

IMMIGRANT STATUS, SUBSTANCE USE AND SEXUAL RISK AMONG  
AFRO-CARIBBEAN ADOLESCENTS LIVING IN SOUTH FLORIDA

by

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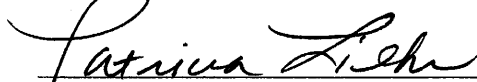
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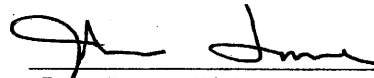
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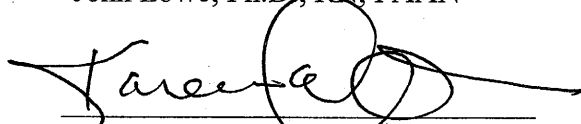
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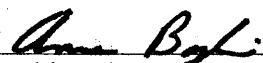
This dissertation was prepared under the direction of the candidate's dissertation advisor, Dr. Patricia Liehr, and has been approved by the members of her supervisory committee. It was submitted to the faculty of the Christine E. Lynn College of Nursing and was accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

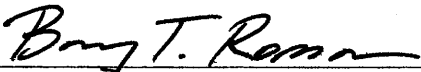
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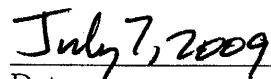
  
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## ABSTRACT

Author: Kim Jolly

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Objectives: To describe the co-occurrence of substance use and sexual activity behaviors among Afro-Caribbean adolescents living in South Florida, with attention to legal status, socio-demographic factors and risk-taking attitudes and behaviors.

Methods: Convenience sampling was used to select 106 Afro-Caribbean adolescents from community centers in South Florida. A descriptive exploratory study was conducted.

Data was analyzed using an independent *t* test, frequencies and crosstabs.

Results: The study consists of 106 adolescents, 75% (*n* = 79) documented and 25% (*n* = 27) undocumented. Forty-one documented and 10 undocumented adolescents were sexually active. Of those, 14.6% of the documented and 40% of the undocumented adolescents had been drinking alcohol while engaging in sexual activity; 7.3% of documented and 30% of undocumented adolescents used drugs while engaging in sexual activity. Undocumented adolescents had less adult presence before and after school;

Creole was spoken at home more than English, and none of the parents had gone to or graduated from college. There was no significant difference in risk-taking and social adaptation scores as measured by the Adolescent Risk-Taking Instrument (ARTI) for the documented and undocumented Afro-Caribbean adolescents. The ARTI had acceptable internal consistency reliability for the risk-taking (.87) and social adaptation (.82) scale in this population. The mean score of risk behavior was 2.04 (SD = .44) for documented Afro-Caribbean adolescents and 1.89 (SD = .47) for undocumented adolescents. For social adaptation, mean scores were 3.23 (SD = .45) for documented and 3.20 (SD = .35) for undocumented adolescents. The co-occurrence of substance use and sexual activity is nearly triple for alcohol use and more than triple for drug use when comparing undocumented to documented adolescents. However, scores on the ARTI did not differ. Socio-demographic factors related to risky behaviors suggest that the undocumented adolescents were more at risk. Health risk of undocumented adolescents demands more research attention if nurses wish to address the unique needs of this population.

## DEDICATION

To my husband Ernest Nolan, daughter, Kimberly and sons, Willie, Stephon, and Justin. Without their love, support, patience and understanding, the completion of this project would not have been possible.

IMMIGRANT STATUS, SUBSTANCE USE AND SEXUAL RISK AMONG  
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LIST OF TABLES ..... ix

CHAPTER

1	INTRODUCTION .....	1
	Specific Aims.....	4
2	REVIEW OF RELATED LITERATURE .....	6
	Background and Significance .....	6
	Afro-Caribbean Families .....	6
	Afro-Caribbean Adolescents.....	7
	Afro-Caribbean Parent-Adolescent Relationship .....	8
	Religious Beliefs Affecting Relationships.....	9
	Child-rearing Practices.....	10
	Adolescent Risk Behavior.....	12
	Substance Use .....	13
	Sexual Risk Behaviors .....	14
	Risk Behaviors in Afro-Caribbean Adolescents Living in the U.S. ....	15
	Cultural Competence .....	23
	Cultural Competence and Adolescent Risk Behaviors .....	24
	Cultural Awareness and Sensitivity .....	25
	Cultural Sensitivity and Adolescent Risk Behaviors .....	26
	Nursing as Caring Theory .....	27
	Research Questions.....	28
3	METHODOLOGY .....	30
	Research Design.....	30
	Instrument and Data Collection .....	31
	Modification of the Adolescent Risk-Taking Instrument .....	32
	Sample and Research Setting.....	32
	Ethical Consideration.....	33
	Data Analysis .....	35
4	FINDINGS .....	37
	Literature Review.....	38



Background.....	41
Theoretical Guidance Supporting the Research Questions.....	43
Method.....	44
Modification of the Adolescent Risk-Taking Instrument.....	46
Results.....	47
5 DISCUSSION.....	64
Recommendations for Future Research.....	69
Implications for Nursing Practice.....	70
Implications for Nursing Education.....	71
Implications for Nursing Involvement in Policy Development.....	71
Limitations and conclusion.....	72
APPENDIX	
A Adolescent Risk-Taking Instrument (Part 1).....	73
B Adolescent Risk-Taking Instrument (Part 2).....	77
C Parental Consent Form (English).....	84
D Parental Consent Form (Creole).....	86
E Teen Assent.....	88
REFERENCES.....	90

## LIST OF TABLES

Table 1.	Demographic and Personal Characteristics of the Sample .....	52
Table 2.	Having Sex and Drinking Alcohol.....	53
Table 3.	Having Sex and Using Drugs.....	53
Table 4.	Age: Having Sex and Drinking Alcohol.....	53
Table 5.	Age: Having Sex and Using drugs.....	54
Table 6.	Genders: Having Sex and Drinking Alcohol .....	54
Table 7.	Genders: Having Sex and Using Drugs .....	55
Table 8.	Parental Presences Before School: Having Sex and Drinking Alcohol.....	55
Table 9.	Parental Presences Before School: Having Sex and Using Drugs.....	56
Table 10.	Parental Presences After School: Having Sex and Drinking Alcohol .....	57
Table 11.	Parental Presence After School: Having Sex and Using Drugs.....	58
Table 12.	Language: Having Sex and Drinking Alcohol.....	58
Table 13.	Language: Having Sex and Using Drugs.....	59
Table 14.	Mother’s Level of Education: Having Sex and Drinking Alcohol .....	59
Table 15.	Mother’s Level of Education: Having Sex and Using Drugs .....	60
Table 16.	Father’s Level of Education: Having Sex and Drinking Alcohol.....	61
Table 17.	Father’s Level of Education: Having Sex and Using Drugs.....	62
Table 18.	Risk-Taking Behaviors of Afro-Caribbean Adolescents .....	63
Table 19.	Social Adaptation (propensity for risk) of Afro-Caribbean Adolescents .....	63

## CHAPTER 1

### INTRODUCTION

Afro-Caribbean people, along with Hispanics and Asians are becoming the fastest growing ethnic group in the United States with one in five being either an immigrant or the child of an immigrant (Hoefler, Rytina & Campbell, 2006; Logan & Deanne, 2003). Logan and Deane noted a 40% increase in the Afro-Caribbean population since 1990 indicating that this group is larger than some more visible national-origin groups, such as Cubans or Koreans. This increase is occurring largely on the East coast, where Afro-Caribbean people, many of whom are undocumented, represent nearly 25% of the Black population in some metropolitan areas (Logan & Deane).

An estimated 7.6 million of the total 10.5 million undocumented immigrants living in the U.S. in 2005 were from Canada, Mexico, the Caribbean and Central America, with Florida being the third largest state for undocumented residents following California and Texas (Hoefler et al., 2006). During 2000-2004, the undocumented resident population in the U.S. grew at an annual average of 408,000 (Hoefler et al.). Assuming this same rate of growth, the undocumented population could reach nearly 13 million within the next several years. Hoefler et al. define undocumented immigrants as foreign-born persons who entered the U.S. without inspection or who were admitted temporarily and stayed past the date when they were required to leave.

There are no national surveys or administrative data for undocumented immigrants to give an accurate count, therefore assumptions must be made. The Department of Homeland Security, estimates the number of undocumented immigrants by using a “reductionist method.” For instance, the legal resident foreign-born population living in the U.S. as of January 1, 2005, was subtracted from the total foreign born population at the same point in time (Hoefler et al., 2006). Hoefler et al. explained that the estimates were generated by country of birth and state of residence for the undocumented population living in the 50 states.

South Florida is known as the “gateway to the Americas” for Caribbean migration (Patsdaughter, Dyer, & Riley-Eddins, 2004). There are 3,355,737 documented persons from the Caribbean living in the U.S. of which 1,289,951 reside in Florida, 688,118 are U.S. citizens and 601,841 legal residents (U.S. Census, 2007). Using the “reductionist method” developed by the Department of Homeland Security to estimate the number of undocumented residents in U.S., it is estimated that there are 1,050,000 undocumented people currently living in Florida (Camarota, 2007; Hoefler, Rytina & Campbell, 2006; Passel & Cohn, 2009).

As the number of Afro-Caribbean families increases, health care providers are challenged with identifying the potential impact of the influx on risk behaviors, and the impact of risk behaviors on health. Adolescent sexual activity and drug use are some of the risk behaviors that demand attention. In addition to the physical, emotional, and social issues associated with adolescence, many Afro-Caribbean adolescents may be undocumented or live in households where at least one family member is without legal

residency status (Barrow, 2001; Carten & Goodman, 2005; Zhou, 1997), contributing to the adolescents potential for engaging in risk behaviors..

Historically, the vast majority of research on risk behaviors of the adolescent population has focused on Whites and African Americans (Elliot & Larson, 2004). Thus far, there has been very little research that includes or identifies youth by country of origin or immigrant or refugee status (Hunt, Morland, Barocas, Huckans & Caal, 2002). Hunt et al. noted that risk behaviors may manifest differently among immigrant adolescents because of their unique experiences of migration.

A factor that further complicates understanding of immigrant adolescents' health risk behaviors is the use of instruments that disregard the complexities related to culture and ethnicity within groups. For instance, Eaton et al. 2005 National Youth Risk Behavior Survey (NYRBS) did not include sub-groups within the Black or African American adolescent community (2006). However, general findings for adolescents, regardless of race or immigrant status were sobering, indicating that during the 30 days immediately preceding the survey, 28.5% of adolescents had ridden with a driver who had been drinking alcohol, 25.5% had episodes of heavy drinking, 23.0% currently used cigarettes and 20.2% currently used marijuana. The survey found that 33.9% of adolescents were currently sexually active; 62.8% did not use condoms when engaging in sexual activity, and 23.3% of those who were sexually active had drunk alcohol or used drugs before their sexual encounter. These findings demonstrate clustering of risk behaviors that may have exaggerated health compromising effects for adolescents.

The clustering of risk behaviors is not an isolated finding of the NYRBS. Other researchers have also found that risk behaviors in adolescents do not occur in isolation,

but they are co-occurring and somewhat predictable (Hussey et al., 2007; Weden & Zabin, 2005; Zweigh, Lindberg & McGinley, 2001). The consequences of drug use and risky sexual behavior are substantial. Each year alcohol and illicit drug use contributes to over 500,000 deaths in the U.S. (Mokdad, Marks, Stroup & Gerberding, 2004) and substance use is implicated in a wide range of social problems, with an estimated cost to the U.S. economy of over \$414 billion. Disease linked to risky sexual behaviors account for approximately 20,000 U.S. deaths each year, primarily from HIV (Mokdad et al. 2004) and are tied to a number of adverse reproductive outcomes (Sulak, 2003). The projected lifetime medical cost of new sexually transmitted infections acquired by U.S. adolescents and young adults ages 15-24 years was \$6.5 billion in 2000 (Chesson, Blandford, Gift, Tao & Irwin, 2004). Although most adverse consequences of drug use and sexual risk-taking do not appear until adulthood, the behaviors are usually initiated in adolescence (Johnston, Malley, Bachman & Schulenberg, 2003). Consequently, understanding sexual risk and substance use risk behaviors for Afro-Caribbean adolescents offers the possibility for improved health into adulthood and substantial savings in health care cost. Further, the consideration of immigrant status will enable new insight about an unexplored dimension of the Afro-Caribbean adolescent health population.

### Specific Aims

The specific aims of the proposed study are to describe by immigrant status (documented: undocumented) for Afro-Caribbean adolescents living in the United States:

1. Coexistence of substance use and sexual activity behaviors.

2. Socio-demographic factors associated with substance use and sexual activity behaviors.

3. Risk-taking attitudes and propensity for taking risks.

The findings from this research promise several contributions such as: information about the health risk behaviors of Afro-Caribbean adolescents living in the U.S; and evidence on the association between immigrant status and patterns of substance use and sexual risk behavior. The study will also examine socio-demographic factors that could help to explain an association between immigrant status and risk behavior patterns. Three social factors that are repeatedly reported to protect against adolescent risk behaviors are: living with married parents (Blum et al., 2000), parental presence in the home during key periods of the day and high parental education (Hussey et al., 2007; Hutchinson, 2007). These social factors and selected demographic factors will be incorporated into analyses to address the second specific aim. Because the findings from this research will provide information about the health risk behavior of Afro-Caribbean adolescents living in the U.S., it will extend research that until this time has assessed the Black population as a group.

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

#### Background and Significance

##### *Afro-Caribbean Families*

##### *Afro-Caribbean people*

Afro-Caribbean people are defined by their ancestry within the predominantly Black Islands of the Caribbean (Logan & Deane, 2003). They represent many ethnic groups with different languages, such as English, French, Spanish, and a host of different dialects (Roopnarine, Singh, Bynoe & Simon, 2005). Immigrant status in the U.S. is distinguished between first and second generation and is based on the birthplace of the children and their parents (Hussey et al., 2007). Zhou (1997) defines “first generation” as foreign born to at least one foreign born parent and second generation as U.S. born to at least one foreign born parent.

Many Afro-Caribbean families entering the U.S. speak English with some type of accent; however, there are people from Haiti who speak Creole and Afro-Cubans who speak Spanish (James, 2002; Zhou, 1997). Zhou pointed out that dark skinned immigrants, specifically those from the Caribbean, often reside in impoverished inner-city ghettos, which can stagnate social mobility and propel the immigrants on a downward path characterized by poverty. The challenges for this group of immigrants escalates because they have settled in a country that disregards the heterogeneous nature



of the Black community and historically discriminates and excludes people based on skin color (Carten & Goodman, 2005).

*Afro-Caribbean adolescents*

Afro-Caribbean adolescents are faced with many of the same physical, emotional and social issues that most other adolescents experience, and risk behaviors are documented at early ages. For instance, researchers have found that Afro-Caribbean adolescents living in the Caribbean who are sexually active reported sexual debut as early as 10 years old; that less than 3 out of 10 used birth control; and that very few used condoms (Blum et al., 2003; Correia & Cunningham, 2003; Halcon et al., 2003). Obene, Ireland and Blum (2005) found that adolescents living in the Caribbean who engaged in sexual risk behaviors were significantly more likely to be simultaneously involved in other multiple risk behaviors such as substance abuse and violence. The challenges experienced by adolescents living in the Caribbean are multiplied when these adolescents migrate to the U.S.

Many Afro-Caribbean adolescents in the U.S. live in households with family members who are neither legal residents nor U.S. citizens, and as a result, both parents and adolescents may be reluctant to seek outside assistance (Hernandez, 2004). Some families fear repercussions associated with traditional discipline approaches which according to Barrow (2001), rely heavily on physical punishment such as beatings, belittling slurs and angry cursing. These traditional child-rearing techniques may be perceived as physical abuse within the litigious climate of the U.S. social system (Carten & Goodman, 2005).

Migrating Afro-Caribbean adolescents, who have settled into poor urban areas routinely experience economic stress which engenders or exacerbates feelings of isolation and helplessness (Pantin, Schwartz, Sullivan, Coatsworth, & Szapocznik, 2003). In addition, these adolescents are almost always faced with challenges such as racial barriers, which may affect assimilation and block a normal path for integration. Family separations, lack of legal status in the U.S., and exposure to the American lifestyle without adequate means of access to that lifestyle (Barrow, 2001; Gopaul-McNicol, 1998; Zhou, 1997) are everyday challenges. Many immigrant adolescent girls are targeted by perpetrators based on the assumptions of social and legal vulnerability such as fear of deportation and disclosure of sexual activity to their parents or the community (Silverman, Decker & Raj, 2007).

*Afro-Caribbean parent-adolescent relationship*

Most Afro-Caribbean children reunite with their families several years after having settled in the U.S. during their early or mid-adolescence (Gopaul-McNicol, 1998). Carten and Goodman (2005) reported that extensive periods of separation and reunification of children in Afro-Caribbean families caused added stress within the family unit. These children may be in a different adaptation phase than their parents, often contributing to conflicts related to family interrelationships, culture, and discipline. This migration-associated alteration in the family structure usually includes increased financial responsibility to the extended family in the Caribbean and the necessity of holding multiple jobs to provide adequate income (Millette, 1998). An important consequence of this “financial responsibility” is less time available for communication and presence with the adolescents in the family. For this reason, the potential for adolescents to engage in

risk behaviors are increased. Researchers have found that parental monitoring and connectedness to adolescents facilitates a reduction in risk behaviors (Huebner & Howell, 2003; Reininger et al., 2005), but often immigrant parents who are struggling to meet financial obligations have neither the time nor energy to cultivate an everyday close connection with their adolescents and they fail to monitor their activities.

*Religious beliefs affecting relationships*

Afro-Caribbean families' religious practices center primarily in the Church of God and the Pentecostal Christian churches, both of which espouse the strong influence of church doctrine in the parent-child relationship (Barrow, 2001; Broos, 1998). The Afro-Caribbean parents and children who are practicing Christians consider themselves saved and their bodies vessels of the Holy Ghost (Broos). Such beliefs prohibit sexual activity before marriage or engaging in other risk behaviors, such as substance use. These beliefs, including the clear prohibition of premarital sexual activity, result in Afro-Caribbean parents failing to provide their adolescents with information on substance use and responsible sexual activity (Barrow).

Another form of religious practice that is common in Afro-Caribbean families is 'Obeah'. Obeah is a folk religion which puts faith in ancient African occult powers and is practiced in secrecy. Very little is written about this form of religion; it is handed down over centuries by word of mouth and its practice is expected to bring immediate results (Broos, 1998). Obeah practice is commonly used to win over lovers, solve problems associated with work, domestic life and health, or place evil on someone to avenge wrong done to the family or because of jealousy (Barrow, 2001; Roopnarine et al., 2005).

Broos (1998) noted that in the Obeah religion the spiritual leader is called an Obeah man. He or she is the one that helps those who are said to be possessed by evil or cannot find a medical excuse for their illness. The Obeah man can talk with the spirits that possess the human being and try to perform an exorsium to remove the evil from the person (Broos). Many Afro-Caribbean people admit to knowing someone who practices obeah or has been affected by obeah, or they admit that they themselves have had to seek the assistance of an obeah man. However, very few will admit to practicing obeah themselves (Broos). Afro-Caribbean people often wear charms or use other folk practices to protect themselves from harm (Broos). Obeah influences Caribbean people's view of risky behaviors and usual rational approaches to preventing risky behaviors become distorted. From the perspective of Obeah, pregnant or substance abusing adolescents may be labeled "possessed by evil" and in need of exorcism. In contrast, the Pentecostal religion forbids the risky behavior, prohibiting both sexual activity and substance using behavior. These cultural beliefs have allowed little space for a healthy approach to risk reduction.

#### *Child-rearing practices*

Many Afro-Caribbean children grow up in homes where child rearing practices are strongly influenced by environmental circumstances. Afro-Caribbean parents believe in the biblical admonition "spare the rod, spoil the child," and they favor harsher and stricter forms of discipline for disobedient children (Barrow, 2001). Extended kinship plays an important role in rearing Afro-Caribbean children (Barrow; Smith & Mosby, 2003). Migration to the U.S. for Afro-Caribbean families, however, may leave a gap in

assistance from kin, necessitating that families depend more on churches, schools and their communities in their new country.

Moore (2005) identified three styles that are associated with general parenting behaviors: authoritative, authoritarian and permissive. The authoritative parents are warm and responsive; they set clear rules and boundaries for their children. For instance, if an adolescent goes out with friends and is supposed to be home by 9 p.m., and he or she returns at 10 p.m., the privilege of going out with friends will be taken away until the adolescent can demonstrate that they understand the importance of following instructions. The authoritative parent will explain why limits are set and will give the adolescent an opportunity to redeem him or herself. In contrast, authoritarian parents expect obedience and have strong control over their children; for instance, in the same scenario, the adolescent's privilege of going out with friends will be taken away with no explanation or any chance of earning the parent's trust. In the third style, permissive parents do not supervise or set rules; they are generally disinterested in their children. For instance; an adolescent can go out with friends and return home any hour of the night without having to explain anything to their parents. This style of parenting is less prevalent in ethnic childrearing (Millette, 1998; Moore; Smith & Mosby, 2003).

The authoritative and authoritarian styles are those most often used by minority group parents. Many researchers view the Afro-Caribbean parenting style as authoritarian, where obedience is expected, physical punishment is common, public display of affection is rare and praises and rewards are infrequent (Barrow, 2001; Millette, 1998; Smith & Mosby, 2003). The origin of physical punishment of children in the Caribbean is not clear, however, researchers have examined the practice through the

lens of history and tradition. Several authors have expressed the view that the extreme authoritarian style, along with excessive discipline, stems from the regions of West Africa combined with learned behavior, specifically from the brutality of slavery (Smith & Mosby). Barrow defines physical punishment as beatings, flogging and cuffing. This style of parenting leads to increased risk behaviors, delinquency and antisocial behaviors in adolescents (Kamsner & McCabe, 2000; Swinford, Demaris, Cernkovich & Giordano; 2000). Smith and Mosby's research examined child-rearing techniques of Jamaican adults and found reliance on physical force as a means to discipline and punish, led to child maladjustment and deviancy in adolescence, with increase risk of drug and alcohol abuse, violence and risky sexual behavior.

#### Adolescent Risk Behavior

The turmoil of adolescence, associated with normal physical, social and mental development, results in adolescents becoming a vulnerable group in today's society. Adolescents risk a 200% increase in death, disease or injury in large part because of risky behaviors such as unprotected sexual activity, drug and alcohol abuse (Busen & Kouzekanani, 2000; Monastersky, 2007). Adolescents sometimes express themselves by engaging in risky behaviors. Spear and Kulbok (2004) noted that during the developmental stage of adolescence young people strive for independence as they begin to make decisions that will impact them for the rest of their lives. This striving can be expressed as risk-taking behavior.

Risk-taking behaviors in adolescence are often linked with psychological and social factors and there is substantial data documenting the co-occurrence of substance use and sexual activity. Several studies have shown that substance use and risky sexual

behaviors, such as drinking and drug use in conjunction with sex, and unprotected sex with risky partners, are associated with each other (Halpern, Kaestle & Hallfors, 2007; Tamsen-VanZile, Testa, Harlow, Livingston, 2006). In addition, Weden and Zabin (2005) suggested that sexual behavior may have a distinct relationship with substance use and aggression in more ethnically diverse populations, with life-compromising implications. Although these relationships are documented in the literature, there is little literature on the growing Afro-Caribbean population and none considering adolescent risk behavior in this population relative to immigrant status. Relevant risk behavior research will be reviewed.

### *Substance Use*

#### *Alcohol*

Alcohol use among adolescents represents a significant public health problem and remains the most widely used and abused drug (Bloomfield, Gmel, & Wilsnack, 2006). Alcohol is associated with early initiation of sexual intercourse and increased risk of Sexually Transmitted Infections (STIs) and pregnancy (Bloomfield, et al.). The 2005 National Youth Risk Behavior Survey (NYRBS) found that nationwide, 25.5% of high school students had equal to or greater than five drinks of alcohol in a row 30 days preceding the survey. A study by Epstein, Botvin, Baker and Diaz (1998) concluded that Afro-Caribbean adolescents report consuming more alcohol and getting drunk more frequently than other adolescent groups. Despite failure to identify specific cultural sub-groups within the Black population, Joseph and Tan (2003) found that Black immigrant adolescents had higher alcohol consumption and binge drinking than any other immigrant group.

### *Marijuana and cigarette use*

According to Eaton, et al. (2006) 2005 NYRBS, 38.4% of students had used marijuana one or more times during their life. Overall, in the population of children younger than 13 years old, marijuana was used most by Hispanics followed by Black/African American adolescents. The report also found that more than 50% (54.3%) of high school student have tried cigarettes. Parker, Sussman, Crippens, Elder and Scholl's (1998) study concluded that African American/Afro-Caribbean adolescents, who perceived themselves as being liked by other ethnic groups, were more likely to smoke.

### *Other illicit drug use (cocaine, crack, heroin, hallucinogens, etc.).*

The illicit drug problem, including the use and selling of narcotics among Afro-Caribbean adolescents may be exacerbated due to the stressors of migration, immigrant status and likelihood of living in poverty (Hunt et al., 2002; Zhou, 1997). The challenges faced by these adolescents may create an environment where risky behaviors like substance use may be seen as an alternative survival strategy and a reasonable approach for getting by. For example, Afro-Caribbean adolescents may engage in unsafe acts such as gang violence, and drug dealing for the purpose of monetary gain. Hunt et al. noted that a large portion of all gang members are ethnic minorities, including many who are undocumented.

### *Sexual Risk Behaviors*

Sexual risk behavior is a primary determinant in the spread of sexually transmitted infections (STIs), especially HIV. The Centers for Disease Control and Prevention (CDC) (2004) reported that 4,883 young people were diagnosed with HIV in 2004 with African Americans being disproportionately affected, accounting for 55% of



all cases among persons between ages 13-24 years of age. The CDC also reported that adolescents from 10 to 19 years old are at the highest risk for acquiring STIs, and females 15 to 19 years old have the highest rate of gonorrhea as compared to women in all other age groups.

The 2005 NYRBS also reported that almost half (46.8%) of the students they surveyed had sexual intercourse during their lifetime; 6.2% before age 13 and 33.9% with more than one partner during the 3 months immediately preceding the survey. Over 14% (14.3%) of the students had sexual intercourse with four or more persons during their life. Among the 33.9% currently sexually active students, 62.8 % reported that neither they nor their partner had used protection during their last sexual intercourse. Overall prevalence of sexual risk behavior was highest among Black/African American adolescents.

#### *Risk Behaviors in Afro-Caribbean Adolescents Living in the U.S.*

##### *Assessment of cultural sensitivity*

Risk behaviors such as using illicit drugs or alcohol, engaging in violence and unsafe sexual practices, are not tolerated in the culture of Afro-Caribbean families. Traditionally, adolescents engaging in these behaviors may be punished by physical beatings with objects or fists or are even put out of their homes (Barrow 2001; Smith & Mosby, 2003). Despite recent efforts to attend to health disparities and to expand research in ethnic minority population, little is known about the risk behaviors of Afro-Caribbean adolescents. Data describing Afro-Caribbean adolescents are often reported within the African American designation disregarding the fact that the culture has significant differences.

To evaluate the state of the science regarding risk behaviors in Afro-Caribbean adolescents, a literature review was undertaken. Articles published in English between 1995 and 2007 comprised the data base. Appropriate studies for inclusion were identified through an extensive computerized database literature search. The databases included EBSCO online, CINAHL, and Social Science Wilson Web. Key terms used in the searches included ‘adolescent risky behavior,’ ‘Afro-Caribbean adolescent risky behavior,’ ‘behavioral problems,’ ‘maladjustment,’ ‘West Indian adolescent risky behavior,’ ‘immigrant adolescent behavioral problems,’ ‘risky behaviors,’ and ‘ethnic immigrant adolescent risky behaviors.’ Studies utilizing quantitative and/or qualitative research designs were considered; the articles focused on adolescents living in the United States. Three manuscripts were found. These three studies will be summarized and evaluated in relation to approaches for measuring risky behaviors particularly substance use and sexual activity and factors indicative of cultural sensitivity. Cultural sensitivity is being considered to formulate a basic list of indicators associated with cultural uniqueness and immigrant status. Each of the three studies identified in the literature review will be described in detail.

#### *Study # 1*

Silverman et al. (2007) conducted a quantitative study with female immigrant adolescents 14-16-years-old, using data from the Massachusetts Youth Risk Behavior Survey (YRBS) for the years 1997, 1999, 2001 and 2003. The YRBS is conducted in most states every two years among U.S. high school students and the states have the option of including additional questions to assess other state-specific adolescents health concerns; in Massachusetts, a Spanish version is available (Silverman et al.). Analyses

were conducted on the total sample (N = 7,970) from the Massachusetts YRBS for the previously noted years. A sub-sample of 3,475 participants (44%) reported that they had engaged in sexual intercourse, and this “risky sexual behavior” sub-sample was the focus for the study reported by Silverman and colleagues. Seventy-four percent of the sub-sample were White (2,571); 10% were Hispanic (347); 8% were Black (278), 4% were Asian (139), and 3% were “Other” mixed ethnicity adolescents (104). Thirteen percent (486) of the sub-sample population were immigrants and 18% (87) of the immigrant population reported a dominant language other than English. Immigrant status was determined by a single question; “How long have you lived in the U.S.?” Cultural uniqueness was assessed with one question, “How often do the people in your home speak a language other than English?”

The purpose of the study by Silverman and colleagues (2007) was to assess disparities in experiences of physical and sexual dating violence based on immigrant status and language spoken at home among adolescent girls. The findings indicated that Black immigrant female adolescents (12.02%) had higher risk for life-time experience of dating violence as compared to Hispanic (9.97%) and White (11.77%) female adolescents. Although it can be assumed that the Black immigrants included Afro-Caribbean adolescents, the researchers did not distinguish this cultural group from other participants. Immigrant status was found to be a protective factor against dating violence among Hispanics only. The reliability of the Massachusetts YRBS was not reported in the study. However, the YRBS is a recognized reliable and valid evaluation of adolescent risk behaviors. It addresses a broad range of risk behaviors including substance use and sexual activity behaviors.

## *Study # 2*

Parker et al. (1998) conducted a quantitative study on ethnic identification, and cigarette smoking among urban African American/Afro-Caribbean and Latino youth. The authors noted that Afro-Caribbean adolescents were included in the African American population they studied. Seventh graders numbering 545, with a mean age of 12.6 years were studied (Parker et al.); 31% were African American/Afro-Caribbean; 56% were Hispanic and 13% were designated “Other.” The sample was obtained from seventh graders attending health and science classes at three urban Southern California junior high schools. The health and science teachers were provided personalized verbal and written invitations and all the teachers agreed resulting in 20 classes of adolescents for inclusion in the study.

The researchers used a pretest demographic questionnaire and a 4-item smoking measure. The pretest demographic questionnaire included gender, age, city of residence and ethnic group name. Lifetime use of cigarettes was also collected as part of descriptive data. The first item of the 4-item smoking measure asked about the number of friends who smoked using a 5-point rating scale, ranging from (1) none to (5) all. The scale was recoded using a yes/no response to indicate whether or not any of their friends smoked. The second item asked whether the adolescent had ever smoked even a puff of a cigarette. The second item originally used a 3-point rating scale ranging from (1) no to (3) yes. The scale for this question was also recoded using a yes/no response to indicate whether or not the student had every smoked. The third and fourth questions were intended to determine self-efficacy related to stopping tobacco use. Students indicated on a yes/no scale whether they could make new friends with other students their age without

using tobacco, and whether they were able to avoid students their age when their peers used tobacco. The smoking measure had a Cronbach alpha of 0.66, raising questions about reliability of this 4-item, dichotomous-response instrument.

Regardless of ethnicity, 34% of the adolescents had tried smoking and 4% were current smokers. In addition, African American/Afro-Caribbean adolescents, who perceived themselves as being liked by other ethnic groups, were more likely themselves to smoke. Although the researchers did include Afro-Caribbean participants they were incorporated within the African American category when data were reported, once again blurring ethnic/racial distinctions.

### *Study # 3*

Epstein et al. (1998) conducted a quantitative study using a questionnaire to determine patterns of alcohol use among ethnically diverse Black and Hispanic urban boys and girls. Students completed the questionnaire that included items regarding gender, age, ethnicity, family structure, and current and future patterns of alcohol use. Three items assessed current patterns and one item assessed future patterns of alcohol use. To determine current frequency of drinking and frequency of drunkenness, students indicated; 1) how often (if ever) they drank alcohol and 2) how often (if ever) they drink until they get drunk. The questionnaire used a 9-point scale ranging from (1) never, to (9) more than once a day. The third item measured current alcohol consumption by asking, “if you drink alcohol, how much do you usually drink each time you drink?”, using a 6-point scale ranging from (1) never, to (6) more than six drinks. The final item measured future drinking behavior of beer, wine, wine coolers, or hard liquor within the next year.

Responses were recorded by a 5-point scale that included: (1) definitely not, (2) probably not, (3) maybe, (4) probably will, and (5) definitely will.

Participants numbered 4,847, with a mean age of 12.9 (Epstein et al., 1998); 71% Black (N = 3441) and 29% Hispanic (N = 1406). Within the Black population, 68% were African American (N = 2339) and 27% were Afro-Caribbean (N = 929). The researchers found that Hispanic youth reported more alcohol use than Black youth. However, within the Black subgroups, Afro-Caribbean adolescents reported drinking more frequently, getting drunk more often and consuming more alcohol than the other adolescents in the Black sub-group. As for drinking prevalence rates; Afro-Caribbean adolescents had significantly greater rates of ever drinking (36.3%) than African American adolescents (27.5%). Current drinking was also significantly higher for Afro-Caribbean adolescents (6.4%) relative to African American adolescents (4.6%). In addition, the study indicated that Afro-Caribbean adolescents appear to be at greater risk for alcohol use than African American adolescents. In this study, cultural uniqueness was assessed by designating sub-groups within the Black population. Distinct cultural status was self-reported by selecting “Caribbean/West Indian” from the list of possible responses to the question “What is your race?”

The identification of specific subgroups within the broader ethnic group of African American varied in the three selected studies. Epstein et al. (1998) were most specific when they identified the percentage of Afro-Caribbean adolescents who participated in their study. Silverman et al. (2007) noted the inclusion of Black immigrant adolescents in their study, but did not distinguish Caribbean adolescents. Parker et al. (1998) included the Afro-Caribbean population within the African American population.

Overall, this set of studies represents varying approaches highlighting how designation of ethnic categories can silence the voice of distinct cultural groups such as Afro-Caribbean people.

All three researcher teams studied different risk behaviors, and used different measurement instruments. Parker et al. (1998) and Epstein et al. (1998) used measurement instruments specific to the risk factor being studied. Silverman et al. (2007) used the Massachusetts YRBS that measured multiple risk behaviors and focused on one component of the instrument to assess sexual violence. This narrow focus eliminates possibilities for understanding how risk behaviors cluster and therefore, limits the potential for health promotion guidance emerging from these data.

Instrument reliability was noted by Parker et al. (1998); and Epstein et al. (1998) reported that they informed students about the confidential nature of their responses to help ensure validity and a higher response rate. Fain (2004) advised that the criterion level for coefficient alpha with a new scale be at least .70. Parker et al. reported an overall Cronbach alpha of .66 which leads to questions about reliability. It is likely that alpha reliability was limited by the small number of questions in this measure (four items) and the decision to make the response format a dichotomous choice. The Massachusetts YRBS used by Silverman et al. is a commonly used risk behavior measure. Although validity and reliability was not reported in this manuscript, the instrument has been tested and used in many studies to assess risk behaviors, and psychometric properties have been reported elsewhere (Brener, Kann, McManus, Kinchen, Sunbreg & Ross, 2002).

The number of Afro-Caribbean adolescents in the Epstein et al. (1998) study, and the immigrant Blacks in the Silverman et al. (1998) study, was relatively small when compared with the other ethnic groups, but the Epstein study included nearly 1,000 Afro-Caribbean adolescents making it the largest report of risky behavior in Afro-Caribbean adolescents living in the U.S. The narrow focus on alcohol is a weakness of the work, given what is known about risk behavior clustering.

The evidence emerging from this literature review demonstrates the limited information available regarding risk behavior for Afro-Caribbean adolescents, and the need for more studies that include and distinguish the Afro-Caribbean population and capture information to enhance cultural uniqueness. There is also a need for instruments which address more than one risk behavior and for psychometric testing of existing instruments to assure that they are culturally appropriate and psychometrically sound.

A review of the measurement instruments in Studies 1, 2 and 3 in addition to other studies conducting research on minority and immigrant adolescents was undertaken to identify basic factors that address cultural uniqueness for Afro-Caribbean adolescents. Many researchers studying this population identified factors that could increase understanding of risk behaviors such as family structure, parental presence and language spoken in the home (Blum et al.; 2000; Hussey et al., 2007; Hutchinson, 2007). Although most studies which included these factors were not done with Afro-Caribbean adolescents, the factors have proven to be meaningful indicators when they have been used with the African American and Hispanic adolescents. A better understanding of cultural uniqueness is essential to conducting culturally competent research with minority populations.



## Cultural Competence

Leininger has taken credit for coining the term “cultural competence.” She defined cultural competence as

The use of culturally based care and health knowledge in sensitive, creative, and meaningful ways to fit the general lifeways and needs of individuals or groups for beneficial and meaningful health and well-being, or to face illness, disabilities or death. (Leininger & McFarland, 2002, p. 84)

There are different views of cultural competence given by other experts. A more conceptual view is taken by Chiu and Hong (2005) where cultural competence is described as a network of knowledge and practice that is produced, distributed, and reproduced among a collection of interconnected people. Springer et al. (2004) defined cultural competence as a set of academic and interpersonal skills that allow individuals to increase their understanding and appreciation of cultural differences and similarities within, among, and between groups. The Expert Panel on Cultural Competence for the American Academy of Nursing added that cultural competence includes having general cultural, as well as cultural specific information, so that health care providers/researchers know what questions to ask (Giger et al., 2007).

Cultural competence is a process contributing to effective work with individuals from different cultural and ethnic backgrounds (Carpenter-Song, Schwallie & Longhofer, 2007). This process demands commitment and usually includes the ability to understand or learn the language, culture, and behaviors of individuals and the group one wishes to engage. Becoming culturally competent is easy to talk about, however it is much more difficult to accomplish. In a study by Cassata and Dallas (2005), nurses acknowledged

that part of their difficulty in dealing with patients from another culture could be accounted for by deficits in their education. The participants noted that their nursing education had not prepared them to provide care to ethnically or racially diverse people.

### *Cultural Competence and Adolescent Risk Behaviors*

There are many instruments used to evaluate adolescent risk behaviors; however they often disregard cultural uniqueness between and within ethnic groups. For instance, Afro-Caribbean adolescents are a sub-group often hidden within African American demographics (Hall & Carter, 2006). When a sub-group is hidden, health care providers including nurses, often fail to accurately identify health needs, and culturally distinct voices are silenced. Jolly, Wiess and Liehr (2007) suggest that giving attention to adolescent voice is critical for nurses wishing to provide optimal health care to all adolescents, but particularly those from ethnic minority groups.

In order to study Afro-Caribbean adolescents regarding their risk behaviors, research methods need to reflect on appreciation for the cultural uniqueness of research participants. Information that contributes to culturally competent instruments include demographic and socio-cultural factors. Hunt et al. (2002) noting a significant increase in the ethnic diversity of the U.S. population, emphasized the importance of research studies that specifically identify youth, and youth trends by country of origin, immigrant, and refugee status. Valid and useful research on health and risk factors among Afro-Caribbean adolescents, for example, depends on the quality and appropriateness of instruments used to evaluate risk behaviors in that population. Without the use of instruments which incorporate relevant demographics and socio-cultural factors, the gap in knowledge about Afro-Caribbean adolescents' risk behaviors will persist, and at the

very least, inaccurate research information and conclusions would be the norm. Although cultural competence is the desirable standard when planning and implementing research, cultural competence is built on a foundation of awareness and sensitivity.

### *Cultural Awareness and Sensitivity*

As our communities become more globally diverse, cultural awareness and sensitivity must increase in practice and research. Flaskerud (2007) noted that cultural sensitivity included an ethic or a moral imperative to value and respect the beliefs, norms and practices of the people to be served. Culturally sensitive professionals possess capacities such warmth, empathy and genuineness; they are flexible and skillful in responding and adapting to different cultural contexts and circumstances (Flaskerud). Culturally sensitive care is more than cognitive, it also includes the attitudes and feelings that are applied in everyday practice (Cassata & Dallas, 2005).

Cultural sensitivity and awareness are necessary foundations for cultural competence which explicitly implies that health care professionals are aware of the potential and actual cultural factors that affect quality health care delivery. (Schim, Doorenbos, Benkert & Miller, 2007). Sensitivity to culture is also essential for researchers. When nurse researchers are studying adolescents, it is common to silence their voices by using research methods which neither respect their views nor resonate with their language and perspectives. When these adolescents are from minority populations the nurse is strongly called to query “what matters.” Many researchers have written about the growing need for culturally sensitive practice and research; however the lack of representation of health care providers and researchers from minority populations complicates this process making it a challenging goal to accomplish.

### *Cultural Sensitivity and Adolescent Risk Behaviors*

Researchers must be culturally sensitive when conducting research on immigrant adolescents regarding their risk behaviors. Given what is known about the Afro-Caribbean immigrant family, it is possible to compose a list of essential elements which provide a perspective on the cultural sensitivity of research. Information that contributes to culturally sensitive studies for this population can be generally distinguished as demographic and social factors. Relevant demographic factors include information such as: self-reported racial/ethnic status and generational status determined by place of birth, place of parent birth, U.S. Citizenship and length of time in the U.S. (Hoefer et al., 2006). Relevant social factors include information such as: family structure, parental presence, religion, urbanicity, region of U.S. residence, parent level of education and language spoken at home. Family structure includes parental marital status, number of siblings and other relatives living in the home (Hoefer et al.).

Family structure may be complex for Afro-Caribbean people. Many Afro-Caribbean parents who migrate to the U.S. are married; however, they may come with one child and live with family members while working to support their spouse, and other children in the Caribbean (Barrow, 2001; Roopnarine et al., 2005) creating circumstances which influence adolescent risk. It is important for the researchers studying adolescent risk to capture the complex details of family structure. It is also important to thoughtfully consider ethnicity/race among Afro-Caribbean adolescents. Ethnicity is a quality distinguishing people who belong to a group because of shared characteristics, including ancestral and geographical region of origin, cultural tradition and language (Elam & Fentos; 2003). Race and ethnicity are often used interchangeably and for the purposes of

cultural sensitivity, self-reported race/ethnicity data should be collected as well as other demographic data indicating generational status.

The voice of African American and Hispanic adolescents has been queried in research of risky behaviors; adding the voice of Afro-Caribbean adolescents could bring new dimensions of understanding that contribute to further understanding of risk behaviors of minority adolescents. Nurses must be engaged in research activities that are relevant to meeting the needs of diverse populations. The research must be rigorous with research tools and designs that sensitively measure population characteristics, including ethnic/cultural factors. These approaches to research naturally occur within a caring context and can be structured through *Nursing as Caring* theory.

#### Nursing as Caring Theory

Coming to know Afro-Caribbean adolescents as caring persons is to understand their personal reality and its meaning in their lives. Boykin and Schoenhofer (2001) describe the call for nursing as a call for acknowledgement and affirmation of the person living caring in specific ways. A call for nursing is expressed when the nurse researcher recognizes Afro-Caribbean adolescents as unique individuals. Answering the call promotes honesty, openness, increased levels of trust and comfort that allows voice to be fully expressed.

Nurse researchers must develop trusting relationships with minority populations like the Afro-Caribbean adolescent community. Listening to and being on the same “wavelength” with these adolescents is essential if their health behavior is to be understood and eventually influenced. When adolescents are respected as individuals and

their uniqueness taken into consideration, they may express themselves freely and become empowered to make better health choices.

Boykin and Schoenhofer (2001) affirm that “nursing knowledge is knowledge of nurturing persons living caring and growing in caring within shared lived experiences, in which the caring between nurse and nursed enhances personhood” (p. 54). Nurse researchers, like nurses in practice, see the wholeness of person. Acknowledging the individuality of Afro-Caribbean adolescents may support their personhood in a way to reduce risky behavior, and facilitate self-growth. Actively listening to Afro-Caribbean adolescents promises active engagement of a population that is mostly underrepresented and often unheard. Attending to voice is one way of responding to the call to nurture described by Boykin and Schoenhofer. Jolly et al. (2007) defined adolescent voice as “the power to express self through dialogue with a non-judgmental listener who gives and receives feedback” (p. 11). Consideration of the voice of Afro-Caribbean adolescents when evaluating existing approaches for measuring risk behaviors, such as substance use and sexual activity can contribute to research that will make a difference for the population being studied. The overall purpose of this study is to describe substance use and sexual activity for Afro-Caribbean adolescents with attention to legal status, socio-demographic factors, risk-taking attitudes and behaviors.

#### Research Questions

1. What are percentages of documented and undocumented (social security number; yes; no) Afro-Caribbean adolescents using substances and simultaneously engaging in sexual activity?

2. What are the socio-demographic factors (age; gender; parental presence; language spoken in the home; parents level of education) associated with substance use and simultaneously engaging in sexual activity for documented and undocumented Afro-Caribbean adolescents living in South Florida?

3. What are the risk-taking attitudes and propensity for taking risks, [substance use, sexual activity and violence as measured by the Adolescent Risk-Taking Instrument (ARTI)] of documented and undocumented Afro-Caribbean adolescent living in South Florida.

CHAPTER 3  
METHODOLOGY  
Research Design

This is a descriptive exploratory study intended to provide foundational information about risky behaviors, specifically substance use and sexual activity in Afro-Caribbean adolescents. This study explores risk-taking attitudes and behaviors among Afro-Caribbean adolescents living in South Florida; evaluates the association between immigrant status, substance use and sexual activity; and examines socio-demographic factors associated with immigrant status and co-occurrence of substance use and sexual activity. Documented and undocumented status will be determined by social security numbers. Those participants who have self-reported that they have social security numbers will be classified as documented and those who self-report that they are without social security numbers will be classified as undocumented. Many Afro-Caribbean adolescents are first or second generation (Zhou, 1997) and there is evidence that generation designation affects health behaviors and health outcomes (Hoefler et al., 2006). Generation status will be assessed with a series of questions consistent with guidelines suggested by Zhou (1997). The Adolescent Risk-Taking Behavior Instrument (ARTI), part two has been modified to incorporate information documenting participant place of birth and parents' place of birth. Part two of the ARTI will also document sexual activity and substance use in addition to socio-demographic factors.



## *Instrument and Data Collection*

### *The Adolescent Risk-Taking Instrument*

The ARTI was originally developed in 1990 to measure high-risk adolescents' perceptions of risk behavior using the social adaptation and the risk-taking subscale (Busen & Kouzekanani, 2000). The original instrument was pilot tested on a sample of 70 high-risk adolescents, and based on the data obtained from the pilot study, the ARTI part one was revised in 1995 (Busen & Kouzekanani), decreasing the number of items from 63 to 44. On the version of the instrument used in this study, part one of the ARTI contained 44 items purported to measure two dimensions, social adaptation and risk-taking (Busen, Marcus & Von Sternberg, 2006). The risk-taking dimension includes risks associated with substance use, sexual activity and violence. This part of the ARTI uses a four point Likert scale, ranging from strongly agree to strongly disagree. Higher scores on the risk-taking subscale of Part one of the ARTI indicates higher risk-taking activity. Example questions from the risk-taking dimension of the ARTI include: I like to watch violent TV shows and movies; when I want to be part of a gang, I drink or do drugs; when I want some excitement, I have sex with someone new. The social adaptation dimension of the ARTI captures social attitudes related to risk-taking behaviors. The Likert scale, ranging from strongly agree to strongly disagree mirrors that of the risk-taking dimension of the instrument. Higher scores on the social adaptation sub-scale indicate positive social adaptation. It takes 20 minutes to complete the ARTI and the measure is estimated to be at a fourth-grade reading level.

Reliability of the ARTI was estimated by use of Cronbach's coefficient alpha. The internal consistency reliability coefficients for the social adaptation and risk-taking

scales were .77 and .80 respectively. Part two of the ARTI contains descriptive variables such as; age, sex, ethnicity, sexual activity and exposure to violence, school problems and substance use.

#### *Modification of the Adolescent Risk-Taking Instrument*

There was no modification of the 44 questions that comprise part one of the ARTI (Appendix A). The modified portions of the ARTI part two (Appendix B), appear in bold type. Part two of the ARTI now incorporates Afro-Caribbean specific information as well as social and cultural information, thereby tailoring the instrument to enable understanding of the Afro-Caribbean population being studied. Questions have also been added to query the co-occurrence of the risky behaviors of substance use and sexual activity.

#### *Sample and Research Setting*

Convenience sampling was used to select students living in South Florida by recruiting from community centers with a large representation of Afro-Caribbean adolescents. The researcher went to the community centers to announce to parents the research study and its purpose. A one-page informed consent describing the study (Appendix C) (translated into Creole) (Appendix D) was given to each participant parent or legal guardian and an assent (Appendix E) form to each student prior to the questionnaire being distributed. Fain (2004) affirms that the basic responsibility of a researcher is to ensure that potential subjects understand the implications of participating in a research study. In addition, the consent forms were available at the front desk of the centers and the researcher was on site during student pick up to answer questions.

A quiet conference room at the community center was chosen to distribute the questionnaire to those students whose parents provided written consent for them to participate. When the adolescents completed questionnaires, each received a \$5 gift card as an incentive for their participation. Inclusion criteria required participants to be: (a) 7th through 12th grade students; (b) living in South Florida; and (c) of Afro-Caribbean heritage (Afro-Caribbean themselves or parents are Afro-Caribbean). It was expected that some students completing the questionnaire may not be Afro-Caribbean, but this could not be known until data were prepared for entry. When the participant was not Afro-Caribbean, his/her data were used to address the research question. Recruitment and data collection were completed in approximately two months. Once all data were collected the students were categorized in to two groups; documented and undocumented residents.

#### *Protocol*

Documented or undocumented status was identified by answering the question, “Do you have a social security number?” on part two of the ARTI. For the participant to be in the undocumented group, they would have answered “no” to having a social security number. Afro-Caribbean race of the participants was determined by their place of birth and their parents’ place of birth. The participants background was determine by answering the questions, “in what country were you born?” “in what country was your mother born?” and “in what country was your father born?”

#### Ethical Consideration

##### *Protection of Human Subjects*

The University Institutional Review Board (IRB) at Florida Atlantic University approved the study. The researcher went to the community centers to announce to parents

and guardians the research study and its purpose. A one-page informed consent describing the study, also translated into Creole was given to each participant's parent or legal guardian, and an assent form was given to each participant prior to the questionnaire being distributed. In addition, the consent forms were available at the front desk of the centers, and the researcher was on site during student pick up to answer questions. The consent forms were collected by the researcher and placed in a seal enveloped. A quiet conference room at the community center was the site for data collection. Questionnaires were distributed to those adolescents whose parent had provided written consents and who signed an assent form themselves.

Participants were given an assent form that provides an explanation of the research study. The researcher, who is a nurse practitioner with 12 years experience in school health, is very comfortable working with this population; she is prepared to manage concerns introduced by the students. If during the study a student feels stressed about some of the questions, the nurse practitioner researcher will make appropriate referrals for further evaluation. Participation was voluntary and study participants were instructed that they can withdraw any time without experiencing penalties imposed by the community center or the researcher.

Data were anonymous; there were no personal identifiers on any of the questionnaires. Access to the data was limited to project researchers. No other people, unless required by law, viewed the data or results. No one was identified when reporting study outcomes. The students were assured that the questionnaires will not be graded, and their response would not affect their membership with the community center in any way.

They may discontinue participating in the study at any time for any reason without negative consequences.

### Data Analysis

This is a descriptive exploratory study which will use means, standard deviations, frequencies, chi-square and independent  $t$  tests to address the research questions. Data will be entered into SPSS and data ranges will be examined for errors prior to conducting the analysis. Specific analysis will be described for each research question.

#### *Question #1*

What percentages of documented and undocumented Afro-Caribbean adolescents (social security number; yes; no) Afro-Caribbean adolescents are using substances and simultaneously engaging in sexual activity?

This question will be addressed through frequencies using self-report of social security numbers (yes; no) to record documented/undocumented status and the response to two items on Part two of the ARTI, which query the coexistence of substance use and sexual activity. The data will be analyzed using frequencies and crosstabs.

#### *Question #2*

What are the socio-demographic factors (age; gender; parental presence; language spoken in the home; parent level of education) associated with substance use and simultaneously engaging in sexual activity for documented and undocumented Afro-Caribbean adolescents living in South Florida? This question will consider the group of undocumented participants distinct from the documented participants. The data will be analyzed using frequencies and crosstabs.

*Question #3*

What are the differences in risk-taking attitudes and propensity for taking risks as measured by the Adolescent Risk-Taking Instrument (ARTI) for documented and undocumented Afro-Caribbean adolescents living in South Florida?

An independent  $t$  test will be used to examine differences in risk-taking and social adaptation as measured by the ARTI for documented and undocumented adolescents. In addition, alpha reliability will be calculated on the 16 social adaptation items and the 28 risk-taking items in Part one of the ARTI. Part one of the ARTI will be calculated using Cronbach's alpha. This analysis plan is dependent on the number of undocumented and documented participants recruited into the study. Numbers in each category may alter analysis plans but generally, analysis is planned using descriptive rather than inferential statistics.

## CHAPTER 4

### FINDINGS

The turmoil of adolescence, associated with normal physical, social and mental development, results in adolescents becoming a vulnerable group in today's society. Adolescents risk a 200% increase in death, disease or injury in large part because of risky behaviors such as unprotected sexual activity, drug and alcohol abuse (Monastersky, 2007; Busen & Kouzekanani, 2000). Risk-taking behaviors during adolescence are often linked with psychological and social factors and there is substantial data documenting the co-occurrence of substance use and sexual activity (Halpern, Kaestle & Hallfors, 2007; Tamsen-VanZile, Testa, Harlow, Livingston, 2006). Weden and Zabin (2005) suggested that sexual behavior may have a distinct relationship with substance use and aggression in more ethnically diverse populations, with life-compromising implications. Although these relationships are documented, there is little literature on the growing Afro-Caribbean population and none considering adolescent risk behaviors.

Afro-Caribbean people, along with Hispanics and Asians are becoming some of the fastest growing ethnic groups in the United States with one in five being either an immigrant or the child of an immigrant (Hoefler, Rytina & Campbell, 2006; Logan & Deane, 2003). South Florida is known as the "gateway to the Americas" for Caribbean migration (Patsdaughter, Dyer, & Riley-Eddins, 2004). There are 1,289,951 documented foreign born Caribbean people residing in Florida; 688,118 are U.S. citizens and 601,841

legal residents (Census 2007). Using the “reductionist method” developed by the Department of Homeland Security to estimate the number of undocumented residents in the U.S., it is estimated that there are 1,050,000 undocumented people currently living in Florida (Camarota, 2007; Hoefer, Rytina & Campbell, 2006; Passel & Cohn, 2009).

Afro-Caribbean adolescents are faced with many of the same physical, emotional and social issues that most other adolescents experience, and risk behaviors begin at early ages. Obene, Ireland and Blum (2005) found that adolescents living in the Caribbean who engaged in sexual risk behaviors were significantly more likely to be simultaneously involved in other risk behaviors such as substance abuse and violence. The challenges experienced by adolescents living in the Caribbean are multiplied when these adolescents migrate to the U.S.

#### Literature Review

Historically, the vast majority of research on risk behaviors of the adolescent population has focused on Whites and African Americans (Elliot & Larson, 2004). Thus far, there has been very little research that includes or identifies youth by country of origin or immigrant or refugee status (Hunt, Morland, Barocas, Huckans & Caal, 2002). Many Afro-Caribbean adolescents are first or second generation (Zhou, 1997) and there is evidence that generation designation affects health behaviors and health outcomes (Hoefer, Rytina & Campbell, 2006).

Currently very little is known about the health status of Afro-Caribbean adolescents residing in the U.S. Few research studies give a glimpse of the risk-taking behaviors in this population, such as sexual risk-taking or substance use and abuse: Given the results of these few, there is a cause for concern. Epstein, Botvin, Baker and Diaz



(1998) conducted a study to determine patterns of alcohol use among ethnically diverse urban adolescents. The researchers found that Afro-Caribbean adolescents reported drinking more frequently, getting drunk more often and consuming more alcohol than the other adolescents in the Black sub-group. The prevalence rate for drinking was also significantly greater among Afro-Caribbean than African American adolescents.

Silverman, Decker and Raj's (2007) study with female immigrant adolescents assessed disparities in experiences of physical and sexual dating violence based on immigrant status and language spoken at home. The researchers found that Black immigrant female adolescents had higher risk for life-time experience of dating violence as compared to Hispanics and Whites. Parker, Sussman, Crippens, Elder and Scholl's (1998) study on ethnic identification, and cigarette smoking among urban African American/Afro-Caribbean and Latino youth found that 34% of the adolescents had tried smoking and 4% were current smokers. In addition, African American/Afro-Caribbean adolescents, who perceived themselves as being liked by other ethnic groups, were more likely themselves to smoke. These three studies identified the Afro-Caribbean subgroups within the broader ethnic group of African Americans generally dismissing cultural uniqueness and the challenge of migration.

Hunt et al. (2002) noted that risk behaviors may manifest differently among immigrant adolescents because of their unique experience of migration. A factor that further complicates understanding of immigrant adolescents' health risk behaviors is the use of instruments that disregard complexities related to culture and ethnicity within groups. For instance, Eaton and colleagues' 2005 National Youth Risk Behavior Survey (NYRBS) did not include sub-groups within the Black or African American adolescent

community (2006). However, general findings for adolescents, regardless of race or immigrant status were sobering, indicating that during the 30 days immediately preceding the survey, 28.5% of adolescents had ridden with a driver who had been drinking alcohol, 25.5% had episodes of heavy drinking, 23.0% currently used cigarettes and 20.2% currently used Marijuana. The survey found that 33.9% of adolescents were currently sexually active; 62.8% of those who were sexually active did not use condoms and 23.3% of those who were sexually active had drunk alcohol or used drugs before their sexual encounter. These findings demonstrate clustering of risk behaviors that may have health compromising effects for adolescents.

The clustering of risk behaviors is not an isolated finding of the NYRBS. Other researchers have also found that risk behaviors in adolescents do not occur in isolation, but they are co-occurring and somewhat predictable (Hussey, Hallfors, Waller, Iritani, Halpren & Banner, 2007; Weden & Zabin, 2005; Zweigh, Lindberg & McGinley, 2001). The consequences of drug use and risky sexual behavior are substantial. Each year the combination of alcohol and illicit drug use contributes to over 500,000 deaths in the U.S. (Mokdad, Marks, Stroup & Gerberding, 2004) and this combination is implicated in a wide range of social problems, with an estimated cost to the U.S. economy of over \$414 billion. Disease linked to risky sexual behaviors account for approximately 20,000 U.S. deaths each year, primarily from HIV (Mokdad et al., 2004) and are tied to a number of adverse reproductive outcomes (Sulak, 2003). The projected lifetime medical cost of new sexually transmitted infections acquired by U.S. adolescents and young adults ages 15-24 years has been estimated at \$6.5 billion (Chesson, Blandford, Gift, Tao & Irwin, 2004). Although most adverse consequences of drug use and sexual risk-taking do not appear

until adulthood, the behaviors are usually initiated in adolescence (Johnston, O'Malley, Bachman & Schulenberg, 2003). Consequently, understanding sexual risk and substance use risk behaviors for Afro-Caribbean adolescents offers the possibility for improved health into adulthood and substantial savings in health care cost. Further, the consideration of immigrant status will enable new insight about an unexplored dimension of Afro-Caribbean adolescent health.

The purpose of this study of Afro-Caribbean adolescent risk-taking behavior was to describe the co-occurrence of substance use and sexual activity among Afro-Caribbean adolescents living in South Florida with attention to legal status, socio-demographic factors and risk-taking attitudes and behavior. The study incorporates relevant demographic and socio-cultural factors that reflect appreciation for cultural uniqueness and give voice to Afro-Caribbean adolescents. Adding the voice of Afro-Caribbean adolescents brings new insights for understanding risk-taking behaviors of minority adolescents.

## Background

### *Afro-Caribbean Families*

#### *Afro-Caribbean people*

Afro-Caribbean people are defined by their ancestry within the predominantly Black Islands of the Caribbean (Logan & Deane, 2003). Immigrant status in the U.S. is distinguished between first and second generation and is based on the birthplace of the children and their parents (Hussey, Hallfors, Waller, Iritaini, Halpern & Bauer, 2007). Parents often migrate to the U.S. leaving children behind with plans for future reuniting when the parent is settled in the U.S.

Most Afro-Caribbean children reunite with their families several years after having settled in the U.S. during their early or mid-adolescence (Gopaul-McNicol, 1998). Carten and Goodman (2005) reported that extensive periods of separation and reunification of children in Afro-Caribbean families caused added stress within the family unit. These children may be in a different adaptation phase than their parents, often contributing to conflicts related to family interrelationships, culture, and discipline. For this reason, the potential for adolescents to engage in risk behaviors is increased. Researchers have found that parental monitoring and connectedness to adolescents facilitates a reduction in risk behaviors (Huebner & Howell, 2003; Reininger et al, 2005), but often immigrant parents who are struggling to meet financial obligations have neither the time nor energy to cultivate an everyday close connection with their adolescents and they fail to monitor their activities.

Many Afro-Caribbean children grow up in homes where child rearing practices are strongly influenced by environmental circumstances. Afro-Caribbean families' religious practices center primarily on Christianity which espouses the strong influence of church doctrine in the parent-child relationship (Barrow, 2001 & Broos, 1998). Afro-Caribbean parents believe in the biblical admonition "spare the rod, spoil the child," and they favor harsher and stricter forms of discipline for disobedient children (Barrow, 2001). Moore (2005) identified three styles associated with parenting behaviors: authoritative, authoritarian and permissive: Authoritative parents are warm and responsive; they expect obedience and have strong control over their children. In contrast, the permissive parents do not supervise or set rules for their children (Moore, 2005). Many researchers view the Afro-Caribbean parenting style as authoritarian, where

obedience is expected, physical punishment is common, public display of affection is rare and praises and rewards are infrequent (Barrow, 2001; Millette, 1998; Smith & Mosby, 2003).

### Theoretical Guidance Supporting the Research Questions

With an overall intent to give voice to Afro-Caribbean adolescents, Boykin and Schoenhofer's (2001) *Theory of Nursing as Caring* was selected as a lens to view this research. Coming to know Afro-Caribbean adolescents as caring persons is to understand their personal reality and its meaning for everyday living. Boykin and Schoenhofer (2001) describe the call for nursing as a call for acknowledgement and affirmation of the person living caring. A call for nursing is expressed when the nurse researcher recognizes Afro-Caribbean adolescents as unique individuals. Answering the call promotes honesty, openness, increased levels of trust and comfort that allows voice to be fully expressed. The research questions posed in this study are a response to the call from Afro-Caribbean adolescents opening a door for open honest description of their personal reality. Understanding of this reality is a critical first step in responding to their call for nursing care.

The research questions are: (1) what percentages of documented and undocumented (social security number; yes; no) Afro-Caribbean adolescents who are using substances and simultaneously engaging in sexual activity? (2) What are the socio-demographic factors (age; gender; parental presence; language spoken in the home; parent level of education) associated with substance use and simultaneously engaging in sexual activity for documented and undocumented Afro-Caribbean adolescents living in the U.S.? and (3) what are the differences in risk-taking attitudes (social adaptation

subscale) and propensity for taking risks (risk-taking subscale), as measured by the Adolescent Risk-Taking Instrument (ARTI) for documented and undocumented Afro-Caribbean adolescents living in the U.S.

## Method

### *Design and Setting*

This descriptive exploratory study provides foundational information about risky behaviors, specifically substance use and sexual activity in Afro-Caribbean adolescents who are documented and undocumented. Appropriate statistical techniques were used to explore risk-taking attitudes and behaviors among Afro-Caribbean adolescents living in South Florida; evaluate the association between immigrant status and simultaneous substance use and sexual activity; and describe socio-demographic factors associated with immigrant status and co-occurrence of substance use and sexual activity.

Documented and undocumented status was determined by social security numbers. Those participants who self-reported that they had social security numbers, were classified as documented and those who self-reported that they were without social security numbers, were classified as undocumented.

### *Sample Recruitment*

Convenience sampling was used to select adolescents living in South Florida by recruiting from community centers with a large representation of Afro-Caribbean adolescents. Invitation flyers were distributed at the centers and the nurse-researcher spoke with assembled groups to introduce the study and answer questions. All parental information was available in English and Creole. Inclusion criteria required participants to be 7th through 12th grade students of Afro-Caribbean heritage (Afro-Caribbean

themselves or parents are Afro-Caribbean). A quiet conference room at the community centers was chosen to distribute the questionnaire to those participants whose parents provided written consent. Prior to data collection, adolescents provided written assent. After completion of the questionnaires, each adolescent received a \$5 gift card as an incentive for their participation.

### *Instrument*

The Adolescent Risk-Taking Instrument (ARTI) was originally developed in 1990 to measure high-risk adolescents' perceptions of risk behavior using the social adaptation and the risk-taking subscale (Busen & Kouzekanani, 2000). Part one of the ARTI contains 44 items purported to measure two dimensions, social adaptation and risk-taking (Busen, Marcus & VonSternberg, 2006). The risk-taking dimension includes risks associated with substance use, sexual activity and violence. This part of the ARTI uses a four point Likert scale, ranging from strongly agree to strongly disagree. Higher scores on part one of the ARTI indicates higher risk-taking activity. Example questions from the risk-taking dimension of the ARTI include: I like to watch violent TV shows and movies; when I want to be part of a gang, I drink or do drugs; when I want some excitement, I have sex with someone new. The social adaptation dimension of the ARTI captures social attitudes related to risk-taking behaviors. The Likert scale ranges from strongly agree to strongly disagree, higher scores on the social adaptation sub-scale indicate positive social adaptation. Example questions from the social adaptation dimension of the ARTI include: I look forward to doing new things; I know my parents are proud of me; I make friends easily. It took 20 minutes to complete the ARTI, estimated to be at a fourth grade reading level. Previous testing of the ARTI in minority populations had indicated that the

measure was reliable and valid (Busen & Kouzekanani, 2000; Busen, Marcus, & Von Sternberg, 2006).

Reliability for part one of the ARTI, estimated with Cronbach's coefficient alpha, was documented as .77 and .80 for the social adaptation and risk-taking scales respectively (Busen & Kouzekanani, 2000). Part two of the ARTI contains descriptive variables such as: age, sex, ethnicity, sexual activity and exposure to violence, school problems and substance use behaviors.

#### *Modification of the Adolescent Risk-Taking Instrument*

There was no modification of the 44 questions that comprise part one of the ARTI. Part two of the ARTI was modified to incorporate Afro-Caribbean specific information as well as social and cultural information, thereby tailoring the instrument to enable understanding of the Afro-Caribbean population being studied. Questions were added to query the co-occurrence of the risky behaviors of substance use and sexual activity.

#### *Procedure*

The University Institutional Review Board (IRB) at Florida Atlantic University approved the study. After parental consent and adolescent assent were obtained, the ARTI was distributed to groups of adolescents ranging from 5 to 10 per group. One hundred and six questionnaires were distributed by the researcher in the community centers. Participants were instructed to answer the questions and ask for assistance if needed. There was no identifying information on the questionnaires, assuring participants of anonymity.



## Results

### *Sample and Socio-demographics*

The sample consisted of 106 Afro-Caribbean adolescents. Seventy-six percent of the adolescents' background was Haitian, 12% was Jamaican, 10% was Bahamian and 2% Trinidadian. Nearly 43% of the adolescents lived with their mother only, 72.6% spoke Creole at home, 34% had witnessed a shooting or a stabbing, 17.9% smoked blacks (a street cigarette that is sometimes laced with Marijuana and other illegal street drugs), 34.9% drank alcohol and 53.8% received beatings as a form of discipline. Forty-eight percent of the adolescents were sexually active and preferred condoms as a form of contraception. Table 1 reports the personal and demographic characteristics of the sample.

### *Instrument*

Reliability of part one of the ARTI was estimated by use of the Cronbach's coefficient alpha. The internal consistency reliability coefficient for the social adaptation scale was  $\alpha = .82$  and for the risk-taking scale,  $\alpha = .87$ . Although the ARTI was never used in a sample of Afro-Caribbean adolescents, it had been previously used with African American adolescents. The internal consistency reliability of the instrument was acceptable in this group.

Research Question one asked: what percentages of documented and undocumented (social security number; yes; no) Afro-Caribbean adolescents are using substances and simultaneously engaging in sexual activity? The data was analyzed using frequencies and crosstabs (Table 2, 3). Overall 49% of the Afro-Caribbean adolescents were sexually active. Participants' responses indicated that 14.6% of documented Afro-

Caribbean adolescents and 40% of undocumented adolescents had been drinking alcohol while engaging in sexual activity; 7.3% of documented and 30% of undocumented used drugs while engaging in sexual activity.

Question two asked; what were the socio-demographic factors (age; gender; parental presence; language spoken in the home; parent level of education) associated with substance use and simultaneously engaging in sexual activity for documented and undocumented Afro-Caribbean adolescents living in South Florida? The data was analyzed using frequencies and crosstabs (Table 4-17). Each socio-demographic factor will be addressed.

#### *Age*

Nearly 3% of documented Afro-Caribbean adolescents between the ages of 12 and 14, 4.9% between 15 and 16, and 7.3% between 17 and 19, drink alcohol while engaging in sexual activity. Of those who used drugs and engaged in sexual activity, 2.4% was between 12 and 14 years, and 4.9% was between 17 and 19 years. For the undocumented population, 30% of 17 to 19 year-olds simultaneously engage in sexual activity while drinking alcohol and using drugs. Overall undocumented Afro-Caribbean adolescents between 17 and 19 years old were more likely to use substances and engage in risky sexual behaviors at the same time (Tables 4 and 5).

#### *Gender*

Nearly 10% of the documented and 30% of the undocumented males drank alcohol and simultaneously engaged in sexual activity. For females, 4.9% of documented and 10% of undocumented adolescents engaged in simultaneous drinking and sexual activity. For drug use, 4.9% of the documented males and 30% of the undocumented

male, compared to 2.4% of the documented females and no undocumented females reported drug use and sexual activity. Overall when compared to females, the undocumented Afro-Caribbean males were more likely to use substances while engaging in sexual activity (Tables 6 and 7).

### *Parental Presence*

Nearly 15% of the documented and 30% of the undocumented adolescents who reported drinking alcohol and simultaneously engaging in sexual activity had an adult present before leaving for school. For those using drugs, 7.3% of the documented and 20% of the undocumented Afro-Caribbean adolescents had an adult present before school. Fourteen percent of the documented and 20% of the undocumented Afro-Caribbean adolescents who reported drinking alcohol and simultaneously engaging in sexual activity, had an adult present after school. For drug use, the documented adolescents reported adult presence after school 7% of the time, and undocumented, 10% of the time (Table 8-11).

### *Language*

Twelve percent of the documented and 40% of the undocumented Afro-Caribbean adolescents who reported drinking alcohol and simultaneously engaging in sexual activity spoke Creole in the home. For drug use, 7.3% of documented and 30% of undocumented adolescents spoke Creole at home. Overall, Creole was spoken more than English in the homes of both the documented and undocumented Afro-Caribbean adolescents who engaged in these multiple risk behaviors (Tables 12 and 13).

### *Mother's Level of Education*

For the documented adolescents who drank alcohol and simultaneously engaged in sexual activity, 4.9% of their mothers' education was at the high school level, 2.4% had some high school and 2.4% were unknown. For the undocumented adolescents, 10% of the mothers had some high school education and 30% reported unknown educational status for their mothers. For the documented adolescents who engaged in drug use and sexual activity, 2.4% of their mothers were high school graduates and 4.9% reported unknown educational status. For the undocumented, 10% of the mothers were reported as having some high school and 20% had unknown educational status. Overall, none of the undocumented adolescent mothers completed high school, and for the majority of adolescents, their mothers' level of education was unknown (Table 14 and 15).

### *Father's Level of Education*

For the documented Afro-Caribbean adolescents who engaged in drinking alcohol while simultaneously engaging in sexual activity, 2.4% of their fathers had grade school education, 2.4% had some high school, 2.4% graduated from high school and 7.3% had unknown educational status. For the undocumented adolescents, 40% of their fathers' level of education was unknown. Of those adolescents who used drugs, 2.4% of the fathers of documented adolescents had grade school education, and 4.9% had unknown educational status. For the undocumented adolescents, 30% reported that they did not know their fathers' level of education (Table 16 and 17).

Question three asked; what were the differences in risk-taking attitudes and propensity for taking risks, as measured by the Adolescent Risk-Taking Instrument (ARTI) for documented and undocumented Afro-Caribbean adolescents living in South

Florida. The data was analyzed using an independent  $t$  test (Table 18). Risk-taking behavior mean scores for documented Afro-Caribbean adolescents were 2.04 (SD = .44) and undocumented were 1.89 (SD = .47). Although the documented adolescents' risk-taking scores were slightly higher at 2.04, there was no statistically significant difference between the two groups. Propensity for risk was measured by the social adaptation scale of the ARTI and analyzed using an independent  $t$  test (Table 19). The social adaptation mean scores for documented Afro-Caribbean adolescent were 3.23 (SD = .45) and undocumented were 3.20 (SD = .35). There was no statistically significant difference between the two groups.

Table 1

## Demographic and Personal Characteristics of the Sample

Characteristic	Range	Mean	SD
Age	12-19	16.0	1.83
Age of sexual initiation	5-18	11.5	3.25
	n		Frequency %
Gender			
Male	49		46
Female	57		54
Social Security Number			
Yes (documented)	79		75
No (undocumented)	27		25
Sexually active	51		48
Documented	41		52
Undocumented	10		37
Engage in substance use and sexual risk			
Documented			
Alcohol	6		15
Drugs	3		7
Undocumented			
Alcohol	4		40
Drugs	3		30
Born in the U.S.			
Yes	59		56
No	47		44
Lived in the U. S			
1 week to 5 years	19		18
6 to 10 years	12		11
11 to 18 years	74		70
Other	1		.9

Table 2

Having Sex and Drinking Alcohol

Social security number	Always	Sometime	Never
Yes	2.4% (n = 1)	12.2% (n = 5)	85.4% (n = 35)
No	0%	40.0% (n = 4)	60.0% (n = 6)

Table 3

Having Sex and Using Drugs

Social security number	Always	Sometime	Never
Yes	2.4% (n = 1)	4.9% (n = 2)	92.7% (n = 38)
No	0%	30.0% (n = 3)	70.0% (n = 7)

Table 4

Age: Having Sex and Drinking Alcohol

Social security number	Always	Sometimes	Never
Yes		2.4% (n = 1)	4.9% (n = 2)
12-14 years			
No			
Yes		4.9% (n = 2)	24.5% (n = 10)
15-16 years			
No			10.0% (n = 1)
Yes	2.4% (n = 1)	4.9% (n = 2)	56.0% (n = 23)
17-19 years			
No		40.0% (n = 4)	50.0% (n = 5)

Table 5

Age: Having Sex and Using Drugs

Social security number	Always	Sometimes	Never
12-14		2.4% (n =1)	4.9% (n = 2)
Yes			
No			
15-16 years			29.3% (n = 12)
Yes			
No			10.0% (n = 1)
17-19 years	2.4% (n =1)	2.4% (n =1)	58.5% (n =24)
Yes			
No		30.0% (n =3)	60.0% (n = 6)

Table 6

Gender: Having Sex and Drinking Alcohol

Social security number	Always	Sometimes	Never
Male	2.4% (n = 1)	7.3% (n = 3)	41.5% (n = 17)
Yes			
No		30.0% (n =3)	40.0% (n = 4)
Female		4.9% (n = 2)	43.9% (n =18)
Yes			
No		10.0% (n = 1)	20.0% (n = 2)



Table 7

Gender: Having Sex and Using Drugs

Social security number	Always	Sometimes	Never
Male			
Yes	2.4% (n = 1)	2.4% (n = 1)	46.3% (n = 19)
No		30.0% (n = 3)	36.6% (n = 15)
Female			
Yes		2.4% (n = 1)	46.3% (n = 19)
No			

Table 8

Parental Presence Before School: Having Sex and Drinking Alcohol

Social security number	Always	Sometimes	Never
Mother			
Yes		7.3% (n = 3)	39.0% (n = 16)
No		20% (n = 2)	30.0% (n = 3)
Father			
Yes		2.4% (n = 1)	2.4% (n = 1)
No			
Both parents			
Yes	2.4% (n = 1)		2.4% (n = 1)
No		10.0% (n = 1)	
Other adult			
Yes			19.5% (n = 8)
No			30% (n = 3)
Nobody			
Yes			22.0% (n = 9)
No		10% (n = 1)	

Table 9

## Parental Presence Before School: Having Sex and Using Drugs

Social security number	Always	Sometimes	Never
Yes			46.3% (n = 19)
Mother			
No		20% (n = 2)	30% (n = 3)
Yes		2.4% (n = 1)	2.4% (n = 1)
Father			
No			
Yes	2.4% (n = 1)		2.4% (n = 1)
Both parents			
No		10% (n = 1)	
Yes		2.4% (n = 1)	19.5% (n = 8)
Other adult			
No			30% (n = 3)
Yes			22.0% (n = 9)
Nobody			
No		10% (n = 1)	

Table 10

## Parental Presence After School: Having Sex and Drinking Alcohol

Social security number	Always	Sometimes	Never
Yes		7.3% (n = 3)	36.6% (n = 15)
Mother			
No		20.0% (n = 2)	20.0% (n = 2)
Yes			2.4% (n = 2)
Father			
No			
Yes	2.4% (n = 1)	2.4% (n = 1)	9.8% (n = 4)
Both parents			
No			10.0% (n = 1)
Yes		2.4% (n = 1)	17.0% (n = 7)
Other adult			
No			20% (n = 2)
Yes			17.0% (n = 7)
Nobody			
No		20% (n = 2)	10% (n = 1)

Table 11

Parental Presence After School: Having Sex and Using Drugs

Social security number	Always	Sometimes	Never
Yes		2.4% (n = 1)	39.0% (n = 16)
Mother			
No		10.0% (n = 1)	30.0% (n = 3)
Yes			20.0% (n = 2)
Father			
No			
Yes	2.4% (n = 1)		12.2% (n = 5)
Both parents			
No			10.0% (n = 1)
Yes		2.4% (n = 1)	19.5% (n = 8)
Other adult			
No			20.0% (n = 2)
Yes			17.1% (n = 7)
Nobody			
No		20.0% (n = 2)	10.0% (n = 1)

Table 12

Language: Having Sex and Drinking Alcohol

Social security number	Always	Sometimes	Never
Yes		2.4% (n = 1)	26.8% (n = 11)
English			
No			10.0% (n = 1)
Yes	2.4% (n = 1)	9.8% (n = 4)	58.5% (n = 24)
Creole			

No	40.0% (n = 4)	50.0% (n = 5)
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Table 13

Language: Having Sex Using Drugs

Social security number	Always	Sometimes	Never
English			29.2% (n = 12)
Yes			
No			10.0% (n = 1)
Creole	2.4% (n = 1)	4.9% (n = 2)	64.4% (n = 26)
Yes			
No		30.0% (n = 3)	60.0% (n = 6)

Table 14

Mother's Level of Education: Having Sex and Drinking Alcohol

Social security number	Always	Sometimes	Never
No school			9.8% (n = 4)
Yes			
No			10% (n = 1)
Grade school			9.8% (n = 4)
Yes			
No			20% (n = 2)
Some high school		2.4% (n = 1)	14.6% (n = 6)
Yes			
No		10% (n = 1)	
High school graduate		4.9% (n = 2)	9.8% (n = 4)
Yes			
No			10.0% (n = 1)
College			19.5% (n = 8)
Yes			
No			20.0% (n = 2)
Yes	2.4% (n = 1)		22.0% (n = 9)

Unknown	No	30% (n = 3)
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Table 15

Mother's Level of Education: Having Sex Using Drugs

Social security number	Always	Sometimes	Never
Yes			9.8% (n = 4)
No school			
No			10.0% (n = 1)
Yes			9.8% (n = 4)
Grade school			
No			20.0 % (n = 2)
Yes			17.0% (n = 7)
Some high school			
No		10.0% (n = 1)	
Yes		2.4% (n = 1)	12.2% (n = 5)
High school graduate			
No			10.0% (n = 1)
Yes			19.5% (n = 8)
College			
No			20.0% (n = 2)
Yes	2.4% (n = 1)	2.4% (n = 1)	24.4% (n= 10)
Unknown			
No		20% (n = 2)	10% (n = 1)

Table 16

Father's Level of Education: Having Sex and Drinking Alcohol

Social security number	Always	Sometimes	Never
Yes			9.8% (n = 4)
No school			
No			
Yes		2.4% (n = 1)	2.4% (n = 1)
Grade school			
No			20% (n = 2)
Yes		2.4% (n = 1)	12.2% (n = 5)
Some high school			
No			
Yes		2.4% (n = 1)	9.8% (n = 4)
High school graduate			
No			10.0% (n = 1)
Yes			12.2% (n = 5)
College			
No			10.0% (n = 1)
Yes	2.4% (n = 1)	4.9% (n = 2)	39.0% (n = 16)
Unknown			
No		40.0% (n = 4)	20.0% (n = 2)

Table 17

## Father's Level of Education: Having Sex and Using Drugs

Social security number	Always	Sometimes	Never
Yes			9.8% (n = 4)
No school			
No			
Yes		2.4% (n = 1)	2.4% (n = 1)
Grade school			
No			20.0% (n = 2)
Yes			14.6% (n = 6)
Some high school			
No			
Yes			12.2% (n = 5)
High school graduate			
No			10.0% (n = 1)
Yes			12.2% (n = 5)
College			
No			10.0% (n = 1)
Yes	2.4% (n = 1)	2.4% (n = 1)	41.5% (n = 17)
Unknown			
No		30.0% (n = 3)	30.0% (n = 3)



Table 18

## Risk-Taking Behaviors of Afro-Caribbean Adolescents

Risk-taking behaviors	Mean	SD
Social Security Number		
Yes ( $n = 79$ )	2.04	.44
No ( $n = 27$ )	1.89	.47
$t = 1.43, p = .156$		

Table 19

## Social Adaptation (Propensity for Risk) of Afro-Caribbean Adolescents

Social adaptation	Mean	SD
Social Security Number		
Yes ( $n = 79$ )	3.23	.45
No ( $n = 27$ )	3.20	.35
$t = 0.37, p = 0.712$		

## CHAPTER 5

### DISCUSSION

This study examined the co-occurrences of substance use and sexual risk-taking behaviors of documented and undocumented Afro-Caribbean adolescents; demographic factors that affect these behaviors and risk-taking attitudes. Data from the present study indicate that among the 49% of Afro-Caribbean adolescents who were currently sexual active, 20% drank alcohol or used drugs while simultaneously engaging in sexual activity. Substance use and sexual risk was higher in males than females, and adolescents between the ages of 17 and 19 years compared to younger age groups. The 2005 YRBS (Eaton et al., 2006) showed that among the 33.9% of student who were sexually active; 23.3% drank alcohol or use drugs before their last sexual encounter. These behaviors were higher among males (27.6%) than females (19%) and students in the 11th and 12th grades when compared to lower grades. When compared to findings from the present study, the percentage of Afro-Caribbean students engaging in risky behavior was slighter higher.

This study found among undocumented Afro-Caribbean adolescents, the 10% who used alcohol while simultaneously engaging in sexual risk had no adult present before or after school. For the 20% who used drugs while engaging in sex, there was no before or after school supervision. The need for other forms of monitoring, such as youth organizations, churches, community agencies and schools that enhance self-esteem is

important given these findings, and may provide positive role models and supervision for Afro-Caribbean adolescents. DiClemente et al. (2001) noted that the use of additional resources and venues to strengthen and extend parental monitoring was an effective approach rather than trying to substitute for parental monitoring or presence.

Afro-Caribbean adolescents in a study by Archibald (2007) verbalized that they did not have enough adult supervision because their parents were working multiple jobs. Hussey and colleagues' (2007) study, examining the relationships between immigrant status and patterns of co-occurring sex and substance use risk behaviors among Asian and Latino adolescents, found that parental presence before and after school decreased risk-taking behaviors in immigrant adolescents. There is a critical need for realistic programs that provide before and after school support for minority adolescents.

The majority of the Afro-Caribbean adolescents who reported using substances and engaging in sexual risk spoke Creole at home. Non-English proficient parents may rely on their children to be linguistic and cultural brokers, which may be a source of increased stress (Gonzales, Deardorff, Formoso, Barr, Barrera Jr., 2006). None of the undocumented Afro-Caribbean adolescents' mothers, had a high school education, and neither documented or undocumented had a college education. None of the undocumented Afro-Caribbean adolescents' fathers had a high school or college education. Hussey et al. (2007) study found that most children in immigrant families have parents who did not complete high school or college. Although 97% of the Afro-Caribbean adolescent parents are employed, 50% are below the poverty level (Betz, 2008). These factors affect socio-economic status which keeps immigrant families in a cycle of poverty, with potential to contribute to risk behaviors of adolescents.

There was no significant difference in the risk-taking and social adaptation scores for the documented and undocumented adolescents. Despite the social disadvantages of these Afro-Caribbean adolescents they seem to be at no more disadvantage in regards to risk as scored by the ARTI than African American adolescents. The means and standard deviations for this Afro-Caribbean sample were consistent with Busen and Kouzekanani's (2000) study findings using the ARTI to assess risk-taking behaviors of African American adolescents. There are several possibilities contributing to these findings. First, studies of immigrant adolescents have noted resilience as a protective factor against risk-taking behaviors (Lee & Cranford, 2008; Takviriyannum, 2008). There is a possibility that Afro-Caribbean adolescents may be resilient, and have developed what it takes to care for themselves and thrive in any situation. Research on the relationship between risk-taking behaviors and resilience among Afro-Caribbean adolescent could be conducted to further explore how they manage and move beyond their socio-demographic circumstances.

Another explanation for the similarity between the levels of risk-taking behaviors of Afro-Caribbean when compared with African American adolescents (Busen & Kouzekanani, 2000) may be attributable to the length of time that they have lived in the U.S. Afro-Caribbean immigrant adolescents who live in the U.S. longer may be more acculturated than recent immigrants. Seventy-nine percent of the adolescents in this study lived the U.S. between 11 and 18 years, 11% between 6 and 10 years, and 18% between 1 week and 5 years. Differences between culturally distinct populations may be mitigated as Afro-Caribbean adolescents spend more time in the host country (Blake, Ledsky, Goodenow & O'Donnell, 2001). As they become more acculturated, they assume the

attitudes and practices of the mainstream or dominant culture (Blake et al.; Zhou, 1997), and the behaviors of the immigrant adolescent become more similar to native born adolescents.

Another factor that may contribute to the “no difference” ARTI findings when comparing documented to undocumented adolescents, may be social desirability and expectations from the community and families of these adolescents. It is expected that Afro-Caribbean adolescents conduct themselves appropriately and not participate in risky behaviors, or associate with peers that engage in risky behaviors. Archibald (2007) found that the Afro-Caribbean adolescents avoided risk-taking behaviors because they did not want to be talked about in their community or in their native island; they feared beatings (corporal punishment) and parental displeasure. Consideration must also be given to the fact that there may be family pressure for undocumented adolescents to avoid attracting the attention of law enforcement personnel (Hernandez, 2004). The issues surrounding Afro-Caribbean adolescent risk-taking behavior remain complex and no single factor can be identified as the cause of risky behaviors. From a descriptive perspective the undocumented adolescents in this study took more risks combining substance use with sexual activity than the documented adolescents. However, scores on the ARTI did not differ. Even though reliability of the ARTI scales was acceptable, there is reason to consider the validity when using the ARTI with this population. It may be useful to conduct focus groups where Afro-Caribbean adolescents can discuss their interpretation of ARTI items.

The data from this study reveals socio-cultural factors that can contribute to better understanding of Afro-Caribbean adolescent risk-taking behaviors. The mean age of

sexual initiation in this study was 11.5 years which is below the national age of 15 years (Busen, Marcus, & Von Sternberg, 2006). Researchers have found that Afro-Caribbean adolescents living in the Caribbean who are sexually active reported sexual debut as early as ten years old; less than three out of ten used birth control; and very few used condoms (Blum et al., 2003; Correia & Cunningham, 2003; Halcon, Blum, Beuhring, Pate, Forrester & Venema, 2003).

Thirty five percent of the participants reported drinking alcohol; this is consistent with researchers' findings of excessive alcohol use among immigrant adolescents (Epstein et al., 1998; Joseph & Tan 2003; Pantin et al., 2003). Afro-Caribbean adolescents have a high risk for developing alcohol use disorder due to the lack of parental presence and an unstable social environment. Lack of parental warmth, perceived parental rejection and chaotic family environment are traits related to disinhibition which have been shown to predict heavy alcohol use in adolescents (Fischer, Pidcock & Flecher-Stephens, 2007). Afro-Caribbean adolescent parents hold multiple jobs resulting in less parental presence and less quality time spent with their adolescents (Archibald, 2007); limited attention from parents can lead to feelings of neglect and rejection.

Nearly 54% of the Afro-Caribbean adolescents in this study reported beatings as a form of discipline. Barrow (2001) defines physical punishment as beatings, flogging and cuffing. This form of punishment is not considered abusive to Afro-Caribbean adolescents; it is expected as a cultural norm. Smith and Mosby's (2003) research examined child-rearing techniques of Jamaican adults and found reliance on physical force as a means of discipline and punishment. This approach to child-rearing led to child

maladjustment and deviancy in adolescence, with increased risk of drug and alcohol abuse, violence and risky sexual behavior (Kamsner & McCabe, 2000; Swinford et al., 2000). In summary, specific cultural factors like early sexual debut and aggressive physical punishment have the potential to contribute to risk-taking behavior. Even though these adolescents reported risk-taking attitudes and behaviors like their African American counterparts (Busen & Kouzekanani, 2000), sensitivity to these factors in future research is warranted.

Forty-three percent of the adolescents in this study reported living with a single mother. Butterfield (2001) and Barrow (2001) noted that a major portion of Afro-Caribbean households are headed by females. Additionally, around 50% of all Afro-Caribbean births are to single women. Nearly 53% of the Afro-Caribbean adolescents in this study never talk about sex with their parents. Smith and Mosby (2003) noted that Afro-Caribbean parents lack the know-how to establish trusting and supportive relationships with their children. This is an area for future nursing research where culturally-tailored caring approaches could be designed and tested to help establish communication bonds between parents and adolescents.

#### *Recommendations for Future Research*

No systematic research related to sexual activity and substance use among Afro-Caribbean adolescents has appeared in the literature. Likewise there has been no overall evaluation of risk-taking attitudes or behaviors in this population. To date, research has focused primarily on the risk behaviors of African American, Hispanic and White adolescents. It is important that further research look more closely at differences within the immigrant population, with particular consideration for the variation in length of time

of residing in the U.S. as well as other culturally-relevant factors that impact acculturation and assimilation. Findings from this study emphasized the need for further investigation of the relationship of risk-taking attitudes and behaviors with resilience in Afro-Caribbean adolescents. Also, there is an indication that long-range research may include an intervention study to facilitate parent-adolescent communication to establish bonds that impact adolescent likelihood for risk-taking behaviors. Consideration of the complex nature of health behavior for this population promises enhanced understanding of population uniqueness. Better understanding will enable a more instructive assessment of adolescent risk behaviors with increased likelihood of affecting risky sexual activity and substance use behaviors.

#### *Implications for Nursing Practice*

The early age of sexual initiation and high percentage of substance use in this population suggest that these adolescents need nursing attention. By utilizing Boykin and Schoenhofer's (2001) *Nursing as Caring Theory*, nurses can implement culturally sensitive health promotion focusing on each adolescents uniqueness related to risky behaviors. Nurses are called to set aside their preconceptions and develop a trusting relationship with this population. Listening and being on the same "wavelength" with these adolescents is essential if their health behavior is to be understood and eventually influenced. This has been conceptualized as a focus on adolescent voice (Jolly, Weiss & Liehr, 2007) that can provide health care professionals with the opportunity to develop meaningful approaches for improving health outcomes for these adolescents.



### *Implications for Nursing Education*

Given the present problem with adolescents' risk-taking behaviors, culturally sensitive curriculums must be incorporated into nursing education if the profession hopes to influence adolescent health. Although nurses typically have front-line experience in caring for adolescents, they often do not understand adolescent risk-taking behaviors and therefore they cannot extend to assist this population in risk reduction and health promotion. Through the lens of *Nursing as Caring*, nurses can be taught ways of building a trusting relationship with adolescents, addressing their issues with nonthreatening adolescent-friendly approaches. Using these approaches, Afro-Caribbean adolescents' personal responsibility for their health care can be strengthened, and risk-taking behaviors maybe reduced or prevented.

### *Implications for Nursing Involvement in Policy Development*

Nurses often intervene with adolescents on an individual basis, but they are less likely to be community advocates. It is important for nurses to not only acknowledge Afro-Caribbean adolescents as individuals, but to also become advocates in the development and implementation of health care policy. Conducting research with Afro-Caribbean families and other immigrants is crucial to inform policy makers of the complex issues surrounding these vulnerable populations particularly related to important health issues like risky sexual activity and substance use. The absence of reliable research on immigrant children and families increases the likelihood that policies for immigrants will be dismissive rather than inclusive and effective.

### *Limitations and Conclusion*

Several factors limited generalizability of the results of this study. The use of convenience sampling contributed to the potential for biased findings with self-selection by those who chose to volunteer for this study. The Afro-Caribbean adolescents were recruited from community centers which may not be representative of the Afro-Caribbean adolescent population as a whole. The overall sample size, particularly of the undocumented population in this study was small. Further research is needed with a larger sample size of documented and undocumented Afro-Caribbean adolescents, and this may best be undertaken in the school settings, where presence/absence of a social security number is part of the student record. Finally, qualitative research about the adolescents' feelings and beliefs about risky behaviors would provide a rich source of data to complement findings from this quantitative study. These data may be especially valuable for enhancing knowledge about undocumented immigrant adolescents for whom there is little understanding.

This study suggests that Afro-Caribbean adolescents have a number of behavioral health risks. These risks can have significant and lasting health consequences. Since most immigrant and Afro-Caribbean adolescents, documented or undocumented, attend public school (Hernandez, 2004), and are involved in church activities (Archibald, 2007), implementing health care and education programs in these settings will increase access to care for this population. Enabling access to culturally sensitive care will enable the best possibility for making a difference in risky sexual activity and substance use behavior.

## APPENDIX A

### Part 1, Adolescent Questionnaire

**Part I**  
**ADOLESCENT QUESTIONNAIRE**

DIRECTIONS: Please answer the following statements (sentences) by giving your most honest answer or how you really feel. **There are no right or wrong answers.** Circle the response that best describes how you feel about the statement. Nobody but the person conducting this study will see your answers.

Circle the **number** which goes with **your answer**

	SA (Strongly Agree)     4		A (Agree)                 3		SD (Strongly Disagree) 1	
			SD	D	A	SA
1.	I like to make my own decisions.	1	2	3	4	
2.	Being a good sport is as important to me as winning the game.	1	2	3	4	
3.	I look forward to doing new things.	1	2	3	4	
4.	When I think about the future I am happy.	1	2	3	4	
5.	Other people can't pressure me to do things I don't want to do.	1	2	3	4	
6.	The more I know about things, the better choices I can make.	1	2	3	4	
7.	I am happy with myself as a person.	1	2	3	4	
8.	I have no control over my feelings.	1	2	3	4	
9.	I am usually busy and I get a lot done.	1	2	3	4	
10.	When I want something, I usually just sit around wishing I could have it.	1	2	3	4	
11.	I like working with new people.	1	2	3	4	
12.	I am working towards things I want out of my life.	1	2	3	4	
13.	I know my parents are proud of me.	1	2	3	4	

14.	When I decide to do something, I do it.	1	2	3	4
15.	I make friends easily.	1	2	3	4
16.	I enjoy parties and other social activities.	1	2	3	4
17.	I think of myself as a leader.	1	2	3	4
18.	I like to watch violent TV shows and movies.	1	2	3	4
19.	I make most of my decisions quickly without thinking.	1	2	3	4
20.	If things don't go my way, I usually blow up.	1	2	3	4
21.	If there is something that I really want, I'll just take it.	1	2	3	4
22.	I usually don't listen to what other people say, and I do what I please.	1	2	3	4
23.	Fear of getting caught doesn't stop me from doing the things I want to do.	1	2	3	4
24.	I'm not afraid of the cops.	1	2	3	4
25.	If my best friend is in a fight, I jump right in.	1	2	3	4
26.	If all the teens I know are having sex, I would have sex even though I'm afraid.	1	2	3	4
27.	When I want to be part of the gang, I drink or do drugs.	1	2	3	4
28.	Sometimes dangerous things excite me.	1	2	3	4
29.	When I want some excitement, I have sex with someone new.	1	2	3	4
30.	Knives and guns don't scare me.	1	2	3	4
31.	When my friends make fun of me, I usually feel bad about myself.	1	2	3	4
32.	If somebody hurts me, I try and hurt them back.	1	2	3	4
33.	I like the feeling I get from drugs and alcohol.	1	2	3	4

34.	I think it is exciting to steal something and not get caught.	1	2	3	4
35.	When I fail at something, I usually never try it again.	1	2	3	4
36.	When I feel angry, I get over it by doing something wild.	1	2	3	4
37.	I think it would be exciting to be a drug dealer.	1	2	3	4
38.	People who know me, say I'm always cool.	1	2	3	4
39.	My friends can talk me into skipping school.	1	2	3	4
40.	I often say things I regret later.	1	2	3	4
41.	When I feel angry, I usually pick a fight.	1	2	3	4
42.	I feel OK saying NO to sex.	1	2	3	4
43.	I feel that I don't have control over my future.	1	2	3	4
44.	Getting in a street fight makes me feel powerful.	1	2	3	4

W:\busen/adolescentquestionnairepart1

APPENDIX B

Part II, Demographic Data

## Part II

### Demographic Data

#### ADOLESCENT QUESTIONNAIRE

Note to IRB : Items in bold have been added by the researcher to the ARTI Part II questions.

DIRECTIONS: It is helpful to know about teenagers who are in this study. Please answer the statements or questions below by **filling the blank** or **checking the correct answer**. What you write will not be seen by anyone but the person doing this study.

1. Your age in Years? \_\_\_\_

2. Your Sex?

Male \_\_\_\_\_

Female \_\_\_\_\_

3. Do you have a social security number?

Yes \_\_\_\_\_

No \_\_\_\_\_

4. In what country were you born? \_\_\_\_\_

5. In what country was your mother born? \_\_\_\_\_

6. In what country was your father born? \_\_\_\_\_

7. What is your race?

\_\_\_ White

\_\_\_ Hispanic

\_\_\_ Black/African American

\_\_\_ Afro-Caribbean

\_\_\_ Other \_\_\_\_\_

8. If Afro-Caribbean, what is your background?

\_\_\_ Jamaican

\_\_\_ Haitian

\_\_\_ Bahamian

\_\_\_ Trinidadian

\_\_\_ Barbadian



Other \_\_\_\_\_

9. What language is spoken in your home?

- English
- Spanish
- French
- Creole
- Other \_\_\_\_\_

10. How long have you lived in the U.S.?

- 1 week-5 years
- 6-10 years
- 11-18 years
- Other \_\_\_\_\_

11. What is your Mom's marital status?

- Single
- Married
- Separated
- Married but separated
- Divorced
- Widowed

12. What is your Dad's marital status?

- Single
- Married
- Separated
- Married but separated
- Divorced
- Widowed

13. Who do you live with?

- Mother
- Father
- Both parents
- Other \_\_\_\_\_

14. Who is at home before you leave for school?

- Mother

- Father
- Both parents
- Nobody
- Other \_\_\_\_\_

15. Who is at home when you return from school?

- Mother
- Father
- Both parents
- Nobody
- Other \_\_\_\_\_

16. What is your parent's level of education?

Mother

- No schooling
- Some grade school
- Grade School graduate
- Some high school
- High school graduate/GED
- Some college
- College graduate
- Unknown

Father

- No schooling
- Some grade school
- Grade School graduate
- Some high school
- High school graduate/GED
- Some college
- College graduate
- Unknown

17. What is your religion?

- Catholic
- Baptist
- Pentecostal
- Obeah
- Other \_\_\_\_\_

18. What style of discipline is practiced in your home?

1.  Beatings/Whoppings
2.  Time out
3.  Things taken away

19. Last grade finished in high school? \_\_\_\_\_

20. Are you comfortable talking to your parents about sex?

1.  Always
2.  Sometimes
3.  Never

21. Have you ever had sex?

- Yes  
 No

22. What age did you first have sex? \_\_\_\_\_

23. When you have or had sex, have you been drinking alcohol?

1.  Always
2.  Sometimes
3.  Never

24. When you have or had sex, have you been using drugs?

1.  Always
2.  Sometimes
3.  Never

25. When drinking alcohol, how likely is it that you will have sex?

1.  Very likely
2.  Somewhat likely
3.  Not likely

26. When using drugs, how likely is it that you will have sex?

1.  Very likely
2.  Somewhat likely
3.  Not likely

27. When you have sex, do you use birth control?

1.  Always
2.  Sometimes
3.  Never

28. What kind of birth control do you use? (Check of all that apply)

1.  Withdrawal
2.  Condoms/Rubbers
3.  Spermicidal gels/Foam
4.  Birth Control Pills
5.  Depo provera

29. Have you ever used street drugs?

1.  Yes
2.  No (if no skip # 30)

30. What drugs have you used? (Check all that apply)

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Crack cocaine (rock) | 4. <input type="checkbox"/> Marijuana (grass/weed)   |
| 2. <input type="checkbox"/> Heroin               | 5. <input type="checkbox"/> Crystal meth.            |
| 3. <input type="checkbox"/> Speed                | 6. <input type="checkbox"/> Huffing paint, glue etc. |

31. Have you used alcohol? (including beer & wine)

1.  Yes
2.  No

32. Have you ever smoked cigarettes?

1.  Yes
2.  No

33. Have you ever smoked Blacks or Blunts?

1.  Yes
2.  No

34. Have you ever been kicked out of school?

1.  Yes
2.  No (if no skip # 35)

35. Why were you kicked out of school? (Check all that apply)

- |                                      |  |
|--------------------------------------|--|
| 1. <input type="checkbox"/> Fighting | 4. <input type="checkbox"/> Bad language |
| 2. <input type="checkbox"/> Stealing | 5. <input type="checkbox"/> Failing      |
| 3. <input type="checkbox"/> Drinking | 6. <input type="checkbox"/> Drugs        |

36. Have you ever been arrested?

1.  Yes
2.  No (if no skip # 37)

37. Why were you arrested? (Check all that apply)

- |                                      |   |
|--------------------------------------|---|
| 1. <input type="checkbox"/> Stealing | 4. <input type="checkbox"/> Gang activity         |
| 2. <input type="checkbox"/> Fighting | 5. <input type="checkbox"/> Drinking              |
| 3. <input type="checkbox"/> Drugs    | 6. <input type="checkbox"/> Assault with a weapon |

38. Have you ever seen anyone shot or stabbed?

1.  Yes
2.  No (if no skip # 39)

39. Who did you see shot or stabbed?

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Parent     | 4. <input type="checkbox"/> Gang member |
| 2. <input type="checkbox"/> Friend     | 5. <input type="checkbox"/> Stranger    |
| 3. <input type="checkbox"/> Schoolmate | 6. <input type="checkbox"/> Other _____ |

40. Describe in your own words what risk-taking means to you.

41. What is the riskiest (or scariest) thing you ever done?

APPENDIX C

Parental Consent Form - English

## Parental Consent Forms

Patricia Liehr, PhD, RN and Kim Jolly, an advanced registered nurse practitioner and doctoral student from Florida Atlantic University Christine E. Lynn College of Nursing are trying to learn about immigrant status related to risky behaviors, including drug use, sexual activity, gang behavior and violence among Adolescents who were born in the Caribbean or have parents who were born in the Caribbean.

The researchers hope this study will help to: 1) increase understanding of risky behaviors among Afro-Caribbean teens in South Florida, and 2) lead to starting health programs that focus on what is important to decrease risky behaviors of Afro-Caribbean teens living in the United States. Your child has been asked to participate in this study and to complete a survey.

**The Title of Research Study:** Immigrant Status, Substance Use and Sexual Risk Behavior Among Afro-Caribbean Adolescents Living in the U.S.

**Survey Content:** Your child will be asked to complete a survey in two parts. Part I asks questions about your child's feelings about life, their friends and family, about their risky behaviors and their parents' behaviors. Part II asks your child's age, where they were born, and whether or not they engage in risky behaviors such as drinking alcohol, using tobacco and other drugs, gang behavior, violence, and sexual behavior. There are no wrong or right answers and your child will not put his or her name on the form. Therefore, there will be no way to identify your child's responses.

**It is Voluntary:** Students who participate only have to answer the questions they want to answer. They can skip questions or ask to leave the study at any time.

**It is Anonymous:** Names will not be placed on the forms.

**Administration:** The survey will be given between August 2008 and December 2009. It will take about 20 minutes to complete.

**Potential Risks:** The risks involved with participation in this study are no more than your child would experience in regular daily activities. However if your child should become stressed about a question, he/she may stop answering the question, skip the question, or ask to leave the study. The researcher is a nurse practitioner with 12 years of experience working with adolescents. She is well prepared for responses that may occur and make referrals if needed.

**For Further Information:** For questions or problems regarding your child's rights as a participant, you may contact the Division of Research of Florida Atlantic University at (561) 297-0777. For any other questions about the study you may contact the principal investigators, Dr. Liehr at (561) 297-2048 or Kim Jolly at (754) 322-3235.

**Consent Statement:** "I have read, or had read to me, the information describing this study. All of my questions have been answered to my satisfaction. I allow my child to take part in this study. My child can stop participating at any time without giving any reason and without penalty. I can ask to have the information related to my child returned to me, removed from the research records, or destroyed. I have received a copy of this consent form.

Signature of Parent or Guardian: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Investigator: \_\_\_\_\_ Date: \_\_\_\_\_

APPENDIX D

Parental Consent Form – Creole



## Konsantman Paren

Patricia Liehr, PhD, ak RN Kim Jolly ki se yon infimye e kap etidye pou genyen yon doktora nan infimye nan Florida Atlantic University Christine E. Lynn College of Nursing ap cheche konen kijan immigran yo kom pote yo sou kesyon pran dwog, aktivite sexyel sou konpotman brigant ak vyolans pami adolesan Afro-Caribbean kap viv nan sid Floride la. Recheche yo espere ke etid sa a ap ede a. 1) Amelyore kompreyansyon pami adolesan "Afro-Caribbean" nan sid Floride sou konpotman ki gen risk. 2) Komanse yon program de sente kap mete aksan sou sa ki empotan pou diminye move konpotman adolesan "Afro-Caribbean" kap viv nan etazini. Yo mande pitit ou a pou patisipe nan etid sa a e pou li ranpli yon fom. Sil vou ple li fom lan pou gen enfomasyon o sije de rechech la e pou gen enstrikyon sou kijan pou ou retire pitit ou.

**Tit rechech la:** Eta imigran, utilisa syon prodwi (dwog, cigarette) ak konpotman sexyel ki ka pote danje pami adolesan Afro-Caribbean kap viv o zetazini.

**Men Konteni Kesyon:** Yap mande piti ou a pou ranpli kesyone an. De (2) pati. Premye pati ap pose kesyon konsenan koman timoun nan we la vi, zanmi li yo, ak fanmili. O sije move konpotman yo, e konpotman paran yo. Dezyem pati a ap mande laj timoun nan, ki kote li fet ak si wi oswa non li konn fe bagay ki ka mete vil an danje tankou bwe tafya, fimmen, ak lot kalite dwog, konpotman vagabon, bandi, ak kijan li konpran sex. Pa genyen ni bon ni move repons pitit ou pa bezwen mete non li nan fom nan. Konsa pap gen mwayen pou yo we repons pitit ou.

**Se si ou vle:** Timoun yo kap patisipe ap reponn Selman kesyon yo vle. Yo ka pa reponn kesyon yo vle ou byen yo ka kite rechech la nenpot le you vle.

**Li pa mande nom:** Pa gen nom ki pral sou fom nan.

**Administrasyon:** Rechech la ap fe pandan mwa daout 2008 jiska mwa desamm nan lane 2009. Lap pran anviron ven (20) minit pou ranpli fom, pandan timoun nan nan klass de sante. Le yo tounen tout fom yo, moun kap fe rechech la ap pale pandan 15-20 minit sou sije konpotman ki gen risk

**Pa gen pyes risk:** Pap genyen pyes risk pou timonn kap patisipe nan rechech la. Sepandan si yon timoun pe reponn yon kesyon, li gen dwa pa reponn. Ou byen li ka kite rechech la. Mounn kap fe rechech la se you infimye ki gen 12 zan eksperyans nan travay ak adolesan. Li byen prepare pou pwoblem ki ka rive. Moun kap travay kom sosyal woke nan lekol la ap la tou si gen ijans.

**Pouplis enfomasyon:** Pou kesyon ak pwoblem konse nan dwa timoun kap patisipe nan rechech la ou ka kontakte seksyon rechech la nan Florida Atlantic University nan (561) 297-0777. Pou nenpot kesyon konsenan rechech la ou ka kontakte moun ki an chaj rechech la nan (561) 297-2048 ou byen Kim Jolly nan (754) 322-3235.

**Instrikyon de konsantman:** mwen te li, oubyen yo te li'l pou mwen, enfomasyon ki konsene etid la. Yo te reponn mwen tout kesyon yo avek satisfaskyon. Mwen admet pitit mwen an pran plas nan etid sa-a. pitit mwen an ka sispann patisipe a nenpot ki moman san li pa bezwen bay pyes rezon e san amand. Mwen ka mande genyen enfomasyon pitit mwen an retounen ban mwen, retire'l nan rechech reko a, oubyen detwi li. Mwen te resevwa yon kopi fom konsantman-an.

Senyati paran ou byen gadyen: \_\_\_\_\_ Dat: \_\_\_\_\_

Senyati investygate: \_\_\_\_\_ Dat: \_\_\_\_\_

APPENDIX E  
Teen Assent

## Teen Assent

A doctoral student from Florida Atlantic University Christine E. Lynn College of Nursing is trying to learn about risk behaviors, including drug use, sexual activity, gang behavior and violence of teens who were born in the Caribbean or have parents who were born in the Caribbean. If you decide to participate in this study, you will be asked questions in two parts. Part I asks you questions about how you feel about your life, your friends, your family, and it asks questions about risky behaviors and your parents' behaviors. Part II asks your age, where you were born and if you have any risky behaviors, including sexual activity, drug use, gang behavior and violence behaviors. This study will take place at your community center. It should take about 20 minutes to answer the questions.

The researcher hopes this study will help to: 1) increase understanding of risky behaviors among Afro-Caribbean teens in South Florida; and 2) lead to starting health programs that focus on what is important to decrease risky behaviors of Afro-Caribbean teens living in the United States.

You do not have to be in this study if you don't want to, and you can quit the study at any time. If you don't like a question, you don't have to answer it, and if you ask, your answers will not be used in the study. If a question upsets you, the researcher is a nurse who will help you. The counselors at the community center will also be available to talk to you about your concerns. No one will get mad at you if you decide you don't want to be in the study.

Other than the researcher, no one will see your answers, including teachers, group leaders, your friends, or other teens. Even the researcher will not be able to tell exactly how you answered because your name will not be collected.

Assent statement: This research study has been explained to me and I agree to be in this study.

\_\_\_\_\_  
Subject's Signature for Assent

\_\_\_\_\_  
Date

Check which applies (to be completed by person conducting assent discussion):

The subject is capable of reading and understanding the assent form and has signed above as documentation of assent to take part in this study.

The subject is not capable of reading and understanding the assent form, however, the information was explained verbally to the subject who signed above to acknowledge the verbal explanation and his/his assent to take part in this study.

\_\_\_\_\_  
Signature of person obtaining assent

\_\_\_\_\_  
Date

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