by the time of the survey. The variable enrollment status was used to determine the dropout status. Those who were not enrolled in school and had not completed high school were regarded as dropouts. Those who had not completed high school but obtained a GED were regarded as having completed since this is a close equivalent of a high school diploma. The variable dropout was coded 0 for those who had not dropped out and a code of 1 was assigned for those who had not completed 12<sup>th</sup> grade and were not enrolled in school.

*Transition to postsecondary education.* This refers to whether or not the youth enrolled in postsecondary education after completing high school. Enrollment status was used to measure this variable. The enrollment variable named enrollment status in the data set was coded 1 for those enrolled at any postsecondary institution and 0 for those not enrolled in postsecondary education.

*Transition to employment.* This variable refers to whether or not youth transitioned to employment before or after completing high school. Only those who did not enroll in postsecondary education were considered in the analysis. The employment status variable named CV ESR COL in the data set was used. The survey question asked whether the youth was: employed, unemployed, not in the labor force, or in active armed forces. The variable was recoded into two categories. Those employed were assigned the value of 1 on the dependent variable and those unemployed and out of the labor force were regarded as unemployed and assigned 0 on the dependent variable. Those in active armed forces were eliminated from the study.

*Duration of non-employment.* This variable was derived from the event history data on employment status of youth measured in weeks over a period of 53 weeks in 2000. Data was transformed to show periods of employment and non-employment during the survey period. The variable was then used in the study to establish whether there were any variations in the employment patterns of youth in the three racial categories under study. It was included to provide a further analysis of the employment status and early labor market experiences of these youth.

### **Methods of Data Analysis**

Three statistical methods were used to analyze data for this study, namely: descriptive statistics, logistic regression, and event history analysis. In order to correctly estimate the population, data were weighted and a new sampling weight calculated for the descriptive and logistic regression analyses. The new weight was calculated as follows:

$$\text{newwt} = \text{spwt}/\overline{\text{spwt}}$$

Where newwt is the new weight calculated for each subject, spwt is the sampling weight provided by the NLSY97 data file, and  $\overline{\text{spwt}}$  is the average of all the sampling weights for the cases in the analysis. The new sampling weight adjusts for the probability of each subject being included in the sample and corrects the problem of under-representation among racial minorities. Each member of the sample represents a different number of people in the population. The new weight rescales the weighted data to reflect the effect of the actual sample size on the variables under study. Based on this new sampling weight each subject in the sample is multiplied by the new sampling weight to estimate the size of the target population. Therefore, the sample of 837 at-risk youth used in this study represented 1,750,511 at-risk youth 18-21 years old in 2000.

#### *Descriptive Statistics*

The Chi-square distribution test was used to generate the descriptive statistics used in examining relationships among the variables used in the study. Both frequency counts and percentages were used in the descriptive analysis.

### *Logistic Regression*

The study enhances the methodological range of the analysis of the experiences by using a multivariate statistical procedure to evaluate the importance of predictor variables for explaining variability in the dependent variables, given the effects of other predictors. The objective of analyzing quantitative multivariate models of relationships between the dependent and a set of independent variables is to assess the strength of the independent variables and the direction of their estimated influence (Hosmer & Lemeshow 2000, Menard, 2001).

In this study, the logistic regression statistical technique was adopted to evaluate the effects of selected group of predictor variables on program of study, high school graduation, dropout, transition to postsecondary, and transition to employment. There were three primary reasons for choosing the logistic regression. First, it is an extremely flexible method of analysis and has an easily used function. Second, it lends itself to a meaningful interpretation of results that are easily understood. And third, the strength of its modeling technique enables independent effects of each variable to be determined (Hosmer & Lemeshow 2000, Karp 1998), making it easy to tell the variables that have the most effect on the independent variable as well as establishing the individual strength and direction of influence. In addition, the coefficients derived using the logistic regression analytical procedure are changed to easily interpretable and explainable quantity odds ratios through exponentiation.



The effect of a set of independent variables on each of the five dependent variables used in the study was estimated using the following regression equation:

$$\text{Log}(P/1-P) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p$$

Where  $\beta_0$  is the intercept,  $\beta_1$  to  $\beta_p$  are the logistic regression coefficients, and  $X_1$  to  $X_p$  are the independent variables. The regression equation upon which the multinomial logistic regression analysis was based is:

$$\text{Log}(p(\text{category}_i)/p(\text{category}_j)) = \beta_{i0} + \beta_{i1} X_1 + \beta_{i2} X_2 + \dots + \beta_{ip} X_p$$

Where  $\text{category}_i$  is the category of the dependent variable included in the model, and  $\text{category}_j$  is the reference category,  $\beta_{i0}$  is the intercept,  $\beta_{i1}$  to  $\beta_{ip}$  are the regression coefficients, and  $X_1$  to  $X_p$  are the dependent variables.

#### *Event History Analysis*

Employment history data was used to analyze weekly employment status to establish variations in average number of weeks worked, and the rate of transition to employment. The weekly data was transformed to generate the duration of non-employment variable used in the analysis. All statistical analysis was done using Statistical Package for Social Scientists (SPSS).

## Chapter 4

### **THE RESULTS**

In this chapter, the results of the study are presented. The purpose of the study was to investigate whether among at-risk youth academic and transitional experiences vary by race, the interaction of race and gender, and the interaction of race and residence. Specifically, the study sought to establish whether the experiences of at-risk white males differ from those of other at-risk youth. The results are presented as follows: first the descriptive statistics to establish the distribution of at-risk youth and relationships among the study variables by race, race and gender, and race and residence; second the logistic regression analysis of variations in the five academic and transitional experiences each by race, race and gender and race and residence according to the research questions. The final part presents results of the analysis of the event history data.

#### **Descriptive Statistics**

The distribution of at-risk youth in Table 2 shows that nearly 58% of at-risk youth in the population under study are white, about 26% are black, and close to 17% are Hispanics. At-risk white females constitute nearly one third of the entire population, while the white males make up about one quarter. Overall, more females are at-risk than males (56% versus 44%).

Table 2

*Point Estimates of the Regular and Relative Distributions of At-Risk Youth 18-21 Years old in 2000 by Race, Race and Gender, and Race and Residence (N = 1,750,511)*

Variable	Black		Hispanic		White		Total
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	%
Total	451,375	25.8	288,769	16.6	1,010,366	57.6	100
Gender							
Male	181,840	10.4	147,510	8.5	433,811	24.7	43.6
Female	269,535	15.4	141,259	8.1	576,555	32.9	56.4
	$\chi^2 = 4.240; df = 2; p = .120$						
Residence							
Rural	82,221	5.1	24,643	1.5	274,238	17.2	23.8
Urban	342,572	21.4	240,285	15.0	633,585	39.8	76.2
	$\chi^2 = 26.516; df = 2; p = .001$						

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

The majority of at-risk youth live in urban areas (76.2%). Nearly 40% of them are urban white, and one quarter are white males. These data document the fact that even though the rate of poverty (proportion) for white Americans in the U.S. population is low, there is a huge number of people behind the small proportion. There are more whites than non-whites in the population of at-risk youth.

Table 3 shows the distribution and relationships among the racial categories and the academic and transitional experiences under study. Nearly 60% of all at-risk youth

enroll in what schools classify as the general curriculum. Only 26% follow academic programs and 14% follow vocational programs. This pattern does not vary by race.

Table 3

*Percent Distribution of At-Risk Youth 18-21 Years old in 2000 by Race and Academic and Transitional Experiences (N = 1,750,511)*

Academic and Transitional Experiences	Black	Hispanic	White	Total
<b>High school program of study</b>				
General	54.7 (24.0)	73.2 (20.9)	58.4 (55.1)	59.9 (100)
Academic	18.6 (18.8)	23.2 (15.3)	30.2 (65.9)	26.0 (100)
Vocational	26.7 (50.0)	3.6 (4.3)	11.4 (45.7)	14.1 (100)
	$\chi^2 = 20.577; df = 4; p = .001$			
<b>HS graduation status</b>				
Graduated	65.0 (23.5)	65.2 (15.2)	75.5 (61.3)	71.1 (100)
Dropped out	35.0 (31.1)	34.6 (19.9)	24.5 (49.0)	28.9 (100)
	$\chi^2 = 10.717; df = 2; p = .005$			
<b>Transition to postsecondary</b>				
No transition	77.1 (29.3)	77.5 (19.0)	60.7 (51.8)	67.7 (100)
Transitioned	22.9 (18.2)	22.5 (11.5)	39.2 (70.3)	32.3 (100)
	$\chi^2 = 25.518; df = 2; p = .001$			
<b>Transition to employment</b>				
No Transition	56.2 (34.8)	45.2 (19.0)	38.4 (46.2)	44.6 (100)
Transitioned	43.8 (21.8)	54.8 (18.6)	61.6 (59.6)	55.4 (100)
	$\chi^2 = 14.320; df = 2; p = .001$			

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

*Note.* Figures in parentheses are percentages within the academic and transitional experiences.

For all racial groups, the largest percentages of at-risk youth follow a general curriculum.

About 71% of these youth complete high school, with no major variations between blacks

and Hispanics. White at-risk youth however have a 10% higher completion rate than black and Hispanic at-risk youth.

Drop out rates for at-risk blacks and Hispanics are higher than that of at-risk white youth. Slightly over one third of both groups drop out of school before the 12<sup>th</sup> grade, compared to about one quarter of at-risk white youth. However, among dropouts, white at-risk youth constitute nearly half of the group (49%).

Enrollment statistics show that about 39% of the white at-risk youth transition to postsecondary compared to 23% of the black at-risk youth and a similar percentage of Hispanic at-risk youth. In general, about one third of the at-risk youth transition to postsecondary education.

In the labor market, black at-risk youth ready for employment are less likely to be employed than both their white and Hispanic counterparts. While 62% of the white at-risk youth and 55% of the Hispanic at-risk youth transition to employment, only 44% of their black counterparts are employed. However, among those who do not transition 44% are white at-risk youth and 40% are blacks. Overall, about 45% of at-risk youth do not transition to employment.

Table 4 shows experiences among at-risk youth by race and gender. Youth across all racial and gender categories enroll most often in general programs. However, the statistics also show that for all racial groups, the percentage of at-risk females who enroll in academic programs is higher than that of at-risk males. And, more at-risk males enroll in vocational programs than females. Overall, about 29% of the females enroll in

academic programs compared to 22% of the males. About 28% of white males enroll in academic programs compared to 33% of white females, 27% of Hispanic females, 22% of black females, 15% of Hispanic males, and 14% of black males. For both males and females, blacks are overrepresented in the vocational programs. Hispanic at-risk females show little interest in vocational programs. There are no race or gender differences in enrollment in general programs. Both males and females of all racial categories are more likely to enroll in general programs than in either academic or vocational.

Table 4

*Percent Distribution of of At-Risk Youth 18-21 Years old in 2000 by Race and Gender, and Academic and Transitional Experiences (N = 1,750, 511)*

Academic and Transitional Experiences	Male			Female		
	Black	Hispanic	White	Black	Hispanic	White
<b>High school program of study</b>						
General	56.8 (23.1)	76.9 (22.0)	58.8 (54.9)	52.0 (24.8)	73.3 (21.0)	57.0 (54.3)
Academic	13.5 (15.2)	15.4 (12.1)	28.2 (72.7)	22.0 (21.2)	26.7 (15.4)	33.0 (63.5)
Vocational	29.7 (45.8)	7.7 (8.3)	12.9 (45.8)	26.0 (56.5)	00.0 (00.0)	10.0 (43.5)
	$\chi^2 = 10.316; df = 4; p = .035$			$\chi^2 = 14.267; df = 4; p = .006$		
<b>High school graduation status</b>						
Graduated	58.8 (19.5)	64.3 (17.5)	78.6 (63.0)	69.0 (26.5)	67.2 (13.4)	73.2 (60.1)
Dropped out	41.2 (33.7)	35.7 (24.0)	21.4 (42.3)	31.0 (29.4)	32.8 (16.2)	26.8 (54.4)
	$\chi^2 = 13.541; df = 2; p = .001$			$\chi^2 = 1.371; df = 2; p = .504$		
<b>Transition to postsecondary</b>						
No transition	83.5 (27.6)	78.6 (21.4)	63.9 (51.0)	72.9 (30.6)	76.5 (16.9)	58.3 (52.4)
Transitioned	16.5 (13.6)	21.4 (14.6)	36.1 (71.8)	27.1 (21.1)	23.5 (9.6)	41.7 (69.3)
	$\chi^2 = 13.527; df = 2; p = .001$			$\chi^2 = 12.817; df = 2; p = .002$		
<b>Transition to employment</b>						
No transition	54.2 (32.5)	44.1 (21.7)	37.7 (45.8)	58.2 (37.0)	46.4 (16.9)	39.0 (46.1)
Transitioned	45.8 (21.0)	55.9 (21.0)	62.3 (58.0)	41.8 (22.5)	53.6 (16.5)	61.0 (61.0)
	$\chi^2 = 5.361; df = 2; p = .069$			$\chi^2 = 9.421; df = 2; p = .009$		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor).

*Note.* Figures in parentheses are percentages within academic and transitional experiences.

While dropout rates appear to be higher among the blacks and the Hispanics compared to white at-risk youth, among females who drop out 54% are white, and among the at-risk male dropouts 42% are white. Enrollment status indicates that for all racial categories, a higher percentage of female at-risk youth transition to postsecondary than male at-risk youth. About 35% of the females transition compared to 29% of the males.

At-risk white males and at-risk Hispanic males appear to have a labor market advantage over their black counterparts. Sixty two percent of the white males and 56% of the male Hispanic at-risk youth transition to employment compared to 46% of the black at-risk youth. However, white males constitute 58% of all males who transition.

Table 5 shows an analysis of the experiences of at-risk youth by race and residence. For all residence and racial categories, all at-risk youth are more likely to enroll in general programs than in academic and vocational programs. More rural at-risk youth tend to enroll in academic programs than the urban at-risk youth. Urban blacks constitute 59% of urban enrollments in vocational programs, while rural whites make up nearly 66% of rural enrollments in vocational programs. There is almost no difference between urban and rural enrollments in vocational education. However, for academic programs 39% rural at-risk youth enroll compared to about 20% in urban areas. About 46% of rural at-risk youth enroll in general programs compared to nearly 66% in urban areas. Overall, there is no residential difference in the pattern of enrollment in the programs. Both rural and urban at-risk youth are more likely to enroll in general curriculum regardless of race.



Table 5

*Percent Distribution of At-Risk Youth 18-21 Years in 2000 by Race and Residence, and Academic and Transitional Experiences (N = 1,750,511)*

Academic and Transitional Experiences	Rural			Urban		
	Black	Hispanic	White	Black	Hispanic	White
High school program of study						
General	57.1 (22.9)	57.1 (11.4)	41.1 (65.7)	55.9 (26.2)	76.1 (24.1)	67.9 (49.7)
Academic	21.4 (10.0)	28.6 (6.7)	44.6 (83.3)	16.2 (25.6)	19.6 (20.9)	21.7 (53.5)
Vocational	21.4 (25.0)	14.3 (8.3)	14.3 (66.7)	27.9 (59.4)	4.3 (6.3)	10.4 (34.4)
	$\chi^2 = 9.421; df = 2; p = .009$			$\chi^2 = 15.416; df = 4; p = .004$		
High school graduation status						
Graduated	69.2 (21.3)	50.0 (4.7)	72.9 (74.0)	63.0 (25.0)	66.1 (18.6)	75.9 (56.4)
Dropped out	30.8 (22.6)	50.0 (11.3)	27.1 (66.0)	37.0 (34.9)	33.9 (22.7)	24.1 (42.4)
	$\chi^2 = 2.806; df = 2; p = .246$			$\chi^2 = 9.726; df = 2; p = .008$		
Transition to postsecondary						
No transition	74.4 (23.0)	75.0 (7.1)	67.7 (69.8)	77.9 (32.2)	78.9 (22.8)	58.7 (45.1)
Transitioned	25.6 (18.2)	25.0 (5.5)	32.3 (76.4)	22.1 (19.5)	21.1 (13.0)	41.3 (67.6)
	$\chi^2 = .809; df = 2; p = .668$			$\chi^2 = 25.607; df = 2; p = .001$		
Transition to employment						
No transition	69.0 (29.9)	44.4 (6.0)	46.2 (64.2)	52.7 (38.5)	43.9 (24.0)	33.2 (37.4)
Transitioned	31.0 (14.1)	55.6 (7.8)	53.8 (78.1)	47.3 (24.6)	56.1 (21.8)	66.8 (53.6)
	$\chi^2 = 4.774; df = 2; p = .002$			$\chi^2 = 12.736; df = 2; p = .002$		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

*Note.* Figures in parentheses are percentages within academic and transitional experiences.

Employment status shows that urban at-risk youth are more likely to transition to employment than rural at-risk youth. In both residence areas however, blacks are less likely to be employed compared to the Hispanic and white at-risk youth. The population of blacks and whites among the unemployed in urban areas is equal (41.3%), but whites make up a larger percentage of the unemployed in rural areas. About 53% rural white compared to 40% rural blacks constitute the unemployed rural population.

### Logistic Regression

Logistic regression models were used to estimate variations in the academic and transitional experiences of at-risk youth by race, race and gender, and race and residence. Table 6 shows the variables that were used as coded for the analysis.

Table 6

*List of Variables Used in the Regression Analyses*

---

Race1	Equals 1 if the respondent was black, 0 otherwise
Race2	Equals 1 if the respondent was Hispanic, 0 otherwise
Gender	Equals 1 if the respondent was female, 0 otherwise
Residence	Equals 1 if the respondent lived in urban area, 0 otherwise
Program1	Equals 1 if the respondent followed an academic curriculum, 0 otherwise
Program2	Equals 1 if the respondent followed a vocational curriculum, 0 otherwise
Graduate	Equals 1 if the respondent graduated from high school, 0 otherwise
Dropout	Equals 1 if the respondent did not complete 12th grade, 0 otherwise
Transps	Equals 1 if the respondent transitioned to postsecondary, 0 otherwise
Transemp	Equals 1 if the respondent transitioned to employment, 0 otherwise
Moed1	Equals 1 if mother's education was high school only, 0 otherwise
Moed2	Equals 1 if mother's education was post high school level, 0 otherwise
Peers	Equals 1 if 50% or more of the respondents' peers were planning college, 0 otherwise

---

***Research Question 1: Do enrollments in academic, vocational, and general programs vary among at-risk youth by race, race and gender, and race and residence?***

Tables 7, 8, and 9 show the estimated variation in programs followed by at-risk youth. Multinomial regression analysis was used because the dependent variable -- programs -- was a three-level variable. The analysis tested the significance of the variation and also estimated the effect of other independent variables on the dependent variable. Specifically, analysis in Table 7 was aimed at establishing whether enrollment in programs by at-risk youth varied statistically by race, controlling for the effect of gender, residence, mothers' education, and peer influence. Results from the model indicate that there are no racial variations in enrollment in academic programs by these youth. White at-risk youth are as likely as other at-risk youth to enroll or not enroll in academic programs given equal conditions.

Table 7

*Multinomial Logistic Regression Analysis Estimating Variation in Program of Study Followed by At-Risk Youth 18-21 Years old in 2000 by Race, Gender, Residence, Mothers Education and Peer Influence (N = 685,904)*

Variable	Academic vs General		Vocational vs General	
	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)
<b>Race</b>				
Black vs White	-.06 (.41)	ns	1.36** (.44)	3.89 (1.64, 9.19)
Hispanic vs White	-.18 (.44)	ns	-.58 (.74)	ns
<b>Gender</b>				
Female vs Male	.36 (.33)	ns	-.57 (.40)	ns
<b>Residence</b>				
Urban vs Rural	-1.17*** (.35)	.31 (.16, .61)	-.30 (.48)	ns
<b>Mothers education</b>				
High school only vs <hs	.44 (.40)	ns	-.52 (.47)	ns
Post high school vs <hs	.75 (.42)	ns	-.30 (.52)	ns
<b>Peers planning college</b>				
50% or more vs <50%	1.60** (.60)	4.97 (1.53, 16.19)	.71 (.52)	ns
Intercept	-.94		-2.56**	
-2 log likelihood	180.20; <i>df</i> = 14; <i>p</i> < .001			

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

\*\**p* < .01; \*\*\**p* < .001; ns = not significant.

However, there are residence differences. Urban at-risk youth are .31 times less likely than rural youth to enroll in academic programs as compared to general programs. Also, even though a majority of at-risk youth of all racial groups are more likely to enroll in general programs than in academic or vocational programs, black at-risk youth are 3.89

times more likely than white at-risk youth to follow vocational programs compared to general programs. This confirms the earlier descriptive analysis, which showed that about half of all students in vocational programs are blacks.

Also revealed by these data is that peer influence is a significant predictor of enrollment in academic programs. At-risk youth who have 50% or more of their friends planning to go to college are 4.97 times more likely than their counterparts with fewer friends planning to attend college to enroll in academic programs compared to general programs.

Table 8 shows results of analysis of programs the youth follow, designed to establish whether there are any variations by race and gender. As shown, no race and gender differences exist. However, as already noted before, residence and peer influence are significant factors in predicting enrollment in academic programs.

Table 8

*Multinomial Logistic Regression Analysis Estimating Variation in Program of Study Followed by At-Risk Youth 18-21 Years old in 2000 by Race and Gender, Residence, Mothers Education and Peer Influence (N = 685,904)*

Variable	Academic vs General		Vocational vs General	
	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )
<b>Race and Gender</b>				
White females vs White males	.33 (.43)	ns	-.86 (.63)	ns
Black males vs White males	-.20 (.69)	ns	.87 (.60)	ns
Black females vs White males	.55 (.55)	ns	.97 (.56)	ns
Hispanic males vs White males	.41 (.70)	ns	.04 (.83)	ns
Hispanic females vs White males	.37 (.59)	ns	-17.30 (.00)	-
<b>Residence</b>				
Urban vs Rural	-1.16*** (.35)	.31 (.16, .62)	-.29 (.48)	ns
<b>Mothers education</b>				
High school only vs <hs	.44 (.40)	ns	-.51 (.47)	ns
Post high school vs <hs	.78 (.42)	ns	-.21 (.52)	ns
<b>Peers planning college</b>				
50% or more vs <50%	1.62** (.60)	5.07 (1.55, 16.55)	.79 (.52)	ns
Intercept	-.94		-2.43**	
-2 log likelihood	175.33; <i>df</i> = 18, <i>p</i> < .001			

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

\*\**p* < .01; \*\*\**p* < .001; ns = not significant.

Table 9 shows the multinomial regression analysis designed to establish variations in program enrollment by race and residence interaction.

Two differences were established by this analysis, namely; the difference in enrollment between urban and rural at-risk youth established in Table 7 affects only white at-risk youth. Rural whites are more likely than urban whites to enroll in academic programs as compared to general programs. For all other race and residence categories of at-risk youth there is no variation. Second, urban blacks are more likely than urban whites to enroll in vocational programs, and this variation affects only these two subgroups. There is no variation among other categories. Only peer influence remains an important predictor of programs youth follow with residence and race interaction.

Table 9

*Multinomial Logistic Regression Analysis Estimating Variation in Program of Study Followed by At-Risk Youth 18-21 Years old in 2000 by Race and Residence, Gender, Mothers Education and Peer Influence (N = 685,904)*

Variable	Academic vs General		Vocational vs General	
	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )
<b>Race and Residence</b>				
Rural white vs Urban white	1.33*** (.39)	3.78 (1.74, 8.18)	.35 (.62)	ns
Urban black vs Urban white	.18 (.46)	ns	1.40** (.47)	4.05 (1.61, 10.20)
Rural Black vs Urban white	.68 (.74)	ns	1.31 (.78)	ns
Urban Hispanics vs Urban white	.23 (.47)	ns	-.68 (.84)	ns
Rural Hispanics vs Urban white	.90 (.91)	ns	-.19 (1.43)	ns
<b>Gender</b>				
Female vs Male	.14 (.31)	ns	-.67 (.39)	ns
<b>Mothers education</b>				
High school only vs <hs	.56 (.37)	ns	-.50 (.44)	ns
Post high school vs <hs	.48 (.40)	ns	-.50 (.50)	ns
<b>Peers planning college</b>				
50% or more vs <50%	1.59** (.56)	4.88 (1.63, 14.65)	.84 (.52)	ns
Intercept	-2.05**		-3.02***	
-2 log likelihood	188.53; <i>df</i> = 18; <i>p</i> < .001			

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

\*\**p* < .01; \*\*\**p* < .001; ns = not significant.



In summary, tables 7, 8 and 9 present the multinomial logistic regression analysis of variation in program enrollment followed by at-risk youth by race, race and gender, and race and residence. The results show that there are no variations by race and by race and gender. The variations that occur by race and residence are between urban white and rural white whereby controlling for the effect of other variables, rural white are less likely than urban white to enroll in academic programs compared to general programs. Also urban white are less likely than urban black to enroll in vocational programs. Overall however, all racial, race and gender, and race and residence categories are more likely to follow a general program than academic or vocational programs.

Binary logistic regression models were used to estimate variation in high school graduation, dropout, youth transition to post secondary education, and transition to employment. The binary regression models were used here because the dependent variables are dummy variables coded 0 and 1.

***Research Question 2: Are there variations in high school graduation rates among at-risk youth by race, race and gender, and race and residence?***

Tables 10-12 show the results of the analysis by race, race and gender, and race and residence. The percent change in probability given a unit change in the independent variable was calculated for each of the regression models using the formula below:

$$\Delta P = pq\beta$$

where  $p$  = proportion coded 1 on the dependent variable,  $q$  = proportion coded 0 on the dependent variable,  $\beta$  = coefficient.

The results presented in Table 10 show that there are no race variations in high school graduation among at-risk youth. At-risk white youth graduate at about the same rate as other at-risk youth groups. Mothers' education level significantly predicts the probability of high school graduation. At-risk youth whose mothers attained at least high school graduation are 24% more likely to graduate than those whose mothers did not make it through high school. The youth whose mothers attained post high school education are 37% more likely than youth whose mothers had less than high school education to graduate from high school. Peer influence plays a significant role in the life of these youth. Those with 50% or more of their friends planning to attend college are 19% more likely to graduate than those with fewer friends having college attendance plans.

Table 10

*Logistic Regression Model Estimating Variation in High School Graduation Among At-Risk Youth 18-21 Years old in 2000 by Race, Gender, Residence, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	$\Delta P^a$ (95% CI)
Race			
Blacks vs Whites	-.14 (.22)	ns	ns
Hispanics vs Whites	-.02 (.27)	ns	ns
Gender			
Female vs Male	-.19 (.19)	ns	ns
Residence			
Urban vs Rural	-.16 (.23)	ns	ns
Mothers education			
High school only vs <hs	1.16*** (.21)	3.19 (2.10, 4.84)	.24 (.15, .32)
Post high school	1.79*** (.26)	5.99 (3.61, 9.95)	.37 (.26, .47)
Peers planning college			
50% or more vs <50%	.91*** (.21)	2.49 (1.64, 3.78)	.19 (.10, .27)
Intercept	-.39		
-2 log likelihood	688.69; <i>df</i> = 7; <i>p</i> < .001		

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\*\*\**p* < .001; ns = not significant.

Table 11 shows the regression model estimating variation in high school graduation by race and gender. There are no variations in high school graduation rates when the interaction of race and gender is considered. Mothers' education level and peer influence remain important predictors of high school graduation.

Table 11

*Logistic Regression Model Estimating Variation in High School Graduation Among At-risk Youth 18-21 Years old in 2000 by Race and Gender, Residence, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )	$\Delta P^a$ 95% <i>CI</i>
<b>Race and Gender</b>			
White females vs White males	-.43 (.26)	ns	ns
Black males vs White males	-.66 (.34)	ns	ns
Black females vs White males	-.17 (.30)	ns	ns
Hispanic males vs White males	-.17 (.37)	ns	ns
Hispanic females vs White males	-.23 (.37)	ns	ns
<b>Residence</b>			
Urban vs Rural	-.16 (.23)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.19*** (.22)	3.27 (2.14, 4.99)	.24 (.16, .33)
Post high school	1.81*** (.26)	6.12 (3.68, 10.18)	.37 (.27, .48)
<b>Peers planning college</b>			
50% or more vs <50%	.92*** (.22)	2.50 (1.64, 3.80)	.19 (.10, .27)
Intercept	1.15		
-2 log likelihood	682.90; <i>df</i> = 9; <i>p</i> < .001		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\*\*\**p* < .001, ns = not significant.

Table 12 shows the logistic regression model for estimating variation in high school graduation by race and residence. There are no variations in high school graduation for at-risk youth when the interaction between race and residence is taken into consideration. Urban whites are as likely as other at-risk youth to graduate from high school. Mothers' education and peer influence remain significant predictors of at-risk youth probability of graduating from high school.

In summary, the logistic regression models for high school graduation have provided evidence that there is no variation in high school graduation among at-risk youth. White males graduate at similar rates as all other at-risk youth categories.

Table 12

*Logistic Regression Model Estimating Variation in High School Graduation Among At-Risk Youth 8-21 Years old in 2000 by Race and Residence, Gender, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )	$\Delta P^a$
<b>Race and Residence</b>			
Rural white vs Urban white	.09 (.27)	ns	ns
Urban black vs Urban white	-.28 (.24)	ns	ns
Rural Black vs Urban white	-.05 (.43)	ns	ns
Urban Hispanics vs Urban white	-.08 (.28)	ns	ns
Rural Hispanics vs Urban white	-.55 (.66)	ns	ns
<b>Gender</b>			
Female vs male	-.19 (.18)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.03*** (.20)	2.79 (1.87, 4.15)	.21 (.13, .29)
Post high school	1.57*** (.24)	4.79 (2.98, 7.71)	.32 (.22, .42)
<b>Peers planning college</b>			
50% or more vs <50%	.92*** (.21)	2.50 (1.67, 3.75)	.19 (.11, .27)
Intercept	-.35		
-2 log likelihood	757.65; <i>df</i> = 9; <i>p</i> < .001		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\*\*\**p* < .001; ns = not significant.

***Research Question 3: Are there variations in dropout rates among at-risk youth by race, race and gender, and race and residence?***

Tables 13-15 show the logistic regression models for drop out among at-risk youth. Table 13 specifically aims at establishing variation in dropout among the at-risk youth by race. Results show that there are no racial differences in drop out among at-risk youth. There are also no significant gender and residence differences.

The programs that the youth follow significantly predict their likelihood of dropout. Those enrolled in academic programs are 76% less likely to drop out of school and those in vocational programs are 29% less likely to drop out than those enrolled in the general programs.

Equally important is mother's education in predicting dropout among at-risk youth. At-risk youth whose mothers completed at least high school are significantly less likely to drop out than those whose mothers did not complete high school. Those whose mothers attained high school only are 22% less likely to drop out of school than those whose mothers dropped out. Those whose mothers attended post secondary education are 27% less likely to drop out than those whose mothers had less than high school graduation.



Table 13

*Logistic Regression Model Estimating Variation in Dropout Rate Among At-Risk Youth 18-21 Years old in 2000 by Race, Gender, Residence, Program, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	$\Delta P^a$ (95% CI)
<b>Race</b>			
Black vs White	.32 (.43)	ns	ns
Hispanic vs White	-.29 (.52)	ns	ns
<b>Gender</b>			
Female vs Male	.06 (.37)	ns	ns
<b>Residence</b>			
Urban vs Rural	.66 (.49)	ns	ns
<b>Programs</b>			
Academic vs General	-3.73* (1.54)	.02 (.01, .49)	-.76 (-.95, -.15)
Vocational vs General	-1.14* (.60)	.32 (.12, .85)	-.29 (-.43, -.03)
<b>Mothers education</b>			
High school only vs <hs	-1.09** (.42)	.34 (.15, .77)	-.22 (-.39, -.05)
Post high school	-1.34** (.52)	.26 (.10, .73)	-.27 (-.47, -.06)
<b>Peers planning college</b>			
50% or more vs <50%	-.25 (.42)	ns	ns
Intercept	-.79		
-2 log likelihood	190.64; <i>df</i> = 9; <i>p</i> < .001		

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05; \*\**p* < .01; ns = not significant.

Table 14 shows that the dropout experience among at-risk youth does not vary by race and gender. White males are as likely as all other at-risk youth to dropout of school. Programs followed and mothers' education significantly predict dropout. Adjusting for the interactive effect of race and gender, mothers' education and peer influence, academic programs reduce the likelihood of dropout by 76%. Those in the vocational programs are 24% less likely to drop out. Mothers' education at high school level reduces the likelihood of dropout by 23% compared to less than high school education. Mothers' education beyond high school reduces the likelihood of dropout by 27%.

Table 14

*Logistic Regression Model Estimating Variation in Dropout Rate Among At-Risk Youth 18-21 Years old in 2000 by Race and Gender, Residence, Program, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	$\Delta P^a$ (95% CI)
<b>Race and Gender</b>			
White females vs White males	.61 (.56)	ns	ns
Black males vs White males	.81 (.67)	ns	ns
Black females vs White males	.63 (.63)	ns	ns
Hispanic males vs White males	.57 (.76)	ns	ns
Hispanic females vs White males	-.35 (.79)	ns	ns
<b>Residence</b>			
Urban vs Rural	.69 (.50)	ns	ns
<b>Programs</b>			
Academic vs General	-3.73* (1.54)	.02 (.01, .49)	-.76 (-.94, -.15)
Vocational vs General	-1.15* (.59)	.32 (.12, .85)	-.24 (-.43, -.03)
<b>Mothers education</b>			
High school only vs <hs	-1.10* (.43)	.33 (.15, .77)	-.23 (-.39, -.05)
Post high school	-1.30* (.53)	.27 (.10, .77)	-.27 (-.47, -.05)
<b>Peers planning college</b>			
50% or more vs <50%	-.22 (.43)	ns	ns
Intercept	-1.17		
-2 log likelihood	188.25; <i>df</i> = 11; <i>p</i> < .001		

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05; ns = not significant

Table 15 shows the logistic regression analysis of drop out estimating variation among at-risk youth by race and residence. Results show that there is no variation in drop out among at-risk youth by race and residence. Urban white are as likely as other at-risk youth to drop out of school.

Adjusting for race and residence interaction, those at-risk youth enrolled in academic programs are 80% less likely to drop out of school and those in vocational programs are 27% less likely than general programs to dropout. Mothers' education at high school level reduces the probability of dropout for at-risk youth by 22% and at post high school level reduces the probability by 18%.

Table 15

*Logistic Regression Model Estimating Variation in Dropout Rate Among At-Risk Youth 18-21 Years old in 2000 by Race and Residence, Gender, Program, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )	$\Delta P^a$ (95% <i>CI</i> )
<b>Race and Residence</b>			
Rural white vs Urban white	-.65 (.59)	ns	ns
Urban black vs Urban white	.44 (.44)	ns	ns
Rural Black vs Urban white	-.79 (1.08)	ns	ns
Urban Hispanics vs Urban white	-.40 (.54)	ns	ns
Rural Hispanics vs Urban white	-.22 (1.15)	ns	ns
<b>Gender</b>			
Female vs Male	.05 (.35)	ns	ns
<b>Programs</b>			
Academic vs General	-3.90* (1.54)	.02 (.01, .41)	-.80 (-.94, -.18)
Vocational vs General	-1.30* (.58)	.27 (.09, .86)	-.27 (-.49, -.03)
<b>Mothers education</b>			
High school only vs <hs	-1.08** (.41)	.34 (.15, .75)	-.22 (-.38, -.06)
Post high school	-.89* (.45)	.41 (.17, .99)	-.18 (-.35, -.33)
<b>Peers planning college</b>			
50% or more vs <50%	-.16 (.41)	ns	ns
Intercept	-.24		
-2 log likelihood	212.91; <i>df</i> = 11; <i>p</i> < .001		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05 level; \*\**p* < .01; ns = not significant.

***Research Question 4: Do the transition rates to postsecondary education vary among at-risk youth by race, race and gender, and race and residence?***

Tables 16-18 show logistic regression models for transition to postsecondary for at-risk youth. Table 16 shows analysis aimed at establishing whether there are variations in the youth transition to postsecondary by race. Results show no variation by race. There are also no residence and gender variations.

Academic programs increase the likelihood of transition to postsecondary by 42% compared to general programs. Those whose mothers have high school only are 28% more likely to transition to postsecondary than those whose mothers have less than high school education. Post high school education of mothers increases the likelihood by 32%.

Peer influence significantly predicts transition to postsecondary education. At-risk youth who have more than 50% of their peers aspiring for college are 40% more likely to transition to postsecondary than those with fewer than 50% college interested peers.

Table 16

*Logistic Regression Model Estimating Variation in Transition to Postsecondary Education Among At-Risk Youth 18-21 Years old in 2000 by Race, Gender, Residence, Program, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	$\Delta P^a$ (95% CI)
<b>Race</b>			
Black vs White	-.37 (.41)	ns	ns
Hispanic vs White	-.13 (.46)	ns	ns
<b>Gender</b>			
Female vs Male	.01 (.34)	ns	ns
<b>Residence</b>			
Urban vs Rural	-.24 (.38)	ns	ns
<b>Programs</b>			
Academic vs General	1.91*** (.37)	6.74 (3.25, 13.98)	.42 (.25, .57)
Vocational vs General	.64 (.51)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.30** (.44)	3.67 (1.54, 8.76)	.28 (.09, .47)
Post high school	1.48** (.46)	4.39 (1.78, 10.80)	.32 (.12, .51)
<b>Peers planning college</b>			
50% or more vs <50%	1.82* (.73)	6.18 (1.48, 25.84)	.40 (.08, .70)
Intercept	-3.92		
-2 log likelihood	235.11; <i>df</i> = 9; <i>p</i> < .001		

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001

Table 17 shows the logistic regression model for transition to postsecondary estimating variation among at-risk youth by race and gender. Results show that no variation exists. White males are as likely as all other at-risk youth to transition to postsecondary. Controlling for race and gender interaction, mothers' education and peer influence, those following academic programs are 48% more likely to transition to postsecondary than those in general programs. Mothers' education at high school level increases the likelihood of transition by 27% when compared with mothers' education at less than high school. At-risk youth whose mothers attained post high school education are 29% more likely to transition to postsecondary than those whose mothers did not complete high school. And for at-risk youth having friends who plan to go to college increases the likelihood of transition to postsecondary by 40%.



Table 17

*Logistic Regression Model Estimating Transition to Postsecondary Education Among At-Risk Youth 18-21 Years old in 2000 by Race and Gender, Program, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )	$\Delta P^a$ (95% <i>CI</i> )
<b>Race and Gender</b>			
White females vs White males	-.27 (.40)	ns	ns
Black males vs White males	-.48 (.60)	ns	ns
Black females vs White males	-.52 (.53)	ns	ns
Hispanic males vs White males	-.91 (.79)	ns	ns
Hispanic females vs White males	.06 (.57)	ns	ns
<b>Programs</b>			
Academic vs General	2.21*** (.35)	9.11 (4.56, 18.14)	.48 (.33, .62)
Vocational vs General	.69 (.49)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.24** (.41)	3.46 (1.55, 7.75)	.27 (.09, .44)
Post high school	1.34** (.44)	3.80 (1.61, 8.98)	.29 (.10, .47)
<b>Peers planning college</b>			
50% or more vs <50%	1.84* (.74)	6.32 (1.50, 26.71)	.40 (.09, .71)
Intercept	-3.96***		
-2 log likelihood	255.68; <i>df</i> = 10; <i>p</i> < .001		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001; ns = not significant.

Table 18 shows the regression analysis for transition to postsecondary for at-risk youth estimating variation by race and residence. The results show that no variation exists. Urban white are as likely as other race and residence categories to transition to postsecondary. Academic programs increase the likelihood of transition to postsecondary by 47% compared to the general programs. Those with mothers who attained at least high school education are 28% more likely to transition to postsecondary than those whose mothers did not complete high school. Post high school education for mothers increases the likelihood of transition to employment by 30% compared to less than high school education of mothers. Peer influence is a significant predictor of transition to postsecondary. Many college bound friends increase the likelihood of transition to postsecondary for at-risk youth by 41% compared to those with fewer friends aspiring for college.

Table 18

*Logistic Regression Model Estimating Variation in Transition to Postsecondary Education Among At-Risk Youth 18-21 Years old in 2000 by Race and Residence, Program, Mothers Education and Peer Influence (N = 1,742,263)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	$\Delta P^a$ (95% CI)
<b>Race and Residence</b>			
Rural white vs Urban white	.14 (.44)	ns	ns
Urban black vs Urban white	-.30 (.46)	ns	ns
Rural Black vs Urban white	-.78 (.82)	ns	ns
Urban Hispanics vs Urban white	-.34 (.51)	ns	ns
Rural Hispanics vs Urban white	.55 (1.01)	ns	ns
<b>Programs</b>			
Academic vs General	2.15*** (.36)	8.56 (4.22, 17.33)	.47 (.31, .61)
Vocational vs General	.664 (.48)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.26** (.42)	3.51 (1.55, 7.95)	.28 (.09, .45)
Post high school	1.37** (.44)	3.95 (1.66, 9.37)	.30 (.11, .48)
<b>Peers planning college</b>			
50% or more vs <50%	1.85* (.73)	6.33 (1.51, 26.57)	.41 (.09, .71)
Intercept	-4.12***		
-2 log likelihood	255.84; <i>df</i> = 10; <i>p</i> < .001		

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001; ns = not significant.

***Research Question 5: Do the transition rates to employment vary among at-risk youth by race, race and gender, and race and residence?***

Tables 19-21 show the logistic regression models estimating variation in transition to employment among at-risk youth. Table 19 specifically shows the results of the analysis of variation among at-risk youth by race. The results show that there is a variation by race. Black at-risk youth are 29% less likely to transition to employment than white at-risk youth.

Following academic programs predict transition to employment. Those enrolled in academic programs are 26% more likely to transition to employment than those in general programs. Mothers' education is a significant predictor of transition to employment especially at high school level. Mothers with high school only increase the likelihood of their children's transition to employment by 26% compared to those with less than high school.

Table 19

*Logistic Regression Model Estimating Variation in Transition to Employment for At-Risk Youth 18-21 Years old in 2000 by Race, Gender, Residence, Program, Mothers Education and Peer Influence (N = 1,280,517)*

Variable	<i>b</i> ( <i>SE</i> )	<i>e<sup>b</sup></i> (95% <i>CI</i> )	$\Delta P^a$ (95% <i>CI</i> )
<b>Race</b>			
Black vs White	-1.17** (.39)	.31 (.15, .67)	-.29 (-.47, -.09)
Hispanic vs White	-.42 (.44)	ns	ns
<b>Gender</b>			
Female vs Male	-.03 (.33)	ns	ns
<b>Residence</b>			
Urban vs Rural	.46 (.40)	ns	ns
<b>Programs</b>			
Academic vs General	1.05* (.51)	2.86 (1.05, 7.79)	.26 (.01, .51)
Vocational vs General	.31 (.49)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.05** (.39)	2.87 (1.34, 6.13)	.26 (.07, .45)
Post high school	.46 (.41)	ns	ns
<b>Peers planning college</b>			
50% or more vs <50%	.38 (.38)	ns	ns
Intercept	-.46		
-2 log likelihood	230.04; <i>df</i> = 9; <i>p</i> < .01		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05; \*\**p* < .01; ns = not significant.

Table 20 shows the regression analysis for at-risk transition to employment predicting variation in transition by race and gender. Black males are 28% less likely to transition to employment than white males. Programs and mothers' education are significant predictors of transition to employment.

Table 20

*Logistic Regression Model Estimating Variation in Transition to Employment Among At-Risk Youth 18-21 Years old in 2000 by Race and Gender, Residence, Program, Mothers Education and Peer Influence (N = 1,280,517)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	$\Delta P^a$ (95% CI)
<b>Race and Gender</b>			
White females vs White males	-.34 (.49)	ns	ns
Black males vs White males	-1.41* (.60)	.24 (.08, .79)	-.35 (-.62, -.06)
Black females vs White males	-1.16 (.56)	.31 (.10, .94)	-.29 (-.57, -.02)
Hispanic males vs White males	-.65 (.66)	ns	ns
Hispanic females vs White males	-.60 (.64)	ns	ns
<b>Residence</b>			
Urban vs Rural	.45 (.40)	ns	ns
<b>Programs</b>			
Academic vs General	1.01* (.52)	2.75 (1.00, 7.60)	.25 (.01, .50)
Vocational vs General	.24 (.49)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.05** (.39)	2.86 (1.33, 6.15)	.26 (.07, .45)
Post high school	.48 (.42)	ns	ns
<b>Peers planning college</b>			
50% or more vs <50%	.40 (.38)	ns	ns
Intercept	-32		
-2 log likelihood	226.59; <i>df</i> = 11, <i>p</i> < .01		

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05; \*\**p* < .01; ns = not significant.

Table 21 shows regression analysis for transition to employment predicting variation by race and residence. The analysis shows that rural blacks are less likely to transition to employment than urban white. Program and mothers' education are significant predictors. The youth whose mothers dropped out of school are 26% less likely to transition to employment compared to those whose mothers had a high school education.



Table 21

*Logistic Regression Model Estimating Variation in Transition to Employment Among At-Risk Youth 18-21 Years old in 2000 by Race and Residence, Program, Mothers Education and Peer Influence (N = 1,280,517)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)	$\Delta P^a$ (95% CI)
<b>Race and Residence</b>			
Rural white vs Urban white	-.12 (.47)	ns	ns
Urban black vs Urban white	-.55 (.41)	ns	ns
Rural Black vs Urban white	-1.83* (.84)	.16 (.03, .84)	-.45 (-.87, -.04)
Urban Hispanics vs Urban white	-.27 (.45)	ns	ns
Rural Hispanics vs Urban white	.36 (1.06)	ns	ns
<b>Programs</b>			
Academic vs General	1.02* (.52)	2.76 (1.00, 7.60)	.25 (.01, .50)
Vocational vs General	.17 (.45)	ns	ns
<b>Mothers education</b>			
High school only vs <hs	1.06** (.36)	2.88 (1.41, 5.89)	.26 (.08, .44)
Post high school	.61 (.39)	ns	ns
<b>Peers planning college</b>			
50% or more vs <50%	.51 (.36)	ns	ns
Intercept	-.44		
-2 log likelihood	250.91; <i>df</i> = 10; <i>p</i> < .01		

*Source:* Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

<sup>a</sup> $\Delta P$  = Percent change in probability given a unit change in the independent variable.

\**p* < .05; \*\**p* < .01; ns = not significant.

### **Event History Analysis**

The purpose of the event history analysis was to provide further information about variations in employment experiences of at-risk youth, especially because a one-time survey of the employment status does not accurately relay what happens to these youth in their early labor market experiences when they transition. Particularly important is how much time it takes them to find these jobs and whether they retain the jobs when they find them. This analysis examined duration of non-employment.

Event history analysis method was chosen because the dependent variable is time and it deals with censored cases. This method of analysis is appropriate for modeling probabilities of employment and non-employment over a period of time. Data is not weighted for this analysis but because the statistical unit is duration of non-employment, and several respondents had more than one spell of non-employment, the number of cases in the analysis increased to 1,185.

Table 22 shows the means and standard deviations of the weeks worked on average by these youth during the 53 weeks. Whites had higher mean weeks worked than Hispanics and blacks. Hispanics also had higher mean weeks of work than blacks.

Table 22

*Means and Standard Deviations of Number of Weeks Employed by At-Risk Youth  
18-21 Years old in 2000 (n = 1,185)*

Variable	<i>f</i>	%	Weeks employed	
			<i>M</i>	<i>SD</i>
Race				
Black	213	21.4	22.2	19.33
Hispanic	135	14.8	24.21	20.11
White	477	63.8	29.53	18.74
Gender				
Male	360	43.7	26.78	19.67
Female	465	56.3	26.77	19.18
Residence				
Rural	180	24.3	27.41	19.49
Urban	573	75.7	26.98	19.3
Program				
General	193	55.6	23.68	18.75
Academic	82	30.4	30.36	17.48
Vocational	46	14	25.04	18.87
Mother's education				
Less than high school	229	30.9	26.06	19.21
High school only	263	35.9	26.37	19.89
Post high school	224	33.2	28.71	18.94

*Source:* Bureau of Labor Statistics, *NLSY97* data file.

Table 23 shows the results of the cox-regression survival analysis for the rate of transition to employment over the 53 weeks. The results show that there is no significant difference in the rate at which at-risk youth entered the employment market. However, for all at-risk youth the program of study that they follow has an important impact on when they gain employment. At-risk youth who take academic and vocational programs while in school are more likely to enter the labor market earlier than those in the general programs. In fact, those who enroll in vocational programs are 2.02 times more likely to find jobs earlier, and those in the academic programs are 1.56 times more likely to get a job faster than those in general programs.

Table 23

*Survival Analysis of Rate of Transition to Employment for At-Risk Youth 18-21 Years old in 2000 (n = 1,185)*

Variable	<i>b</i> (SE)	<i>e<sup>b</sup></i> (95% CI)
Race		
Black vs White	-.29 (.21)	ns
Hispanic vs White	-.35 (.26)	ns
Gender		
Female vs Male	.01 (.17)	ns
Programs		
Academic vs General	.45* (.21)	1.56 (1.04, 2.34)
Vocational vs General	.70** (.27)	2.02 (1.18, 3.44)
Mothers education		
High school only vs <hs	-.24 (.21)	ns
Post high school vs <hs	-.02 (.23)	ns
Peers planning college		
50% or more vs <50%	.14 (.24)	ns
-2 log likelihood	944.56	

Source: Analysis of NLSY97 data set (U.S. Department of Labor, 2002).

\* $p < .05$ ; \*\* $p < .01$ ; ns = not significant.

### **Summary of the Results**

The findings of the study show that there are no major variations in the academic and transitional experiences among at-risk youth by race. In general all at-risk youth tend to enroll in general programs, avoiding the more challenging programs that are of benefit to them in climbing the social ladder. Their high school graduation, dropout and transition to postsecondary education experiences are similar. This gives testimony to how homogeneous the group is. The only variation is in employment where urban white at-risk youth are more likely to be employed than rural blacks, which may be explained by several confounding factors.

Findings from this study show that there are also no major variations by race and gender. Both males and females of all racial groups tend to follow general programs. Their high school completion, dropout, transition to postsecondary and transition to employment experiences are similar.

Analysis of race and residence relationships showed that there are also no major variations in the academic and transitional experiences of at-risk youth by race and residence. Urban at-risk youth are as likely as other at-risk youth to enroll in general programs than in any other program. They are also as likely as others to graduate at the same rate from high school, drop out, or transition to postsecondary. Employment experiences only vary between urban whites and rural blacks.

## Chapter 5

### **DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS**

The purpose of this study was to establish whether the academic and transitional experiences of at-risk youth vary by race, race and gender, and race and residence. The focus of the study was on white males and whether their experiences differ from those of other at-risk youth. The results in chapter four have shown that overall there are no significant variations except in transition to employment where black at-risk youth from rural America are less likely to transition to employment than urban white at-risk youth. This chapter presents the discussion of the results, implications, and recommendations.

#### **Discussion**

The demographic distribution of the at-risk youth in this study has shown that nearly 58% of at-risk youth 18-21 years old are non-Hispanic whites. At-risk white males alone constitute one quarter of the at-risk youth and white females make up one third of the at-risk population in this age range. Because of the high poverty rates for blacks and Hispanics, poverty in America has been associated with minorities. It is true, and will probably remain true for many years to come, that blacks and Hispanics are more likely to be poor than whites. However, this neither eliminates the fact that there are poor whites nor minimizes the importance of examining their plight. The high percentage represented by whites among the at-risk population endorses the importance of this study.

In his book, *Two Nations*, Hacker (1992) notes that Americans tend to think of white poverty as anomalous, and that even those who concede that poverty exists often imagine it is a kind of deformity. While this perception is good for the truly advantaged, generalizations about groups have certainly left a knowledge gap that may serve to disadvantage the white poor (Coeyman, 2003). For example, Clemetson (2003, September 26) reported that the number of Americans living in poverty increased by 1.7 million in 2002, and that the median income for blacks fell three percent and that of Hispanics declined 2.9%. No mention was made of the effect of this trend on white poverty.

Past research however provides evidence that the population of the whites among poor is large and deserves attention. In his study -- upon which this research draws its conceptual framework -- Rodgers (2000) emphasized the importance of showing both the poverty rate and the percentage or numbers these rates reflect. For example, he indicated that in 1997 the poverty rate for white Americans was as low as 8.6%, but this was millions of people and represented 46.4% of all poor Americans. In an earlier study, Weissbourd (1996) reported that in 1993 about 40% of poor children in the U.S. were white representing 6.3 million white poor children compared to 5.1 million black and 3.9 million Hispanics. Bureau of the Census (1998) statistics show that in general poverty rates for whites is very low compared to that of blacks and Hispanics but because of the relatively huge population of the white, these rates represent millions of people. More to this, which is of importance in this study, these millions of whites at all ages that go 'unnoticed' face a number of difficulties and negative experiences that are largely known



to be typical of minority poor. It was probably in reference to this large number of white among the poor that Jencks (1992) observed that as the American economy and social structure changes the underclass is not only getting smaller but also getting whiter.

On the other hand, most minorities in the U.S. believe that the negative experiences of their youth are associated with racial discrimination. This study shows that the major problem is poverty because poor whites under similar circumstances do face similar risks except for employment where differences persist.

Several studies have demonstrated that when economic status is controlled for, there is not much difference between whites and the minority populations. For example, in their study of youth violence, Kirvo and Peterson (1999) found that violent crime does not vary by race when structural differences among communities are considered. They found that race differences do not exist for violent crime when similar economically disadvantaged communities are compared. In fact, according to the study, when race differences do persist, individuals in black communities that are not highly economically disadvantaged are less likely to become the victims of violent crime than those in black or white neighborhoods that are highly economically disadvantaged. Such empirical evidence indicates that youth behavior is a function of community resources. Poverty has similar effect on all youth regardless of race.

Another study by Wilson (1996) suggests that the problems of the disadvantaged minorities such as low income, poor neighborhoods, broken homes, poor education, and many others are not always related to previous racial discrimination. Children who grow

up in homes surrounded by these disadvantages are more likely to be denied an equal chance in life because the development of their aspirations and talents is hindered by their environment, regardless of race. A large number of at-risk white youth do suffer similar disadvantages as all other at-risk youth when faced with these hardships.

In his book, *Today's Children*, Humburg (1992) reports having found no difference between blacks and whites in a study that measured several variables and concluded, "when social class is comparable, there are no differences between blacks and whites in divorce rates, proportion of births to unmarried mothers, proportions of children living in female headed families, ..." (p.40). These are some of the experiences that are typically associated with non-whites and with which minorities have lived throughout their history. But, millions of whites do face similar difficulties, and this is reflected in the experiences of the many at-risk white youth as well. This is evidence that social class is the important factor in determining the dynamics of the American society in light of racial differences. The main problem facing the largest population of minorities is really poverty.

Barr and Parrett (2001) submit that when family background, attitude, and schooling variables are taken into account, minorities are no more likely than whites to drop out of school or not to continue and graduate. Weissbourd (1996) also concluded that at-risk black children are no more likely than their at-risk white counterparts to drop out of high school when poverty is under control. Earlier, Borus (1984) also drew similar conclusions where he found that variations in dropout rates and transition to

postsecondary education among youth were not due to race. In *Other Ways to Win*, Gray (2000) points out that although the poverty rate for blacks and Hispanics exceeds that of whites, the experience of all economically disadvantaged children are almost the same regardless of race. Further, Wehlage and Rutter (1986) also found similar results in their study of school termination. When family background is controlled, race is no longer predictive of school termination.

This research provides further evidence of the above findings. There are largely no major variations in the experiences of at-risk youth as shown by the variables in this study. Overall race is an insignificant factor where poverty is severe. So powerful is poverty in its effect on youth experiences that race, on which decades of research has placed so much emphasis, truly declines in significance (Wilson, 1980).

### *Program of Study*

According to Gray and Herr (1998) the track a student pursues in secondary school has a great deal to do with the type of academic learning to which one is exposed, whether or not one is likely to drop out or finish high school, and the total amount of education one ultimately completes. The results of this study show that regardless of race, gender or residence majority of at-risk youth enroll in general programs. Research shows that students who enroll in general programs are less likely to complete high school and transition to postsecondary or to employment than those in academic and vocational

programs. The fact that nearly 60% of at-risk youth enroll in general programs demonstrates the extent to which they need guidance.

Curriculum choices at the secondary school tend to be proxies by which parents socio-economic status are linked to their children's learning and aspirations (Gray & Herr, 1998). Evidenced by this research and others, academic programs are the best predictors of youth transition to postsecondary education. Clearly the findings too show that at-risk youth whose mothers attained postsecondary education are more likely to enroll in academic programs than those whose parents did not. Not many mothers enroll in vocational education, but vocational programs have been proven, and this research provides further evidence, to significantly reduce dropout rates among school youth, and also to enable youth find jobs relatively easier than other programs. The advantages of enrollment in general programs are yet to be known. Of the three programs, it is so far the least effective transition avenue for high school youth.

However, while it is clear that those who enroll in academic programs are more likely to enroll in postsecondary education, this research shows that very few at-risk youth enroll in academic programs. Several researchers have indicated that for most people academic programs are abstract, and especially for at-risk youth there is need to provide motivation. Barr and Parrett (2001) argue that to be effective in motivating at-risk youth, schools need to provide programs that combine rigorous academic work with career education and out of school learning opportunities. Available evidence shows that children with multiple problems learn best when engaged in practical activity with which they can associate rather than when presented with abstract knowledge. It is difficult to

make any conclusions as to why most at-risk youth enroll in general programs but it can be suggested that they probably lack adequate guidance or are influenced by their parents educational background among other factors.

### *High School Graduation*

High school completion is the first measure of success in educational attainment in the United States. Not graduating from high school is associated with failure in the life of American youth regardless of race. Those who graduate from high school have hope of acquiring status in society. Those who complete high school are many times more likely than their colleagues who do not to experience better life whether they transition to postsecondary education or to employment. Traditionally white males have completed school at a higher rate than all other racial categories. Recent trends indicate that more females than males are now completing high school and going to college. Among at-risk youth however, there was no significant variation.

### *Dropout*

Among at-risk youth, about 29% drop out before completing high school, and nearly half (49%) of those are whites. This is further evidence that poverty among a few whites is magnified when considered in the context of a subset of the poor. It is also evidence that generalizations mislead. The study found out that dropout among these youth does not vary by race, race and gender, or race and residence. When living in

poverty at-risk white males suffer and drop out at the same rate as other at-risk youth groups.

Not completing high school is a signal of a problem of economic security in the future. Statistics from Bureau of Census (1998) show that both high school dropouts and graduates who do not attain post high school education have gradually suffered a steady decline in wages over the past two decades whereas workers with post-high school training and college degrees have made significant wage gains. As Rodgers (2000) predicts, this trend is likely to continue and Americans in search of economic gain and security will increasingly find post-high school education mandatory. This is already being experienced and testimony to this is the motive behind No Child Left Behind Act of 2001. For at-risk youth not completing high school means maintaining the vicious circle of poverty in their lives (Miller, 2003; Sickle, 1985). This is the same for all youth regardless of race, race and gender, or race and residence.

Dropping out has negative impact on all youth alike. In their analysis of at-risk youth school experiences, Barr and Parrett (2001) conclude that for America's at-risk youth, the continued use of intervention approaches like grade retention, tracking, and the like have not and will not improve efforts to educate at-risk youth. White at-risk youth are as likely as other at-risk youth to drop out. Evidence that drop out is inversely related to poverty is readily available (Land & Legters, 2002). Poverty is the major issue that needs to be addressed.

### *Transition to Postsecondary Education*

Transition to postsecondary is the desired state by youth and their parents alike. Asked what their aspirations for college are, over 90% of all youth say they plan to go to college. However, not every one can go to college and even though they aspire, only a small percentage of at-risk youth transition to postsecondary as can be expected. Postsecondary experiences of these youth are beyond the scope of this study, but it will not be surprising if many of these youth drop out before completing even a grade at the postsecondary level.

Mothers' education and peer influence are significant predictors of youth academic and transitional experiences in general, but also more specifically for transition to postsecondary education. The importance of mothers' education in youth upbringing and eventual success in life has been widely researched and agreed upon by various researchers. Among at-risk youth, high school or more education of a mother significantly impacts the likelihood of transition to postsecondary education. As the child's first teachers parents must learn the importance of utilizing rather simple opportunities in stimulating the brains of infants and help prepare them for reading and school success (Barr & Parrett, 2001). One would guess that poor mothers find this hard to do since they have to deal with priorities of the basic needs first, but where it is done, the impact is significant. Peers play an equally important role. Those with many friends focused on college education are more likely to focus their aspirations in similar ways.

### *Transition to Employment*

The results of this study show that there is a difference between the experiences of rural blacks and urban whites in regard to their transition to employment. The problem is especially significant among rural blacks that are 45% less likely to transition to employment as compared to urban whites. It is argued that the high levels of joblessness among the blacks is mostly due to difficulty among these youth in finding jobs because of inequalities in human and social capital. Research shows that most young people find work through friends, relatives, and recommendations (Allat & Yeandle, 1992). Considering that a very small percentage of blacks live in rural areas and that they are generally concentrated in poor neighborhoods with a high degree of social isolation, it can be expected that they have weak social ties to their larger communities and therefore low social capital.

Another possible reason could be what Gray and Wang (1989) found out about firm size distribution and youth employment. According to their research, blacks tended to be employed in the largest firms and were underrepresented in the smallest ones. If this situation remains true today, rural blacks have a problem because firms found in rural areas are usually the smallest firms. These researchers did not rule out the possibility that underrepresentation could be a result of race discrimination since smallest firms are exempt from some state and federal equal opportunity regulations and jobs are most often filled through informal networks among families and friends.



Yet another possible explanation could be what McWhorter (2000) referred to as poor social and employability skills. Because of their poverty culture and the almost permanent perception of discrimination most blacks do not develop adequate basic foundation skills required for work. In many rural communities job opportunities are scarce and therefore the unemployment index is much higher than in urban areas. Competition is probably higher and the poor work attitudes with which the blacks are associated probably makes it more difficult for them to get employed in these rural communities where values are highly preserved.

Analysis of the event history data shows that in general at-risk whites were employed slightly more weeks on average than both blacks and Hispanics, however they all experienced periods of unemployment totaling to nearly half of the year. Among those employed, no significant differences emerge in their patterns of employment. They all exhibit a weak attachment to the labor force, moving in and out of the labor market (Tiemeyer, 1991). For example, some of the youth had up to five spells of unemployment over the one-year period of study. These findings are consistent with previous studies that examined employment outcomes among youth (Campbell et al., 1986; Schneider et al., 1987).

Wilson (1996) illustrates the importance of being employed and how this reduces the significance of race in employment issues. In his analysis he concludes that joblessness, which is a signal of poverty, is the cause of bad behavior among youth and this does not vary by race. When black youth are employed, they quickly shed off the

undesirable behavior and acquire the requisite work ethics; and when white youth are jobless, they too are violent, especially the males. Weissbourd (1996) further argues that all forms of destruction found among poor black youth are also found among poor white youth who are encased in extreme poverty. The problem is not race but poverty.

Finally, while it would be expected that at-risk youth whose parents have higher levels of education would possess better social capital and therefore be more likely to find work, contrary to this expectation, mothers' education beyond high school was not significant in helping at-risk youth transition to employment. One may argue that even though they may have better network connections because of their education level, perhaps these parents place a higher value on educational attainment beyond high school as opposed to employment immediately after high school.

Instead, a significant factor in helping at-risk youth gain employment is their program of study. Youth who enroll in vocational programs are more likely to be employed faster or earlier than those in general programs. So important is vocational education to at-risk youth that even when compared to academic programs those who take vocational programs gain employment faster. Obviously for these youth having nothing else to show except their earned skills, vocational education provides them with labor market advantage and is extremely vital for their labor market success.

### **Implications**

The conditions of youth in poor families vary in almost every conceivable respect: in the length of time they are poor, in the circumstances and qualities of their families' lives, in the work patterns of their parents, in the structure of their families, in the circumstances of their communities, in the nature of their problems, and in many other ways (Weissbourd, 1996). However, in general they place youth in the risk status in such homogeneous ways that the variances stated above provide no significant difference in their experiences. This confirms how complex the problems of at-risk youth can be and calls for no simple solutions.

Unpleasant experiences of at-risk youth are cause for worry for parents, teachers, administrators, policy makers, and all who care about the future generation. Regardless of race, the youth and their experiences predict the future of a nation. As the American demographics changes, a more broad approach is needed in dealing with problems of at-risk youth. No longer is race as significant as it probably was years ago (Wilson, 1980). At-risk youth are at risk regardless of race.

While this study has shown that there are no variations in the experiences of at-risk youth, it is important to note that national estimates consistently show higher rates of dropout, and lower rates of high school completion, transition to postsecondary and to employment for blacks and Hispanics in general. This is perfect for providing a general picture but is misleading when considering issues of at-risk youth. Dropping out of high school is a disastrous experience for all youth and is associated with lesser economic

success for all of them regardless of race, compared to those who complete high school. Bearing in mind that even though the poverty rates are lower for whites, behind those rates are huge numbers of youth, it is useful to know that the majority (58%) of youth labeled at-risk are white, and 49% of those who drop out of school are white and they are no more advantaged than their fellow dropouts.

Also important to keep in mind is the fact that economic status is not always a stable variable throughout ones life. Any child may become at-risk at any stage and begin to perform marginally or poorly regardless of race. Several factors lead parents to a poverty situation and yet the importance of parental support and guidance cannot be overemphasized. Research has suggested that poverty erodes the natural tie between children and their parents forcing parents react to them negatively, thus making children withdrawn and insecure very early in life (Weissbourd, 1996). This behavior inhibits the development of their social skills and confidence. Family welfare and parents education, whether formal or informal, are critical ingredients in the life of youth. These are not racial issues but affect all children who become at-risk.

In their circumstances, at-risk youth certainly have a greater need to work but evidently they do not have the social, human and financial capital to support their aspirations. More effective and equitable policies are needed to ensure that these youth have access to employment opportunities, for example, through availing labor market information, in high school work opportunities, affirmative action, and so on. At-risk youth employment-related policies should ensure that non-college bound youth have

access to employment during their high school years through which they can build some social capital. This will also help them make a smooth transition from school to work. According to Chaplin and Hannaway (1996) one clear advantage of high school work is that it helps youth to establish connections with future employers. It is hoped that an employer of a high school student would be willing to employ that youth upon graduation. They note that transition from school to work for non-college bound youth is considered problematic in the United States where formal linkages between schools and employers have traditionally been weak. Therefore, a desirable policy would be one that helps to link at-risk youth with employers during their high school years.

Stoll (1997) suggests a look at the German apprenticeship program frequently cited as a model for increasing the skills and employability of non-college bound youth. Apprenticeships provide high school youth with workplace experience and most of the apprentices maintain employment immediately following high school with the firm where they are trained, and spend a large portion of their careers in the same occupation. Critics contend that these programs discourage youth from going to college, but evidently they benefit at-risk youth whose chances of going on to college are minimal.

At-risk youth often come from dysfunctional families and the changing family structure now dominated by single parent homes largely accounts for this. According to Wilson (1996), changes in family structure in America affect all racial and ethnic groups and the soaring birth rate among unmarried and divorced women is accounted for by all races. This emerging structure of families from which these youth originate is worth an

investigation while dealing with issues of at-risk youth. White women account for the largest portion of the divorced women and black women account for largest portion of the unmarried with children (Rodgers, 2000).

### **Recommendations**

On the basis of the findings of this study and the consequent implications, the following recommendations are offered:

#### *Policy Recommendations*

1. While consideration of proportions in populations is appropriate in research, this study demonstrates that in looking at numbers among the at-risk, there are more at-risk white than the minority groups in the at-risk population. This confirms the concerns of Coeyman (2003) who stated that focusing on the negative experiences of minorities minimizes the on-going problems and difficulties of white at-risk youth. A broader view of the problems of at-risk youth and attention to this reality is called for.
2. Even though some scholars believe that schools can do very little on their own to help at-risk youth (Weissbourd, 1996), others contend that all children can learn and that schools can help overcome the effects of poverty (Barr & Parrett, 2001). Results show that most at-risk youth enroll in general courses, which currently least predicts transition to post-secondary education or even to employment. Guidance counselors, teachers and parents may need to provide more effective guidance to these youth in their course enrollments.

3. Policy makers may want to examine the family structure in the United States more closely. Single parent homes significantly impact especially at-risk youth regardless of race because of economic burdens they shoulder. Children from single parent homes need protection. The advantages of two parent families in the current economy cannot be downplayed.
4. The number of white youth living in poverty is increasing. Evidence of this is shown by studies over time. Weissbourd (1996) found 40% of the poor were white, but this grew to 46.4% in 1997 as reported by Rodgers (2000) and this figure is on the rise. This study has found 58% of the at-risk in the age group are white. Societal bias that considers poverty an issue for the minorities may force poor whites to act as though they are not poor, when actually they are. A policy that addresses the issue of racial bias in considering poverty issues is recommended.
5. The complex problems of at-risk youth need complex solutions. The interacting variables of family, school, and community need to be examined together in addressing issues of at-risk youth. The problems cannot be solved by addressing any one piece of this complex structure individually. A combined vision and efforts of the legislature, media, parents, teachers and communities is called for.

#### *Recommendations for Further Research*

1. A study focussing on non-poor minorities and non-poor whites would provide an interesting comparison to this study.

2. Several factors explain variation in academic and transitional experiences of youth. In this study only economic status was considered the measure of being at-risk and few control variables were included. Another measure of being at-risk could be considered.
3. Inclusion of other variables such as marital status, family structure, type of school, size of school, teachers' attitudes, and community resources may provide more information about the confounding effects of other variables on academic and transitional experiences of at-risk youth.
4. A similar study exploring academic and transitional experiences among at-risk youth using a different data set is recommended. Possible data sources include National Center for Education Statistics (NCES), High school and Beyond (HS&B), and others.
5. Less than half of the data in this data set was used due to missing data, another approach where imputation of data is done may yield more inclusive results, especially if it increases the sample size.
6. Future studies should aim at using transcript data in analyzing programs these youth enroll in so as to minimize potential errors caused by self-report data.



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