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PARENTAL FACTORS IN ADOLESCENCE AS PREDICTORS OF SEXUAL
BEHAVIOR AMONG HISPANIC/LATINO EMERGING ADULTS

A thesis submission in partial fulfillment of the requirements
For the degree of Master of Public Health in Health Education

By

Olubukola Toluwase Olajide

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The thesis of Olubukola T. Olajide is approved:

Myriam Forster, MPH

Date

Lawrence Chu, PhD, MPH, M.S.

Date

Kathleen Young, PhD, MPH, M.S., Chair

Date

California State University, Northridge

California State University, Northridge

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ABSTRACT

PARENTAL FACTORS IN ADOLESCENCE AS PREDICTORS OF SEXUAL BEHAVIOR AMONG HISPANIC/LATINO EMERGING ADULTS

By

Olubukola T. Omolayo

Master of Public Health in Health Education

Risky sexual behavior is associated with many adverse health outcomes including sexually transmitted infections and unintended pregnancies. These outcomes are elevated among adolescents and emerging adults and cost the nation billions of dollars annually. Studies show that parental influences (socioeconomic status, monitoring, and communication) play a significant role in reducing risky sexual behaviors among teenagers. However, it is not generally known whether this influence continues into early adulthood, neither has it been studied specifically among the Hispanic/Latino population. Therefore, this study utilized secondary data obtained from Project RED (Reteniendo y Entendiendo Diversidad para Salud) and explored whether or not parental factors, cultural identity and gender of 10th graders in Southern California will predict the use of condoms as emerging adults, an important health protective sexual behavior. Logistic regression was used to assess these predictive associations. The sample was composed of 57.6% females and 42.4% males. At Time 1, the respondents' mean age was 15.86 years and 20.93 years at Time 2. Findings of the study indicated that, for the sample, parental communication (OR = 1.116, $p = .025$) was the only parental factor predictive of condom

use in emerging adulthood. However, these predictors lost significance in the aggregate logistic model. The implications of the findings for public health and health education are discussed. Several limitations that reduce the generalizability of the results of this study are also outlined.

Key words: acculturation, acculturation discrepancy, condom use, cultural identity, emerging adulthood, immigrant paradox, machismo, marianismo, parental communication, parental monitoring, parenting styles, risky sexual behavior

CHAPTER 1

INTRODUCTION

The introduction section provides an overview of the prevalence of risky sexual behaviors, namely condom use, among adolescents and emerging. The outcomes of the behavior are explored within the contexts of age, gender and ethnicity from the national level to the local level. Statistical and epidemiological facts are presented to explain these outcomes. Included in this chapter are the goals and objectives for the study, hypotheses and the theoretical framework. Additionally, assumptions, delimitations, and limitations associated with the study are stated. Lastly, the terms utilized in the course of the thesis are defined.

Overview of the problem

Adolescents are at a stage in which they experience rapid development physically, emotionally, and socially. As they attempt to develop individual self-identities, teenagers grapple with several challenges; one of which is the development of intimate relationships. Due to these specific physiological, psychological, and contextual changes that occur during this developmental phase, teens are particularly susceptible to involvement in problem behaviors. According to the YRBS, among the concerning risk behavior is the higher likelihood of drug use and alcohol consumption, prior to having sex thereby reducing the likelihood of contraceptive use (YRBS; Eaton, et al, 2012).

Risky sexual behavior can lead to a multitude of adverse health outcomes that include sexually transmitted diseases (STDs), human immunodeficiency virus (HIV), and unintended pregnancy (Centers for Disease Control and Prevention [CDC], 2012a)

resulting in social and economic burden. According to the CDC (2012b), teen pregnancy and childbirth accounted for nearly \$11 million in national expenditure in 2008 due to the provision of health and foster care, incarceration among children of teenagers and lost tax revenue due to low socioeconomic status among adolescent parents.

Socially, adolescents who become parents face lower educational achievement, reduced job opportunities and limited social support systems while their children are at increased risk of premature birth, low birth weight and death. Over the life course, these children are at risk for poor school performance, not completing their education, becoming adolescent parents themselves, and un- or under- employed (LA Best Babies Network, 2010; CDC, 2012b).

According to the Centers for Disease Control and Prevention (CDC, 2011), the birth rate among adolescents between ages 15 and 19 years has steadily declined from 1991 to 2009 across ethnic groups for which data was collected (Figure 1). However, there are noticeable trends and disparities: the decline in birth rate among black adolescents was higher from 1991 to 1994, than from 1999 to 2009. Hispanic teens have the smallest reduction of birth rates and consistently higher overall birth rates since 1999 (CDC, 2011).

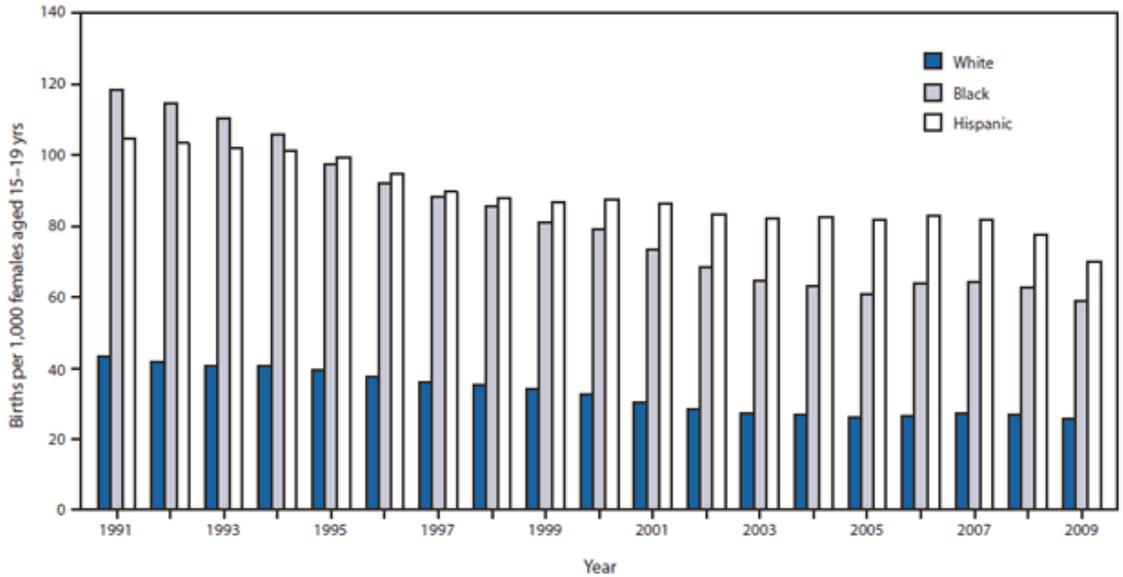


Figure 1. Birth rates for teenagers in the United States by ethnicity, 1991-2009.

One of the many consequences of unprotected sexual intercourse is the increased risk of acquiring sexually transmitted infections (chlamydia, gonorrhea, genital human papillomavirus, and HIV). Overall, the CDC has found that condom use is very effective in preventing the transmission of HIV and other sexually transmitted infections and preventing pregnancy (Advocates for Youth, 2014). However, in 2009, chlamydia and syphilis incidence continued to increase among individuals aged 15 to 19 and 20-24 (CDC, 2010). Although teenagers make up one-fourth of sexually active persons, they are at higher risk of STIs and represent approximately 50 percent of all new STIs (HHS, 2011; & Guttmacher Institute, 2012). Based on the mandatory report of STIs, Hispanic adolescents rank third in the rates of chlamydia and gonorrhea, following non-Hispanic black and American Indian/Alaska Native (CDC, 2010).

The CDC recommends that when latex condoms are used “consistently and correctly” they are highly effective in preventing the transmission of STDs and HIV and prevent unintended pregnancy although the most reliable methods are abstinence or

monogamy with an uninfected partner (CDC, 2012c; & Office of Adolescent Health [OAH], 2012). Condom availability programs in adolescent-frequented locations such as schools and teen clinics have reduced barriers (financial, logistical, and social) that deter sexually active teenagers from using condoms (Advocacy for Youth, 2014). These programs have been shown to discourage teenagers to early initiation of sex and decrease the frequency of sexual activity or number of partners among sexually active teenagers. Rather, they embolden sexually active teenagers with access to such sites to use condom often and more consistently than their sexually active peers who are without condom availability programs. Although the use of condoms has increased among adolescents since the 1990s, they report inconsistent use (OAH, 2012).

Background of the Study

The term emerging adulthood/the emerging adult (EA) is a relatively new phenomenon proposed by psychologist Jeffrey Jensen Arnett in 2000 to encompass the transitional period from late adolescence to the late twenties, ages 18 to 25 years (Arnett, 2000; Arnett, 2004; Sussman & Arnett, 2014). Arnett argued that this is a “period of frequent change and exploration” and is “theoretically and empirically distinct” from adolescence and young adulthood (Arnett, 2000). Arnett (2004) also states that this distinctive period is characterized by five distinct features:

- *Identity exploration* – discovery of possibilities, particularly in love and work, as parental surveillance decreases, thus resulting in better self-understanding
- *Instability* – aware of expectations to have a “Plan” for the direction of life but due to exploration uncertain of that direction

- *Self-focus* – most self-focused period as decisions have to be made by the EA without accountability to parents (adolescence) or relationship partner (adulthood), leading to self-sufficiency
- *Feeling in-between* – due to exploration and instability EAs are not adolescents (living at home and required to attend school) or adults (married, parents, and have stable occupations)
- *Possibilities* – opportunity to transform selves from images of parents to develop who they want to be and what they wish out of life.

Emerging adulthood, as a phenomenon was previously thought to be unique to industrialized countries. However, recent literature suggest that other countries, including Europe, Latin America, China and Japan, now display similar patterns toward this growing developmental stage (Salkind, 2005; Arnett & Eisenberg, 2007; Billari & Liefbroer, 2010; Speder, Murinko & Settersten Jr., 2014). These patterns are often marked by delays in behavioral changes associated with leaving the parental home, finishing school, finding work, getting married or partnered, and having children (Speder, Murinko & Settersten Jr., 2014). For example, the median age for marriage increased from ages 22 years (females) and 26 years (males) in 1890 to 26 years (females) and 28 years (males) in 2010 (U.S. Census Bureau, 2010); due to the increase in the number of individuals who are pursuing higher education. Overall college enrollment in the United States increased from 8,581,000 in 1970 to 19,125,780 in 2010 (Kantrowitz, 2010). Furthermore, the 1960s brought about a shift in the acceptance of premarital sexuality and cohabitation before marriage (Salkind, 2005). In addition, attitudes towards being single have changed positively while marriage became viewed more negatively for its

restrictions on sexual freedom (Thornton, 1989; Thornton & DeMarco, 2001). Studies support that the proportion of sexual intercourse has increased among adolescents and emerging adults since the 1980s (Halpern et al, 2006; Biddlecom, 2004) with almost 50 percent of adolescents reporting ever having had sexual intercourse in 2011 (CDC, 2013a).

Risky sexual behavior in emerging adulthood

The CDC defines risky (high-risk) sexual behavior as consisting of sexual activity, multiple partners, and no or improper use of contraceptive (2013a). According to the CDC (2013b) and the U.S. Department of Health and Human Services (USDHHS, 2012), aside from abstinence, consistent and correct use of male condoms provide the most reliable method to reduce the transmission of sexually transmitted diseases (STDs), including the human immunodeficiency virus (HIV). STDs can cause infertility in both men and women, increase the risk for certain types of cancers, and the likelihood to contract other types of STDs (USDHHS, 2012).

Chlamydia, gonorrhea and syphilis remain the most reported notifiable diseases in the United States. The high reported incident rate is attributed to increased screening activities, more sensitive diagnostic tests, active case reporting from health providers and laboratories, and improved information systems used for reporting (CDC, 2012). However, despite all efforts, emerging adults continue to exhibit the highest rates of STDs among all age groups. In 2011, young people aged 15 to 24 constituted four times the reported rate of chlamydia and gonorrhea with the highest rates among ages 20 to 24 years of age who also maintained the highest rate of primary and secondary syphilis

(CDC, 2012b). The trend remained consistent for the estimated number of diagnosed HIV infections in 2011 (CDC, 2013b).

Approximately half of births among single college-aged women were unintended between 2006 and 2010, revealing a trend of an increase of six percent since 2002 (Table 1) according to the CDC (Jones, Mosher, & Daniels, 2012). And although, Black women maintained the highest percentage of unintended pregnancies overall, the occurrence increased for Hispanic women over the same period.

Table 1

Trends in percentage of unintended pregnancies among never married women ages 15-44

Age	2002	2006-2010
15-19	78.4	77.2
20-24	44	50.1
25-44	23.8	25.4
Race		
Hispanic/Latina	16.8	18.1
White	10.7	9.3
Black	26.2	22.9

Note. Adapted from *Current contraceptive use in the United States, 2006-2010, and changes in patterns of use since 1995*. Jones, Mosher, & Daniels (2012). Retrieved from <http://www.cdc.gov/nchs/data/nhsr/nhsr060.pdf>

A contributing factor to this increase in unintended pregnancies is the downward trajectory of condom use among women of all ethnicities except non-Hispanic white as shown in Table 2 (Jones, Mosher, & Daniels, 2012). Across ethnic groups, the use of condoms has steadily risen as the preferred method of contraception among sexually active women aged 15 to 44 years in the United States from 1982 to 2002 (Mosher et al, 2004).

Table 2

Trends in percentage of condom use among women ages 15-24 years in the United States by race

Race	1995	2006-2010
Hispanic/Latina	31.9	29.3
White	27.1	19.9
Black	35.4	38.2

Note. Adapted from *Current contraceptive use in the United States, 2006-2010, and changes in patterns of use since 1995*. Jones, Mosher, & Daniels (2012). Retrieved from <http://www.cdc.gov/nchs/data/nhsr/nhsr060.pdf>

As for men, almost twice as many (estimated 33%) unmarried non-Hispanic black men and Hispanic men have had a child compared to 19 percent of non-Hispanic white men (Martinez et al, 2006). Men aged 20 to 24 years compared to 15 to 19 years of age were more likely to use no contraceptive methods and less than 50 percent had ever used condoms. Of all men between the ages of 15 to 44 years, almost half (44%) of Hispanic/Latino origin had ever used condoms almost similar to non-Hispanic white men (45%) but less than non-Hispanic black men at 59 percent.

Significance of the study

At a population of 53 million, Hispanic/Latinos constitute the largest minority group in the United States comprising 17% of the total population (U.S. Census Bureau, 2014a). California had the largest Hispanic/Latino population in 2012 (14.5 million) compared to other states and among all counties (U.S. Census Bureau, 2014b). In 2011, Hispanic/Latinos had a median household income of \$38, 624 well below the federal median household income (\$50,054) and only surpassing the median household income of African Americans in both 2010 and 2011 as indicated in Table 3. There were also

25.3 percent who were in poverty compared to 15 percent federally; again just slightly better than African Americans that were at 27.6 percent (U.S. Census Bureau, 2014c).

Table 3

Median household income by race in the United States, 2010-2011

Race	2010	2011
White	\$53,340	\$52,214
White, not Hispanic	\$56,178	\$55,412
Black	\$33,137	\$32,229
Asian	\$66,286	\$65,129
Hispanic origin (any race)	\$38,818	\$38,624

Note. Adapted from U.S. Census Bureau (2014b). *Asians fastest-growing race or ethnic group in 2012, census bureau reports.* Retrieved from <http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

Based on the 2010 U.S. census (U.S. Census Bureau, 2013), there were approximately 9.8 million people in the county of Los Angeles, and these comprised more than 26% of the overall population of California. Of these, almost 50% are of Hispanic origin and 15.4 percent were between 15-24 years in according to the 2010 U.S. census. The median household income between 2006 and 2010 was \$49,123 with 19.5% living below the poverty level and about a third of persons 25 years and older having a bachelor's degree or higher. In the Los Angeles-Long Beach metropolitan area, the median earnings in Hispanic households was \$45,000 in 2010 and 10.73% of Hispanics held a bachelor's degree or higher (Pew Research Center, 2012).

The 2010 Los Angeles County report (Los Angeles County Department of Health [LADPH], 2011) indicated that persons 24 years and under account for 35.3% of all sexually transmitted diseases (chlamydia, gonorrhea, and all stages of syphilis) and adolescents account for 3% of the total HIV/AIDS diagnosed in 2011 (LADPH, 2012).

In Los Angeles County, pregnancies among youth are high and account for 9.8% of all live births with nearly 270 million dollars of associated public health and medical expenditures (LA Best Babies Network, 2010). Epidemiological data indicate that teenage Latinas have childbirth rates nearly 12 times that of their Asian counterparts and 7 times that of non-Hispanic white females.

YRBS (CDC, 2012d) data show that among high school students in Los Angeles, 39% had sexual encounters with 6% of respondents reporting initial sexual intercourse before age 13. Furthermore, 39% did not use a condom at the most recent sexual encounter and almost a fifth (18%) reported drinking alcohol and using drugs prior to sexual activity and male students were more likely to be sexually active than female students with highest activity level among Hispanics as compared to other ethnic groups.

According to the 2011 Los Angeles County Sexually Transmitted Disease Morbidity Report (2013), in the last five years, the reported cases of chlamydia in Los Angeles County increased by 21% from 421 to 513 cases per 100,000 persons and reported cases of gonorrhea increased by 7.3% from 96 to 103 cases per 100,000 persons. The same report as illustrated in Table 4 indicated that in 2011, those between the ages of 15 and 24 years are responsible for most of the reported cases of STDs. Of the reported cases, Hispanic/Latinos constituted the highest proportion of all the STDs except gonorrhea in which African Americans reported the highest percentage (37%).

Table 4

Percent Reported Cases of Sexually Transmitted Diseases in Los Angeles County, 2011

Sexually Transmitted Diseases	Age Group (15-24 years)	Hispanic/Latinos
Chlamydia	62	42
Gonorrhea	48	31
Syphilis	31	47
Pelvic Inflammatory Disease (PID)	49	45

Note. Adapted from *Sexually transmitted disease morbidity report 2011* (2013). Retrieved from <http://publichealth.lacounty.gov/std/docs/2011STDReport.pdf>

Among all Hispanic/Latino males, those ages 15-24 years comprised 17% of all STD cases reported in Los Angeles County compared to 9% among Whites. Among all Hispanic/Latino women, ages 15-24 years at 20% comprised a higher percentage of all reported cases of STDs compared to the aforementioned Hispanic males' percentage. However, the proportion is identical to that of White females, also 20%. Of all reported chlamydia cases, Latinas between the ages of 20-24 years reported the highest number of cases.

There also exists a disparity for Hispanic/Latinos in Los Angeles in relation to HIV/AIDS. According to the 2012 Annual HIV Surveillance Report (Los Angeles County Department of Public Health, 2013), in 2012, there were a total of 1,880 new cases of HIV in Los Angeles County accounting for almost 38 percent of new HIV diagnoses in California. Los Angeles County also accounted for approximately 38 percent of all persons living with HIV/AIDS in California. The report further pointed out that of the total HIV/AIDS cases in the county, 35% were Hispanic/Latino and ages 20-29 years made up 30% of those cases. Gender-wise, among all females newly diagnosed in 2012, Hispanic women represented 41% of cases with ages 20-29 accounting for 30%

of the cases. Among all newly diagnosed males in 2012, Hispanic males signified 34% with ages 20-29 year comprising 31% of cases within the group.

In 2011, Los Angeles County accounted for 1 in every four live births in California of these births, 36.3% was unintended (California Department of Public Health, 2013; Maternal and Infant Health Assessment, 2014). Of these, 57.4% were by Hispanic mothers in 2010 according to the Los Angeles Mommy and Baby (LAMB) project and of all births, 27.8 percent of all mothers reported using some method of birth control around the time they got pregnant while 31.9 percent of Hispanic mothers indicated the same (Los Angeles County Department of Public Health, 2014). Lack of contraceptive use, using less effective contraceptive methods (improper or inconsistent use) and lack of control over fertility (male partner refusal to use contraceptive) can often result in unplanned pregnancies (LA Best Babies Network, 2009).

Parental involvement, such as parent-child communication and parental monitoring, has been shown to positively affect the behaviors of children in the Hispanic/Latino group (Niemeyer, Wong, & Westerhaus, 2009). Of particularly interest is the cultural concept of *familismo* (familism) which involves maintaining close familial bonds while fulfilling familial obligations and strongly believing in family support (Sabogal et al, 1987). Familismo has also been found to be a protective factor for social stressors among Latino adolescents (Stein et al, 2013).

Statement of the problem

Emerging adulthood is a unique developmental stage for self-identity and exploration. The increase in the rate of sexual intercourse among this age group has contributed to the higher rates of unintended pregnancies and STIs that may be due to

unprotected sex. There are, however, very few studies on the emerging adult sexual behavior. Although the literature has explored how parental factors influence adolescent sexual behavior, very few actually studied whether these influences continue into emerging adulthood. And the few that have done so, have found inconsistent findings.

Latinos, constitute a large portion of Los Angeles County's population and even though health outcomes for them may not be as bad as those for African Americans, by virtue of their number, they require special attention as they significantly contribute to the overall health status of the county. Because of the disparities in reproductive health and outcomes among minority youth, ongoing health disparities research can inform future prevention program design. Longitudinal, community based samples can yield important information and improve the design of evidence based- prevention curricula to reduce the prevalence of risky sexual behavior. Therefore, this research intends to study whether involvement of Hispanic/Latino parents during adolescence remains protective of sexual behavior in the Hispanic/Latino emerging adult.

The Hispanic/Latino population is a heterogeneous consisting of many ethnic groups and cultures. It is not the intention for this study to explore individual groups but to investigate if there exists a general pattern of parental involvement that persists into emerging adulthood.

Purpose of the study

The specific aims of this research study are:

1. To thoroughly explore current literature on the influence of parental characteristics as well as adolescent demographics (gender) and cultural identity on the use or non-use of condoms in emerging adulthood.

2. To identify the influence of parents (demographically and interpersonally) on the Latino/Hispanic emerging adult's sexual behavior and to indicate the implications to the public health field.
3. To theoretically explain these influences on emerging adult sexual behavior.
4. To contribute to extant literature regarding the determinants of emerging adulthood sexual behavior.

The objectives for this study are as follows:

1. To identify specific parental and adolescent socio-demographic and cultural identity factors in adolescence that continue to play a significant role in the sexual behavior of Southern Californian Hispanic/Latino emerging adults through appropriate bivariate analyses.
2. To properly apply logistic regression model to predict the odds of condom use using parental factors and cultural identity variables as independent variables.

Research question and hypotheses

What parental influences during adolescence are associated and predict sexual behavior in the emerging adult? As a result, the study focused on the following hypotheses:

H1: Active parental supervision/monitoring in adolescence increases the likelihood of condom use among sexually active emerging adults: During adolescence, a child who is aware that his/her parents have knowledge of his/her actions will likely make desirably positive choices. These choices may become habits that continue into adulthood.

H2: The more parents communicate with their adolescent children, the more likely the child will use condoms as an emerging adult during sexual intercourse:

Youths who feel comfortable speaking with their parents will seek their advice and will be given more accurate information and guidance so as to make healthier lifestyle decisions well into adulthood.

H3: Higher socioeconomic status (parental income) results in increased condom use in the emerging adult: Higher parental income opens up access to educational resources as well as healthcare services to condoms.

H4: Higher socioeconomic status (parental education) results in increased condom use in the emerging adult: Parents with higher education have more knowledge about healthy lifestyle habits and have access to resources that can help their children make good decisions in relation to their health.

H5: Increased cultural identification increases the likelihood the emerging adult will utilize condoms during sexual intercourse: Identifying more with one's cultural group increases the likelihood that one will abide by the group's mores and so one will make socially acceptable decisions.

H6: Sexually active female emerging adults are more likely to use condoms during sexual intercourse than sexually active male emerging adult: As a result of receiving more caution regarding sexual intercourse in adolescence, females are more likely than males to use condoms during sexual intercourse as adults.

Theoretical rationale

Parental involvement has been documented as a catalyst in adolescent health behavior. Adolescents in and of themselves make the ultimate decisions whether or not to participate in risky behaviors and indeed would prefer to believe that their behaviors have no external influence. However, parental involvement in the adolescents' daily lives may positively or negatively direct how, why, and when their children participate in certain acts; acts as superficial as chosen attire or hairstyle to more important choices, such as lifetime partners and sexual behaviors. The question now is whether or not these theories apply to emerging adults. Although emerging adults are the crucial link between adolescence and adulthood, their behaviors have been studied as part of the adolescent or adult categories rather than studied as a unique group onto themselves. Do the trends noted in adolescent health behaviors apply to this distinct developmental stage? Do those of adults? Or do emerging adults have unique patterns of decision making?

Although the nature of this study is exploratory, it is important to recognize the role that theory plays in decision making and how intrinsic and extrinsic factors mold individual actions and behaviors. A popular theoretical framework applied toward sexual behavior is the theory of planned behavior. The theory of planned behavior (TPB) operates under the premise that action or behavior is influenced by one's intention to perform a certain behavior or by one's actual control over the behavior. Intention, in itself, is also influenced by three direct measures: attitude toward the behavior; subjective norms and perceived behavioral control. Furthermore, these measures themselves are each influenced by indirect constructs: attitude toward the behavior is influenced by behavioral belief, subjective norms by normative beliefs, and perceived behavioral

control by control beliefs. For the purpose of this study, these indirect constructs will not be discussed.

Attitude toward condom use is either positive (prevention of pregnancy and/or sexually transmitted diseases) or negative (inhibits sexual pleasure in the case of males or disapproved by partners in the case of females). Therefore, the intention to use condoms is enhanced if attitude toward the action is positive and diminished in the case of a negative attitude. The same conclusion applies to the remaining two direct measures. Subjective norms intimate that intention to action can be manipulated by the opinion of individuals with whom there are close relationships, i.e. family, friends, and peers (individuals whose beliefs and outlook have weight). Their stance on condom use could sway an individual's intention to use, or not use a condom. Lastly, perceived behavioral control rests on the individual's perception of their ability to act on the behavior. This measure on its own could result in bypassing intention causing the individual to act directly.

This study emphasizes the subjective norms construct of the TPB theory in that the opinions and guidance of parents can affect the health behaviors of adolescent and consequently emerging adults (Figure 2). It is assumed that the more parents interact with their children through communication and supervision the more likely they will direct their children towards positive health behavior choices, namely condom use, thereby reducing risky sexual behavior. Additionally, the framework indicates that certain socio-economic factors, parental education and income also play a role in adolescent/emerging adult use of condoms. Such an influence may positively increase the individual's perceived behavioral control and attitude toward the health behavior. Well-educated

parents are more likely to be more knowledgeable about sexual intercourse and related consequences as well as know of preventative measures. As such, the likelihood they will instill such knowledge into their children is higher. Moreover, their income status will provide avenues to procure the prophylactics for the adolescents thereby increasing the chance that the condoms will be used.

The subjective norms construct, however, only clarifies the influence of significant figures rather than group effects. There is a potential for cultural identity to also play a role in the health behavior of early adults, it is important to find a social theory to explain such an influence. Social identity theory is such a theory. The premise of self-categorization theory, developed in the 1980s by John Turner and colleagues to expand the social identity theory, is the cognitive depersonalization of an individual in order to identify with a group (Hogg & Levine, 2010). Based on identifying with the chosen group, the person adopts an array of behaviors, conformities, values and ethnocentrism intrinsic to the group as well as extrinsic (stereotypically attached by others).

Therefore, an adolescent deeply embedded within his or her culture will display strong identification with the culture norms. The individual will be more integrated within the community. He or she will participate in cultural rituals and behaviors, associate more with members within the culture, be more comfortable speaking the language associated with the group, eat culturally appropriate meals in the expected manner, and play the expected roles. As a result, the adolescents' health outcome will be strongly connected to cultural expectations as he or she will choose to behave in a manner that is not only pleasing to members of the culture but also identify him or herself

as a member of that culture for the adolescent will believe his or her culture to be the best in comparison to other groups.

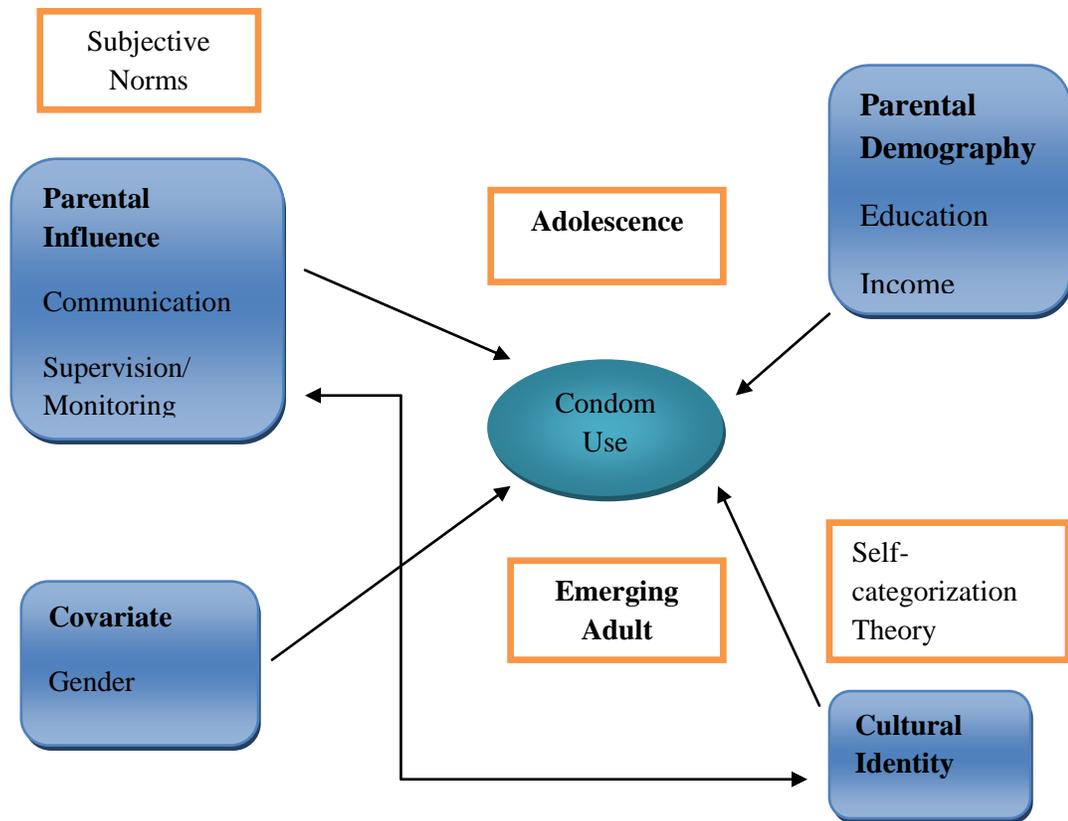


Figure 2. Conceptual framework indicating the influence of parental factors on the sexual behavior of emerging adults.

The research will not apply the TPB wholly as a theoretical framework for sexual behavior. However, it does function under the assumption that these underlying constructs direct the behavior of the target population. Certainly, both internal and external factors influence one's decisions and perhaps one more than another. The TPB allows a more in-depth study of a small portion in a small sample.

The subjective norms construct, however, only clarifies the influence of significant figures rather than group effects. As there is a potential for cultural identity to also play a modification role in the health behavior of early adults, it is important to find

a social theory to explain such an influence. Self-categorization theory does so. The premise of self-categorization theory, developed in the 1980s by John Turner and colleagues to expand the social identity theory, is the cognitive depersonalization of an individual in order to identify with a group (Hogg & Levine, 2010). Based on identifying with the chosen group, the person adopts an array of behaviors, conformities, values and ethnocentrism intrinsic to the group as well as extrinsic (stereotypically attached by others).

Therefore, an adolescent deeply embedded within his or her culture will display strong identification with the culture norms and is assumed to be more integrated within the community. He or she will participate in cultural rituals and behaviors, associate more with members within the culture, be more comfortable speaking the language associated with the group, eat culturally appropriate meals in the expected manner, and play the expected roles. As a result, the adolescents' health outcome will be strongly connected to cultural expectations as he or she will choose to behave in a manner that is not only pleasing to members of the culture but also identify him or herself as a member of that culture for the adolescent will believe his or her culture to be the best in comparison to other groups.

Assumptions, delimitations and limitations of the study

The researcher understood that the following assumptions were the basis for the sample selection, analyses performed, and conclusions drawn from the study:

1. That all ethnic groups within the Hispanic/Latino race have similar psychological, social, cultural, and life experiences. In other words, the groups possessed similar risk factors on macro and micro levels.
2. Participants responded honestly to the questionnaires.
3. Parental income status remained unchanged through the duration of the data collection.
4. The reported use of condoms during the last sexual intercourse implies consistency of condom use by the participants
5. Errors during data input were detected and corrected

Delimitations that existed for this study include the following:

1. Although several problems exist in relation to risky sexual behavior such as sexual debut and number of sexual partners for Hispanic/Latino youths, the study will focus only condom use practices
2. Pre-existing, longitudinal data that were collected by investigators at the University of Southern California are utilized for this study
3. The study is limited to Hispanic/Latino youths in 10th grade in Los Angeles County.
4. The study covers only the use or non-use of condoms as the dichotomous outcome measure for the study.

The following factors that were not under the control of the researcher were identified:

1. The results of this analysis may be generalized to communities that share similar economic, ethnic, and social characteristics with Los Angeles County.

2. This thesis does not account for abstinence as a sexual behavior outcome among the adolescents of interest; therefore, it is not comprehensive.
3. The thesis is restricted to assessing parental characteristics among Hispanic participants because study participants are of Hispanic descent.

Definition of terms

- Acculturation: a dynamic and multidimensional process of adaptation that occurs when distinct cultures come into sustained contact. It involves different degrees and instances of culture learning and maintenance that are contingent upon individual, group, and environmental factors. Acculturation is a dynamic, continuous and fluctuating process. It is multidimensional in that it transpires across numerous indices of psychosocial functioning and can result in multiple adaptation outcomes (Organista, Marin, & Chun, 2010).
- Parental communication: the degree to which the parent and the child are satisfied with how the family functions in terms of rules, relationships, and connectedness; the degree of openness with which communication is perceived between a parent and a child; the parent and child's ability to manage conflicts; and to what degree the child perceives their family meets their care needs' (Riesch, Anderson, & Krueger, 2006).
- Parenting styles: specific attitudes and activities of parents that tend to produce identifiable patterns in offspring adjustment outcomes (Lerner, Lerner, & Finkelstein, 2001). These styles are authoritative, authoritarian, permissive, and uninvolved and produce children who range from well-adjusted to rebellious.

- Parental monitoring/supervision: Parenting features such as knowing where your child is (e.g., after school and on the weekends), who they are with, and setting guidelines or rules (e.g., for curfew and performing household tasks) [Windle, et al., 2010].
- Cultural identity: An individual's perception of belonging to a cultural group as such, the individual will have an understanding of the group's complex subjective norms, values, and characteristics thereby influencing his or her wellbeing (Usborne & Taylor, 2010).
- Emerging (early) adulthood: A transitional developmental period between adolescence and adulthood that is roughly from ages 18 to 25 years, and is demographically and subjectively distinct. An extended period of time in which higher education or vocational training is pursued and marriage or a permanent love relationship may be delayed (Sussman & Arnett, 2014).
- Risky sexual behavior: a history of sexual intercourse involving either multiple partners and/or no condom use
- Immigrant paradox: The more acculturated one is, the increase in adverse health outcomes (Alegria et al, 2008).
- Acculturation discrepancy: The difference between the child and parent's perception of U.S. orientation among first and second generation immigrants (Unger, Ritt-Olson, Soto, and Baezconde-Garbanati, 2009).
- Sexual intercourse: Penetrative sex where a man inserts his penis into the vagina or anus of a sexual partner (Avert, 2014a)

Chapter overviews

Chapter two of the thesis consists of an exhaustive literature review of all the variables of interest, both independent (parental monitoring, parental communication, parental socio-economic status, parental education, cultural identity, and gender) and dependent (condom use) variables in the order of the hypotheses stated. The section aims to expound on the current findings particularly in relation to the Hispanic/Latino ethnic group.

Chapter three delves into the methodology utilized to explore the research question. Firstly, the process in which the data was collected is laid out, followed by the sample selection and explanation of the measurements of variables, both demographic and those of interest. Chapter three also indicates any modifications made to variables in the effort to produce meaningful statistical outputs. Finally, the methodology section includes analyses performed. These analyses included univariate analyses for sample distribution and variable frequencies, bivariate analyses exploring differences and associations between appropriate variables and multivariate analyses, particularly logistic regression to explore if independent variables predicted the outcome.

Chapter four describes the results of the analyses performed. Valid percentages of qualitative variables are recorded as well as measures of central tendency, standard deviations, and range values for quantitative variables. The outcomes of bivariate and multivariate analyses, which included independent samples t-test, two-variable and layered chi square, and logistic regression are also reported in this section with the appropriate p-values.

Chapter five, the discussion section, expands on the results section through interpretation of the outputs as well as endeavoring to explain, through linkage to current literature findings, the results obtained. Furthermore, limitations that restrict the generalizability of the results are also described. Chapter six provides the conclusions drawn from the discussion section, examines the implications of the findings in the realm of public health, and offers possibilities for future research. Additionally, the section proposes approaches through which the findings may be applied toward planning and implementing appropriate programs related to sexual behavior among Hispanic/Latino youths.

CHAPTER 2

LITERATURE REVIEW

It is important to recognize that many factors influence individual behaviors in general parental involvement in a child's life requires physical presence, financial support, an emotionally stable environment, active monitoring of the child's activities and decisions, bi-directional communication with the child and development of appropriate social skills development.

Parenting styles

Prior to delving into essential findings on how parental factors relate to condom use, it is important to recognize that the way a parent rears his or her child influence the effectiveness of life messages delivered to the child. In other words, the approach to parenting a child plays a great role in how the child responds to the parent's guidance. There are four recognized parenting styles that are influenced by two dimensions: responsiveness and demandingness: responsiveness is the degree to which the parents is accepting of and attentive or sensitive to the changing needs of the child; and demandingness is the extent to which parents supervise, discipline and place age-appropriate expectation on their children. The four parenting styles as illustrated in Figure 3(Baumrind, 1971; Lerner, Lerner & Finkelstein, 2001; Weber State University, 2014) follow:

- Authoritarian: demanding but not responsive. These parents tend to be controlling and less warm than other parents. Authoritarian parents tend to use coercion to

force their children to acquiesce to their authority. Their offspring is usually discontent, withdrawn and distrustful.

- Authoritative: responsive while demanding. Authoritative parents are receptive to their offspring's concerns thereby creating a positive environment for autonomous growth. They tend to try to convince their children to voluntarily comply with their wishes by providing feedback, discussions and collaboration (induction). Children tend to be self-reliant, self-controlled, explorative and content.
- Permissive: highly responsive but not demanding. They are neither controlling nor demanding and are relatively warm. However, the children are the least self-reliant, least explorative and less self-controlled, tend to be disobedient and rebellious.
- Uninvolved (rejecting-neglectful): low responsiveness and demandingness. These parents supply no support or structure and may view parenting as burdensome. The children tend to have lower cognitive skills and academic abilities and are least assertive.

Of the four parenting styles, authoritative style has more commonly been associated with positive behavioral outcomes in adolescents. In a study looking into the relationship between parenting styles, parent-child communication and weight status in the child or adolescent, (Parleta, Peters, Owens, Tsiros, and Brennan, 2012), the authors found that authoritative parenting was inversely related to incendiary communication which may encourage healthy-related behaviors in children and adolescents. Rivers, Mullis, Fortner, and Mullis (2012) also found that adolescent children of authoritative parents were more likely to possess intrinsic motivation to perform well academically. In a literature review

of parenting styles and adolescent sexual behavior, de Graaf, Vanwesenbeeck, Woertman, & Meeus (2011) found that adolescents who grew up in loving and supportive family environments, perceived that their parents' rules as fair, and were close to their parents were more inclined to follow their parents' demands. They were more likely to delay first sexual intercourse and to report fewer unwanted sexual experiences but they also reported higher levels of sexual satisfaction. The authors hypothesize that the higher levels of support and authoritative control created psychologically healthy young adults.

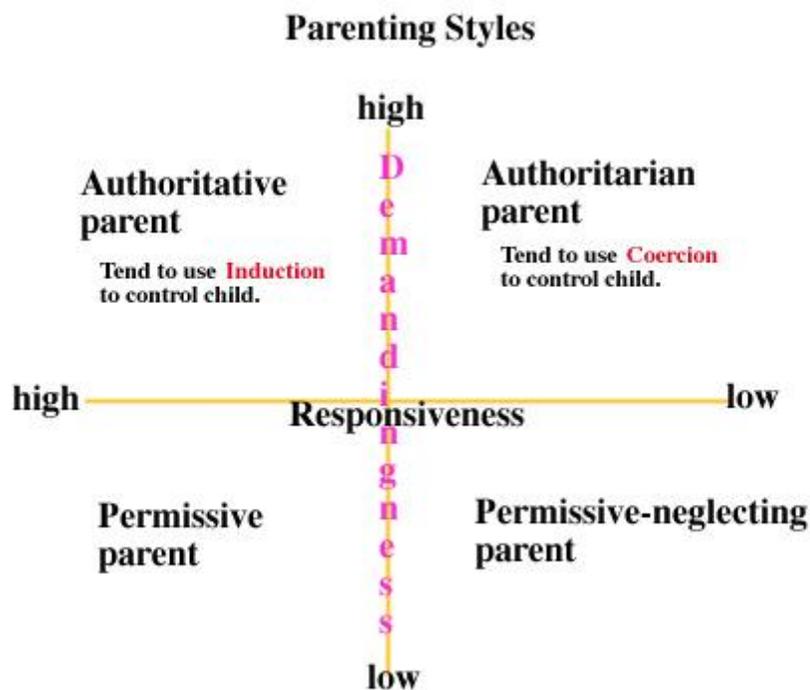


Figure 3. Chart illustrating types of parenting styles and degree of two influential dimensions.

Parental monitoring

Parental monitoring/supervision is a component of parenting which indicates parents' knowledge of their children's activities, whereabouts, and companies while attempting to instill positive behaviors and discourage deviant behaviors (Lerner, Lerner

& Finkelstein, 2001). Parental monitoring is a recognized and important determinant of adolescent behavior (Windle, et al, 2010; Brody, et al, 2010). Therefore, one of the objectives of Healthy People 2020 is to increase the proportion of adolescents between 12 and 17 years who have access to an adult they can confide in about serious problems. The goal is to increase the 2008 baseline of 75.7 percent to 83.3 percent (United States Department of Health and Human Services [HHS], 2012). According to the National Campaign to Prevent Teen and Unplanned Pregnancy, 31 percent of teenagers claim that parents most influence their decision to have sex compared to peers, media, educators and religious leaders (Albert, 2009). Furthermore, there is some evidence that parental involvement is more influential in decreasing sexual initiation among teenagers residing in socio-economically advantaged areas (Roche et al, 2005).

Dishion and McMahon (1998) broadly defined parental monitoring as the parents' awareness of the child's activities and the child's simultaneous awareness of the parents' active knowledge and concern for his or her activities. As such, the definition encompasses the evolution of parent-child relationship with time and development. However, it is important to realize that as a dyad interaction, parental monitoring is not limited only to action on the parent's part but that the child also plays an influential role in the dynamics of the relationship. The child's knowledge of parental monitoring as well as willingness to disclose his or her activities to the parent determines the quality of the parent's awareness especially as the child demands and requires increased autonomy with maturity. Therefore, child disclosure of information and activities and perceived parental knowledge is paramount to accurate and complete parental awareness and surveillance (Kerr & Stattin, 2000). Indeed, Jensen et al (2004) found that the frequency of lying to

parents about activities related to friends, alcohol/drug use, money, parties, and dating decreased between high school and college students, except on the subject of sex for which the frequency is higher among early adults. However, the decrease in lying is likely due to increased autonomy for early adults and parents' willingness to grant more autonomy and therefore, monitor them less intensely and less frequently.

Active parental monitoring, as a protective factor, has been linked to positive health behaviors and decisions among adolescents. Adolescents who perceive more parental monitoring have reported decrease neighborhood risk for the onset of adolescent substance use (Burlew, et al, 2009); fewer sexual partners and more monogamous relationships, less marijuana and alcohol use, lower prevalence of sexually transmitted diseases, fewer arrests, and higher condom use (DiClemente et al, 2001); as well as improved self-esteem in academic performance and abilities, and fewer troubles in school such as paying attention in class (Lowe & Dotterer, 2013).

Interestingly, parental monitoring appears to provide ongoing protection into early adulthood resulting in positive outcomes. Padilla-Walker et al (2008) studied the relationship between perceived parental knowledge to risk behaviors in emerging adults (i.e., drug and alcohol use and number of sexual partners) among 200 college students (18-25 years) from a multi-site study. The authors found that parental knowledge was linked to positive behaviors in emerging adults which may be that emerging adults view parental knowledge and engagement in the relationship. Parental knowledge, therefore served as a factor for positive development during the unstable and transitional stage of emerging adulthood. Furthermore, they noted fewer risk behaviors in participants who disclosed information to their parent. As such, the authors posited that emerging adults

who partake in fewer risky behaviors more likely disclose information to parents due to the bi-directionality of parent-child relationship (parental knowledge and child disclosure) than those who participate in higher risk behaviors who are more likely to intentionally withhold information from their parents.

Parental communication

In a study that focused on three areas of communication between youth and parents from the perspective of the youth (general family communication, values communication with regards to sexual behavior, and instruction regarding sexuality and appropriate sexual behavior such as abstinence and use of contraception), Aspy et al (2007) found that teenagers whose parents talked to them about sexual behavior rights and wrongs, about delaying sexual activity and set clear rules were more likely to be abstinent compared to youth whose parents did not. Furthermore, the study found that once sexually active, youth whose parents communicated the importance of using protection to prevent STDs and pregnancy were more likely to limit the number of sexual partners and use birth control. Therefore, parental communication is important to reducing risky sexual behavior among adolescents. Additionally, in a review of literature, Commendador (2010) supports the trend that parent communication, specifically maternal influence which has been studied more, has an effect on sexual debut and contraceptive use regardless of gender or setting (rural or urban) and therefore can serve as an important interventional tool.

In agreement with Aspy et al (2007), Haglund and Fehring's (2010) study revealed that emerging adults who discussed how to say no as a first topic they had

discussed with their parents were less likely to have had sex and reported fewer sexual partners compared to those who selected other topics (methods of birth control, sexually transmitted diseases, how to use a condom, where to get birth control, and none of the above).

Across the globe in sub-Saharan Africa, Namisi et al (2013) conducted a longitudinal, cross-sectional study investigating the relationship between adolescents' communication on sexuality issue with parents or significant adult (teachers and adult family members) and condom use and also if said communication can predict consistent condom use. The participants were surveyed three times over the course of one year about communication on such topics as HIV/AIDS, abstinence and condom use. The results showed consistent significant association between communication variables and condom use across the three waves. Furthermore, communication was found to predict condom use. The authors surmised that the odds are higher that an adolescent will not only use condoms but also use it consistently, the more he or she communicates with parents, other adult family members and teachers on the sexuality issues. The authors believe the reason this is so is that communication skills are likely higher and the context of communication more favorable in families where there is at least some communication on sexuality issues. Additionally, sexuality communication that is initiated prior to or at the time of sexual debut may increase the likelihood safe sex practices among adolescents.

Trend between parental socioeconomic status and sexual behavior

Socioeconomic status (SES) measured by income, educational level and occupation is associated with many health outcomes through association with health care access, including health insurance (National Center for Health Statistics, 2012). Scrutiny of SES reveals inequalities in access to and distribution of essential resources and quality of life and as such, low SES is correlated to lower education, poverty, and poor health (American Psychological Association [APA], 2014a). Non-Hispanic white and non-Hispanic Asian/Pacific Islanders are more likely to complete high school than Hispanics and non-Hispanic blacks thereby creating a striking health disparity in poverty is greatest for non-Hispanic blacks, American Indians/Alaska Natives and Hispanics (Beckles & Truman, 2011). As shown in Figure 4 there are more children of Hispanic/Latino backgrounds in Los Angeles Unified School District (LAUSD) whose household are below the poverty level compared to other ethnicities at 41 percent (Lucile Packard Foundation for Children’s Health, 2014).

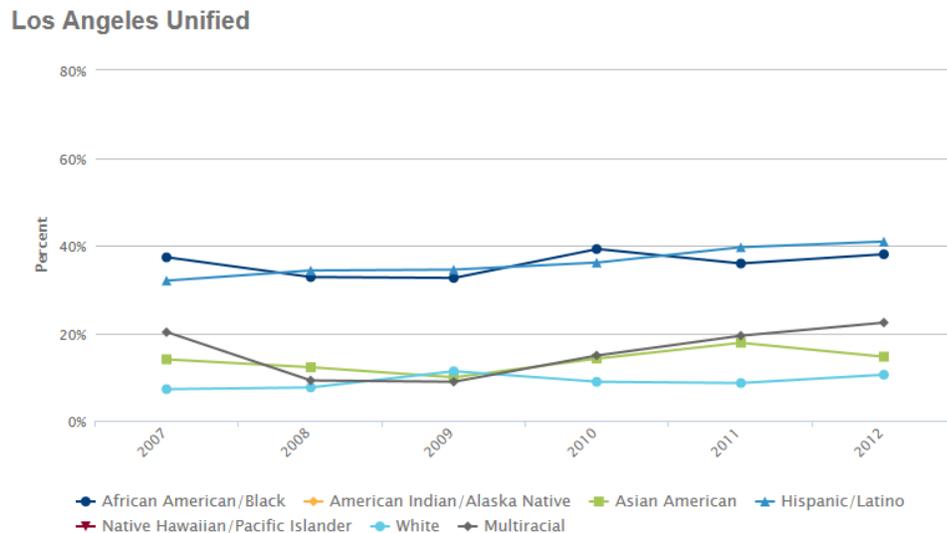


Figure 4. Children in poverty by race/ethnicity in Los Angeles Unified School District (LAUSD): 2007 to 2012.

Source: Lucile Packard Foundation for Children’s Health (2014).

Additionally, as revealed in Table 5, the rate of educational attainment has increased in general for all races since 1960 based on the 2000 U.S. Census (Williams, Mohammed, Leavell, & Collins, 2010). However, the rate remains lowest for Hispanics and particularly for Mexicans. And a very low percentage of Hispanics compared with other races obtained a college degree or higher (12.7%) indicating a high rate of low education attainment in this ethnic group. According to the U.S. Census Bureau, in 2008, most parents with less than high school education were Hispanics with women and men at 39.3% and 41.1%, respectively and they were the least to complete education higher than high school (Institute of Education Sciences, 2010).

Table 5.

Percentage of educational attainment by race/ethnicity in the United States, 1960–2006

Year	White	Black	Asian and Pacific Islander	Hispanic			
				All	Mexican	Puerto Rican	Cuban
High school graduate or more							
1960	43.2	20.1	NA	NA	NA	NA	NA
1970	54.5	31.4	NA	32.1	24.2	23.4	43.9
1980	68.8	51.2	NA	44.0	37.6	40.1	55.3
1990	79.1	66.2	80.4	50.8	44.1	55.5	63.5
2000	84.9	78.5	85.7	57.0	51.0	64.3	73.0
2006	86.2	82.3	87.8	60.3	53.9	73.5	79.8
College graduate or more							
1960	8.1	3.1	NA	NA	NA	NA	NA
1970	11.3	4.4	NA	4.5	2.5	2.2	11.1
1980	17.1	8.4	NA	7.6	4.9	5.6	16.2
1990	22.0	11.3	39.9	9.2	5.4	9.7	20.2
2000	26.1	16.5	43.9	10.6	6.9	13.0	23.0
2006	29.1	18.5	52.1	12.7	9.0	16.4	27.2

Note. Adapted from Williams et al (2010). Complexities, ongoing challenges, and research opportunities. *Annals of the New York Academy of Sciences*, 1186, 69-101
NA = not available

Low SES has constantly been associated with race and ethnicity. Communities segregated by race, ethnicity, and low SES commonly display low economic

development, poor health conditions, and low levels of educational attainment (APA, 2014b). Consistent with previous studies, Namisi et al (2013) found that higher socioeconomic status among their sample was associated with condom use compared with individuals from economically disadvantaged backgrounds indicating that programs designed specifically for socioeconomic disadvantaged adolescents while reducing the economic gap may prove effective.

According to Santelli et al (2000) adolescents whose parents had lower levels of education were more likely to be sexually active. Adolescents whose parents were college graduates were 2.5 times less likely to have had sexual intercourse than teenagers whose parents had not completed high school. Moreover, female adolescents whose parents possessed college education were more likely to use condoms. In contrast, family income did not show any relationship with any sexual behavior but low-income is associated with poor health decisions (VanKim & Laska, 2012). However, studies find that there are significant differences in health outcomes in adulthood of children from high socioeconomic status backgrounds compared to those who grew up from low socioeconomic status (Poulton et al, 2002).

Cultural identity

For the purpose of this study, cultural identity is defined as an individual's perception of belonging to a cultural group. As such, the individual will have an understanding of the group's complex subjective norms, values, and characteristics thereby influencing his or her wellbeing (Usborne & Taylor, 2010). However, in a world of globalization, adolescents and emerging adults rarely grow up within a single culture,

being more willing to change their values and beliefs in new environments and so must choose which group or groups they preferred (Jensen et al, 2011). Therefore, changes in spoken language occurs as many more people speak English than other languages thus causing generational miscommunication, choosing fast foods over cultural foods and or cultural function of food is resulting in an obesity epidemic worldwide, seeking early autonomy from parents by restricting their influence in some areas of life may result in a gap between parents and emerging adults.

Culture includes shared values, beliefs, language, behaviors, and customs (Dana, 1998). It is a set of concept that is learned and shared from one generation to the next lending the idea that culture can influence an individual's behavior. Schwartz et al (2010), in their extensive literature search discovered that Hispanic adolescents who speak Spanish, associated more with Spanish speakers and participate in cultural activities were more likely to make healthier choices than those who are acculturated. In fact, studies point to the phenomenon "immigrant paradox" that indicates that the more acculturated one is, the increase in adverse health outcomes (Alegria et al, 2008; Guarini, Marks, Patton, & Coll, 2011). As such for one to identify with his or her culture, it means the acceptance of core cultural components and incorporation into one's personal life. Therefore, just as parental influence is a recognized power in an individual's development, the collective sway of a cultural group may serve as a modifier for risky sexual behavior.

Increased globalization has resulted in exposure to various cultures and younger generations tend to adapt to the slew of cultures more than older generations. In a study of the differences of the effect of the immigrant paradox on the generational sexual

behavior, Guarini et al (2011) found that first generation Latino immigrant adolescents displayed significantly lower risky sexual behaviors compared to their second and third generation peers and this risk pattern persist through adolescence into emerging adulthood. On the other hand, third generation Latino adolescents displayed the highest level of risky sexual behavior throughout development to young adulthood. Another notable finding was that Latino adolescents demonstrated higher levels of risky sexual behavior than Latina adolescents across the developmental span for all three generations and there is a higher increase in sexual activity among Latina adolescents from the first to the third generation compared to Latino adolescents. A proposed explanation for this gender difference in sexual behavior between generations is cultural expectation of gender roles. In most Latin American countries, Latinas are expected to fulfill the *marianismo* image to remain pious, virtuous virgins until marriage while Latinos must display *machismo* which describes males as virile and dominant. When Latinas arrive in and acculturate to the United States, they enter a less inhibited culture and so their levels of sexual behavior may be expected to increase. Immigrated Latinos may find that expected male sexuality does not differ from that of their countries of origin so their levels of sexual risk behavior may not increase as dramatically as that of their female counterparts.

It is necessary to take into account the quality of parental influence among the sexes as parents may communicate different messages about sex to their male and female children. As one study of Asian American emerging adults found, males mainly received no information from both mothers and fathers about sexual topics as opposed to females who reported mothers communicating about menstruation, pregnancy and dating norms

(Kim & Ward, 2007) as it may be due to cultural taboo about sex. Additionally, they found that respondents who spoke with their parents in English but were replied to in an Asian language reported significantly less sexual information from mother as opposed to those who speak one language at home, whether English or an Asian language. The authors speculated this to be due to a lack of shared vocabulary or difficulty in expressing complex and delicate thoughts. Californian Latina teenagers and adults interviewed in Fresno and Los Angeles recounted that although their parents served as role models as well as reasons for delaying pregnancy, prior to their pregnancies their parents did not elaborate deeply on sex as a topic or birth control and in fact were embarrassed to talk about it to their children (Biggs et al, 2010); a point further illustrated by Jerman & Constantine (2010) who indicated that more than two thirds of parents of adolescents interviewed indicated sexual communication difficulty such as embarrassment. However, of the participants, recent immigrants to the United States delayed sexual initiation had more positive and communicative relationships with parents as well as greater parental supervision as teenagers.

Gender differences in condom use

In a three-wave, nationally representative study of males (ages 15-19 at Wave 1 and 21-26 at Wave 3), Dariotis et al (2011) found that young black and Latino men were more likely than their white counterpart to participate in risky sexual behaviors even after controlling for social and economic variables as well as sexual risk trajectories. The authors speculated that social influences may play a role in the disparity noted in that men and women tend to have sex with people who share their social and demographic

characteristics. Another factor may be the availability of services and pharmacies that carry condoms thereby indicating disparity in access to condoms.

Contrary to other studies in which men reported higher frequency of sexual debut during adolescence as well as vaginal intercourse frequency, Haglund and Fehring (2010) discovered no significant difference between men and women's sexual risk behaviors in their study. This reveals a change in the established pattern of sexual activity across gender. Indeed, there is a discrepancy in communication of sexuality issues between men and women. Emerging adult females recalled having more discussions, in general with their mothers about relationships than their fathers with whom they sometimes or often had these conversations (Arnold, O'Neal & Futris, 2013) and on average found conversations with mother more satisfying, helpful and influential than those with fathers. Additionally, females are more heavily monitored as teenagers to protect them from "boys" and keep them focused academically (Biggs et al, 2010) However, daughters are more likely to receive more prohibitive than permissive messages about sexual topics than sons (Kim & Ward, 2007).

Investigating beyond the conventional outcomes of sexual behaviors, attitudes and beliefs, Lefkowitz, Shearer, Gillen & Espinosa-Hernandez (2014) explored social aspects of gender and its association with gender and perceived double sexual standards and gender roles attitudes. They studied Black or Hispanic/Latino college students at a northeastern public university between ages 17 and 19 years. Their findings showed that there was an association between acceptance of perceived double sexual standards and sexual behaviors. However, the sexual behavior outcome differed for both men and women. Women who endorsed the double sexual standards perceived more barriers to

using condoms but interestingly, were no less likely to use it. Men who endorsed this societal standard were more likely to a higher number of sexual partners. In terms of gender roles, significant associations were also determined. Men who held conventional beliefs about the male role tended to have fewer partners contrary to previous works. The authors thought that religion may play a role in such a finding. Women who held conventional attitudes about the male role tended to use condoms less often, likely deferring to their partners' decision on condom use. However, women who held more conventional attitudes about a woman's role were more likely to use condoms. Overall, the findings may be due to the value that many cultures place on the masculine than feminine behavior. Therefore, endorsement of a power differential between men and women is implied which likely influences into sexual relationships.

Given that the use of condoms could be influenced by relationship dynamics, Tschann et al (2010) tested for gender differences in condom use among sexually active Latinos aged 16-22 years. They learned from the study that a majority of youth who wanted to use condoms within the past month used some type of condom negotiation strategy. Consistent with cultural norms, young men reported using direct verbal and nonverbal communication to obtain condom use. Those who perceived differing views with their partners on condoms and utilized direct verbal/nonverbal strategies or risk information were more likely to report higher rates of condom use compared to those who use no strategy. The authors surmised that such an outcome indicated that perceived to be opposed to condom use may respond more positively than expected. Furthermore, insisting on condom use was an effective strategy for young women who perceived their partners did not want to use condoms. As the authors expected, more women reported

wanting to use condoms but men who wanted to use condoms tended to engage in more strategies thereby reporting actual condom use. Additionally, the authors found that youths who had been in longer relationships tended to report less frequent use of condoms as supported by previous research by Ku, Sonenstein, and Pleck (1994) and Bankole, Darroch, and Singh (1999).

CHAPTER 3

METHODS

The following chapter discusses how the proposed research study was conducted. This study used a secondary data analysis design. Therefore, the variables included in the statistical models have been predetermined. However, this section will delve into the sample of interest, briefly present how the data were originally collected as well as measurements for each variable. Additionally, the chosen analytic techniques will be discussed with their respective limitations. All scales and reliability coefficients, from the RED study, that are included in the analyses are presented.

Data collection

This research study utilized pre-existing data from Project RED (Reteniendo y Entendiendo Diversidad para Salud), a longitudinal study focused primarily on the effects of acculturation constructs and patterns on substance use among Hispanic youths in Southern California. Students from seven high schools in Los Angeles County with a student body of at least 70% Hispanic/Latino completed surveys from 9th to 11th grade and again three to four years after high school (Forster et al, 2013). Further information pertaining to ensuring the selection of high schools that were comprised of predominantly Hispanic students as well as a wide range of socioeconomic characteristics can be found in the work of Unger et al (2007).

During the Fall of 2005, 9th-grade students from the selected schools were approached by trained research assistants from the University of Southern California to participate in the RED project. The purpose of the survey was explained to the students

who were then given consent forms for their parents to sign. For those who did not return with the signed consent, verbal consent was acquired from their parents by telephone. The students' assent was also acquired. The Institutional Review Board (IRB) of University of Southern California (USC) as well as the ethics committees of all participating school districts approved this procedure. Subsequent to completing surveys during 9th grade in 2005, participating students filled out two follow-up surveys during the Fall of 2006 and the Fall of 2007 during 10th and 11th grade. In total there were 2722 participants. Between 2011 and 2012, the participants, now emerging adults, were re-contacted for further contribution as emerging adults.

For the purpose of this study, permission was acquired from the lead investigator of the RED project at USC (Appendix A). Additionally, the Institutional Review Board at California State University Northridge approved the use of the pre-existing data (Appendix B) of which the survey instrument can be located in Appendix C.

Sample selection

The portion of the data set utilized for the study only includes students who identified themselves as Hispanic and/or Latino. The CDC applies the teenage developmental stage to all individuals between 15-17 years old (CDC, 2014). Since most studies focusing on adolescents involve subjects in this age group, this study will focus on participants' responses in the 10th grade (teenagers) as independent variables or predictors for the outcome. The responses to the condom use questions of the same students participating in the follow-up survey as emerging adults (use or non-use of condoms) was the primary outcome variable. From the entire data set (N=2722), 1,108

participants in the 10th grade identified themselves as Hispanic/Latino.

Measurements

Age: The ages of the participants were asked based on their birth month, birth day and birth year, and calculated as a continuous variable.

Gender: Gender was assessed with one item that asked participants “What is your sex?” with answer choices of “Female” (coded as 1) and “Male” (coded as 0).

Grade: Students were asked to write their current grade level.

Ethnicity: The ethnicity was measured with one item that provided a list of possible ethnic/racial response options (American Indian/American Native; Asian; Black/African American; Hispanic; Latino/a; Native Hawaiian/Pacific Islander; White; Mexican; Central American; South American; Mexican-American; Chicano/a; Mestizo; La Raza; and Spanish) of which the respondents were asked “Do you call yourself...?”. For each of the races, the respondents had to check “Yes (coded 1)”, “No (coded 2)”, or “Don’t Know (coded 3)”. The study utilized those who responded positively to either Hispanic or Latino as some may identify with one more than the other.

Parent’s education: The parents’ education level consisted of two questions “Highest grade completed by your father?” and “Highest grade completed by your mother?” Each question is followed by the following responses: “8th or less (code = 1)”; “Some high

school (code = 2)”; “High school graduate (code = 3)”; “Some college (code = 4)”; “College graduate (coded = 5)”; “Advanced degree (coded = 6)”; and “Don’t Know (coded = 7)”.

Language spoken: In order to determine the languages of preference at different locations and with different people, the participants were asked the following question: “In your home, do you speak...?”, “With your friends, do you speak...?” and “With your parents, do you speak...?” The choices of responses were: “Only English (code = 1)”, “Mostly English (code = 2)”, “English and another language equally (code = 3)”, “Mostly another language (code = 4)” and “Only another language (code = 5)”.

Marital status: The marital status of the respondents as emerging adults was determined with the question: “Has this happened to you in the last year?...”Got married.” The dichotomous responses were “Yes” (coded as 1) and “No” (coded as 2).

Parental income: Parental income was determined by a proxy question: “Do you receive free or reduced lunch at school?” Response options were dichotomous “Yes (coded as 1)” and “No (coded as 0)”.

Parental Monitoring (Cronbach’s alpha = 0.66): A three-item measure was used to determine parental monitoring. Two of the three items had the same answer choices: “When you go out with your friends, do your parents ask ‘Where are you going?’” and “How often do your parents know where you really are?” Respondents selected from four

answer choices: “Never (code = 1)”; “Hardly ever (code = 2)”; “Sometime (code = 3)”; or “Always (code = 4)”. The third item asked “How important is it to your parents to know where you are at all times?” to which the participants selected from the following: “Not important at all (code = 1)”; “A little bit important (code = 2)”; “Important (code = 3)”; or “Very important (code = 4)”. Higher scores indicated higher levels of parental monitoring while lower scores suggested less parental monitoring of the adolescent.

Parental Communication (Cronbach’s alpha = 0.87): The parental communication measures consisted of four-items. Three of the items provided the participants with Likert scale response items. The three items were: “How often do you talk to your parents about what’s on your mind?”; “How often do you ask your parents for advice?”; and “How often do you tell your parents your secrets?”. The respondents selected from “Never (code = 1)”; “Hardly ever (code = 2)”; “Sometimes (code = 3)”; and “Very often (code = 4)”. The fourth item, “If you have a problem, would you be able to talk to your parents about it?” was coded as: “Definitely no (code = 1)”, “Probably no (code = 2)”, “Probably yes (code = 3)”, and “Definitely yes (code = 4)”. Higher scores indicated better communication between parent and child. Lower scores indicated poorer communication between the child and parent.

Cultural identity (Cronbach’s alpha = 0.87): Multigroup Ethnic Identity Measure (MEIM) assessed ethnic identity across all ethnic groups for which reliability scores for 10th grade was 0.81 and then 0.90 among emerging adults (Phinney, 1992).. The cultural identity construct utilized for this study consisted of 12 items. These 12 items were answered on a

four-point scale of “Strongly disagree (code = 1)”; “Disagree (code = 2)”; “Agree (code = 3)”; and “Strongly agree (code = 4)” so that a high score indicated strong ethnic identity.

The questions were the following:

- “I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs”;
- “I am active in organizations or social groups that include mostly members of my own ethnic group”;
- “I have a clear sense of my ethnic background and what it means for me”;
- “I think a lot about how my life will be affected by my ethnic group membership”;
- “ I am happy that I am a member of the group I belong to”;
- “ I have a sense of belonging to my own ethnic group”;
- “I understand pretty well what my ethnic group membership means to me”;
- “In order to learn more about my ethnic background, I have often talked to other people about my ethnic group”;
- “I have a lot of pride in my ethnic group”;
- “I participate in cultural practices of my own ethnic group, such as special food, music, or customs”;
- “I feel a strong attachment toward my own ethnic group”; and
- “I feel good about my cultural or ethnic background”.

The sum of all 12 scored items measured ethnic identity for a possible range of scores from 12 to 48. The lower the ethnic identity score, the less the respondent

identified with his or her culture and the higher the score, the more the respondent associated with and identified with his or her cultural background.

Condom Use: To measure the outcome of interest, the question selected from the survey was “Did you or your partner use a condom the last time you had sexual intercourse?” Dichotomous response options were “Yes (coded as 1)” or “No (coded as 0)”.

Data analyses

The data were analyzed using SPSS version 22 (IBM Corporation, 2013). The following sections cover the three-step analyses performed for this research; from univariate analysis of each variable to multivariate analyses of the relationships between these variables. All analyses were tested at the 0.05 level of significance.

As only the overall identification as Latino/Hispanic was of interest for the research study, all Hispanic, Latino/a, and sub-ethnic groups related to Hispanic/Latino background were retained in the encompassing Latino/Hispanic variable.

For coding parental education, both the categories “college graduate” and “advanced degree” were combined because for paternal education, the advanced degree category had a count of 18 and a count of 10 in the maternal education variable. Additionally, reported “don’t know” responses for all variables were re-coded as missing values.

Univariate analyses: Frequency distributions for all demographic variables were calculated (age, ethnicity, gender, parental income, parental education, language spoken

at home, with friends and with parents, as well as marital status) as well as continuous variables included in the model (parental monitoring, parental communication and cultural identity). Additionally, descriptive statistics (mean, standard deviation, percentages, and ranges) for all variables including demographics variables describe the sample distribution, each independent variable and the outcome of interest.

Cronbach's alpha was calculated for each of the three scales in the study (parental monitoring, parental communication, and cultural identity). The individual scale-items were summed and the mean, standard deviation, and range of values were reported.

Bivariate analyses: Table 6 lists the bivariate analyses performed for this research. To analyze the six hypotheses, the tests performed determined if there were any statistically significant associations between the independent and dependent variables. The appropriate test statistics and the p-values were also determined.

Bivariate Associations

Condom use in emerging adulthood and parental monitoring in high school.

Two-independent samples t-test was used to test if there is a statistically significant mean difference in parental monitoring between those who used condoms during their last sexual intercourse and the participants who did not at the 0.05 level of significance.

Parental communication with adolescent and condom use among emerging adults at most recent sexual intercourse.

Two-independent samples t-test was used to determine if there was a statistically significant mean difference in parental communication among respondents who used condoms during the last sexual intercourse and those who did not.

Parental income in high school and condom use in emerging adulthood.

A chi square test for independence was used to assess for a statistically significant relationship between condom use, a dichotomous variable, and the school lunch proxy for parental income.

Parental education in high school and condom use in the emerging adult.

A chi-square test for independence was used to investigate the relationship between parental education and use of condom during the last sexual intercourse. Although, the study examined paternal and maternal educational levels, the variables were tested under one hypothesis. The associations between paternal or maternal education and condom use were examined separately thereby resulting in two independent associations.

Cultural identification and the likelihood of emerging adults to use condoms during sexual intercourse.

As with parental communication and parental monitoring, a test for differences in the means of the respondents' identity with their culture between the two groups of condom use was performed with the two-independent samples t-test.

Gender and condom use during sexual intercourse.

A Chi Square test of independence was used to assess any significant association between gender and condom use at last sexual intercourse.

Finally, for exploratory purposes, three two-independent samples t-tests (Table 7) were performed to assess any differences in self-reported parental monitoring, parental communication and cultural identity. These tests were conducted because the literature indicates there were gender differences within these three variables.

Table 6

Listing of proposed bivariate analyses

Independent Variables	Dependent Variables	Proposed Statistical Analysis
Condom Use (Dichotomous)	Parental monitoring (Continuous)	Two-independent samples t-test
Condom Use (Dichotomous)	Parental communication (Continuous)	Two-independent samples t-test
Parental income (Dichotomous)	Condom Use (Dichotomous)	Two-variable chi square
Paternal education (Categorical)	Condom Use (Dichotomous)	Two-variable chi square
Maternal education (Categorical)	Condom Use (Dichotomous)	Two-variable chi square
Condom Use (Dichotomous)	Cultural Identity (Continuous)	Two-independent samples t-test
Gender (Dichotomous)	Condom Use (Dichotomous)	Two-variable chi square

Table 7

List of proposed exploratory analyses

Independent Variable	Dependent Variable	Statistical Analysis
Gender (dichotomous)	Parental monitoring (continuous)	Two-independent samples t-test
	Parental communication (continuous)	
	Cultural identity (continuous)	

Multivariate analyses: A list of the multivariate analyses proposed for this research is illustrated in Table 8. To evaluate whether each independent variable predicts the outcome, the scale items within the explored variables (parental monitoring, parental communication and cultural identity) were summed to produce a composite measure. The internal consistency of the combined items to measure these variables (Cronbach’s alpha) was also calculated.

All independent variables of interest were included in the standard binary logistic regression model using the 0.05 level of significance. Therefore, the reported test statistics (odds ratio) and p-values indicated predictive values for each variable while controlling for the remaining variables. How well the model predicts the outcome with the predictors was also reported with the Hosmer-Lemeshow goodness-of-fit statistics and p-value. Additionally, Nagelkerke R squared, which indicated how much of the variance in the outcome is explained by the variances in the predictor variables were noted as well.

To test for parental education as a statistically significant predictor of condom use, the lowest level of education, 8th or less, was used as the reference group in the model.

The interaction of the variables (parental monitoring, parental communication, cultural identity, income, and educational levels) with gender on condom use was assessed with logistic regression at the 0.05 level of significance. The continuous variables were centered at their means in order to standardize the data as the scales contained no zero. Hosmer-Lemeshow goodness-of-fit along with Nagelkerke R squared were reported along with any significant relationships noted and the associated odds ratio and p-value.

Layered Chi square tests were employed to analyze associations between all qualitative variables (parental income and educational attainment) and condom use based on gender and ethnicity. Chi square statistics at the 0.05 level of significance, with degrees of freedom, and p-values were reported.

Table 8

Listing of proposed multivariate analyses

Hypotheses	Independent Variables	Dependent Variables	Proposed Statistical Analysis
<i>H1</i> : Active parental monitoring in adolescence increases the likelihood of condom use during emerging adulthood	Parental monitoring (Continuous)	Condom Use (Dichotomous)	Logistic regression
<i>H2</i> : The more parents communicate with their adolescent children, the more likely the children will use condoms as emerging adults during sexual intercourse	Parental communication (Continuous)	Condom Use (Dichotomous)	Logistic regression
<i>H3</i> : Higher parental income results in increased condom use in the emerging adult	Parental income (Dichotomous)	Condom Use (Dichotomous)	Logistic regression
<i>H4</i> : Higher parental education results in increased condom use in the emerging adult	Paternal education (Categorical)	Condom Use (Dichotomous)	Logistic regression
	Paternal education and Gender	Condom Use	Three-variable chi square
	Maternal education (Categorical)	Condom Use (Dichotomous)	Logistic regression
	Maternal education and Gender	Condom Use	Three-variable chi square
<i>H5</i> : Increased cultural identification increases the likelihood the emerging adult will utilize condoms during sexual intercourse	Cultural Identity (Continuous)	Condom Use (Dichotomous)	Logistic regression
<i>H6</i> : Female emerging adults are more likely than male emerging adults to use condoms during sexual intercourse	Gender (Dichotomous)	Condom Use (Dichotomous)	Logistic regression

CHAPTER 4

RESULTS

This chapter covers the outcome of the analyses performed. The first section discusses the overall distribution of the respondent demographic information at time one (10th grade) and time two (emerging adults). Descriptive statistics assessed for the Latino/Hispanic 10th grade students included age, gender, parental income estimated using the reduced/free lunch proxy, and parental education of the mother and father.

The second section presents the output of the logistic regression analysis assessing whether time one variables predict risky sexual behavior in emerging adulthood. Tables and graphs illustrate the univariate and bivariate results.

Univariate analysis results

Of the 2722 participants, 1108 identified themselves as Hispanic or Latino/a during 10th grade. The mean age for this sample was 15.86 years with a standard deviation (s) of 0.409 years at time 1. Table 9 presents the descriptive statistics for demographic characteristics and variables of interest. The study sample was composed of 57.6% female and 42.4% male. The distribution of parental level of education was similar for both mothers and fathers. Among fathers, 31.4% had less than 8th grade education, 26.0% had some high school education, 21.2% were high school graduates, 11.0% reported some college education with the remaining 10.4% having graduated college or held an advanced degree. Maternal education responses indicated that 30.0% of mothers had less than 8th grade education, 27.9% had some high school education while 18.5% completed high school, 14.6% of mothers had some college education and 8.8%

completed college or had an advanced degree. Most of the respondents received free or reduced price lunch (78.8%) while approximately 21% did not.

More than 60% of the respondents indicated they spoke English and another language equally at home. About 21% trended toward speaking English (14.4% spoke mostly English and approximately 7% spoke only English) with 18% speaking mostly or only another language and 16% spoke mostly another language and 3% spoke only another language.

Sixty-five percent spoke either only or mostly English with their friends (23% and 42%, respectively) while 32% spoke English and another language equally. The remaining responses of about 3% pertained to those who spoke mostly or only another language.

With parents, almost 46% trended toward speaking another language (31.3% spoke mostly another language and 14.3% spoke only another language). Almost 35% stated speaking English or another language equally with their parents and a minority, about 19%, spoke only or mostly English (12.1% spoke mostly English while 7.3% indicated speaking only English with parents).

The univariate statistics for emerging adults are presented in Table 10. The mean age for the respondents during emerging adulthood was approximately 21 years old with the same standard deviation of 0.409 years as during high school. The age range was between 19 and 23 years of age. About 96% of the respondents were single while almost 4 percent were married. For the outcome variable, 58% reported using a condom during the last sexual intercourse and 42% indicated they did not.

At home, emerging adults tended to speak mostly English and another language equally (58.8%) trending toward speaking English more with about 15% speaking mostly English and 8.5% speaking only English than speaking another language with 16% speaking mostly another and two percent speaking only another language.

Outside of home, the participants tended to speak English: 52% spoke mostly English and 21% spoke only English. The remaining 27% consisted of those who spoke English and another language equally (26.2%) and mostly another language (1.0%). None of the respondents indicated speaking only another language.

With parents, the respondents trended toward speaking a language other than English: approximately 36% spoke mostly another language, 30.9% spoke English and another language equally and 17.2% spoke only another language. The remainder of the participants reported 8.3% mostly English with their parents and 7.2% spoke only English with their parents.

Table 10

Descriptive statistics of respondents during emerging adulthood

Variable	Mean, (s), %	Range
Age (years)	20.93 (s = 0.409)	19.42 - 23.17
Marital Status	Single = 568 (96.1%) Married = 23 (3.9%)	-- --
Condom Use	Yes = 274 (57.7%) No = 201 (42.3%)	-- --
Language (at home)	Only English = 51 (8.5%) Mostly English = 89 (14.9%) English/other equally = 352 (58.8%) Mostly other language = 97 (16.2%) Only another language = 10 (1.7%)	-- -- -- -- --
Language (w/friends)	Only English = 125 (20.9%) Mostly English = 311 (51.9%) English/other equally = 157 (26.2%) Mostly other language = 6 (1.0%) Only another language = 0 (0.0%)	-- -- -- -- --
Language (w/parents)	Only English = 43 (7.2%) Mostly English = 50 (8.3%) English/other equally = 185 (30.9%) Mostly other language = 218 (36.4%) Only another language = 103 (17.2%)	-- -- -- -- --

N = 1108; HS = High School; EA = Emerging adults

At time two, more emerging adult females (n = 131) than emerging adult males (n = 108) expressed using condoms. Within each gender, a higher percentage tended to use condoms. 53.3% among females indicated they used condoms during the last sexual intercourse whereas 62.8% among male participants reported using condoms during the last intercourse (Figure 5).

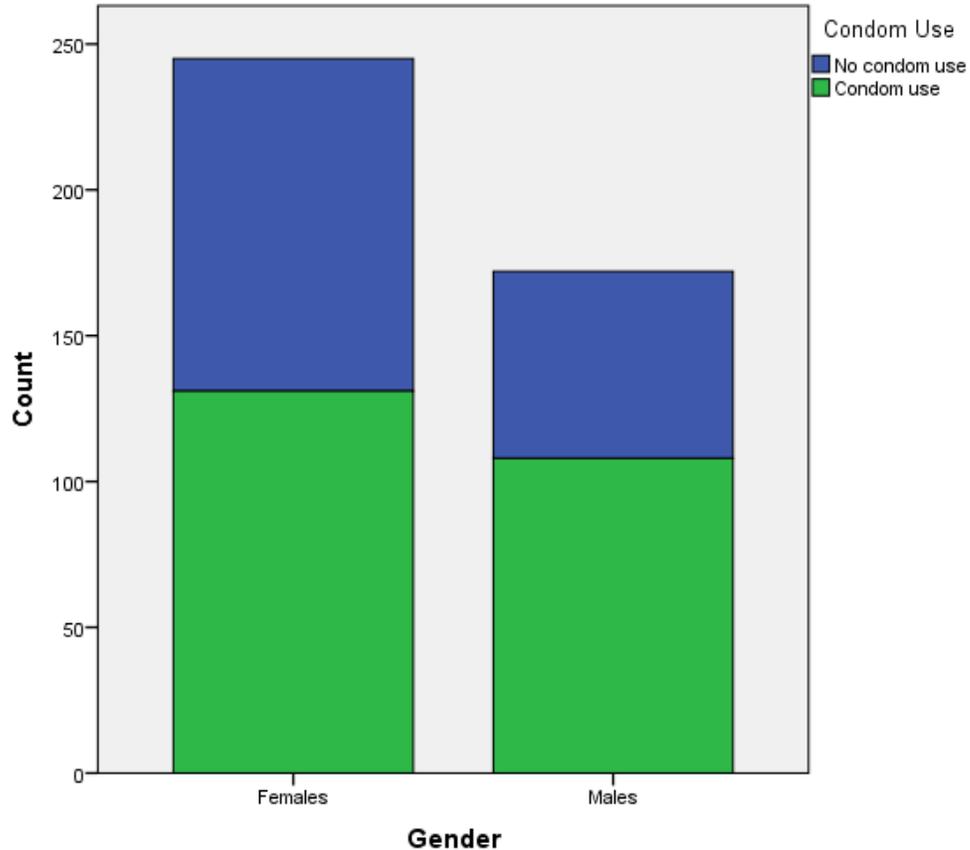


Figure 5. Condom use by genders

The 3-item scale to measure parental monitoring had a Cronbach's alpha of 0.658 (Table 11) indicating that it is a moderately reliable measure of parental monitoring. The inter-item correlation was positive and when summed up, the minimum and maximum scores were between 3 and 12. The mean score was 10.93 with a standard deviation of 1.401.

The parental communication scale consisted of four items. A Cronbach's alpha of 0.873 suggests these items are a reliable measure of parent-child communication (Table 11). The correlation between all items was positive and minimum to maximum range was from 4 to 16. The mean score was 9.69 with a standard deviation of 3.245.

Finally, the cultural identity scale consisted of 12 items. It resulted in a Cronbach's alpha of 0.870 (Table 11) indicating it to be a reliable measure cultural identity. All inter-item correlations were positive and minimum and maximum scores ranged from 12 to 48. The mean score was 35.02 with a standard deviation of 5.835.

Table 11

Calculated Cronbach's alphas for scales

Scales	Cronbach's alpha (mean, s)	Range
Parental monitoring	0.658 (10.93, s = 1.401)	3 - 12
Parental communication	0.873 (9.69, s = 3.245)	4 - 16
Cultural identity	0.870 (35.02, s = 5.835)	12 - 48

Bivariate analysis results

Bivariate analyses results included the test statistic, p-value and 95% confidence interval where appropriate. Table 12 includes the overall results of all bivariate tests done for the study.

Condom use in emerging adulthood and parental monitoring in high school.

Levene's test indicated similar variances between the groups ($F = 2.038, p = 0.154$). The results of the t-test indicated no statistically significant mean difference between the two groups ($t = 0.845, df = 414, p = 0.399$). With 95% confidence [95% CI] the true mean difference in parental monitoring is between -0.145 and 0.364. Non-condom users reported mean parental monitoring of 11.033 with a standard deviation of 1.267 while condom users reported a mean of 10.924 with a standard deviation of 1.338.

Parental communication with adolescent and condom use among emerging adults at most recent sexual intercourse.

Levene's test for equal variances was 1.103 with a p-value of .294. There was no statistically significant mean difference in parental monitoring among condom users and non-condom users ($t = -0.722$, $df = 412$, $p = 0.470$). With 95% confidence, the true mean difference in parental communication falls between -0.842 and 0.389. Mean parental communication for non-condom users was 9.408 ($s = 3.121$) and for condom users, the mean was 9.634 ($s = 3.184$).

Parental income in high school and condom use in emerging adulthood.

The results of the chi square test for independence showed no statistically significant association between parental income and condom use ($X^2 = 0.040$, $df = 1$, $p\text{-value} = 0.892$).

Parental education in high school and condom use in the emerging adult.

There was no statistically significant relationship between in condom use and paternal education ($X^2 = 4.469$, $df = 4$, and $p = 0.346$). Additionally, there was no statistically significant association between maternal education and condom use ($X^2 = 7.762$, $df = 4$, with $p = 0.101$).

Cultural identification and the likelihood of emerging adults to use condoms during sexual intercourse.

Levene's test for equal variances between groups was 1.104 and $p = 0.237$. There was no statistically significant difference in the average cultural identification between condom users in the sample and non-condom users ($t = 0.687$, $df = 454$, $p = 0.492$). With 95% confidence, the true mean difference in cultural identity lies between -0.693 and 1.438. The mean cultural identity score for non-condom users was 35.548 ($s = 5.757$) and for condom users, the mean was 35.175 ($s = 5.654$).

Gender and condom use during sexual intercourse.

Chi square test for independence indicated no statistically significant association between gender and condom use ($X^2 = 3.589$, $df = 1$, $p = 0.070$).

Table 12

Results of bivariate analyses

Tested Variables	Test Statistics	df	P-value	Confidence Interval
Condom Use (Dichotomous)	t = 0.845	414	0.399	-0.145 - 0.364
Parental monitoring (Continuous)				
Condom Use (Dichotomous)	t = -0.722	412	0.470	-0.842 - 0.389
Parental communication (Continuous)				
Parental income (Dichotomous)	$X^2 = 0.040$	1	0.892	--
Condom Use (Dichotomous)				
Paternal education (Categorical)	$X^2 = 4.469$	4	0.346	--
Condom Use (Dichotomous)				
Maternal education (Categorical)	$X^2 = 7.762$	4	0.101	--
Condom Use (Dichotomous)				
Condom Use (Dichotomous)	t = .687	454	0.492	-0.693 – 1.438
Cultural Identity (Continuous)				
Gender (Dichotomous)	$X^2 = 3.589$	1	0.070	--
Condom Use (Dichotomous)				

The results for the three exploratory two-independent samples t-tests are reported in Table 13. The test for differences between genders and the three scale variables resulted in the following output:

- Parental monitoring: Levene’s test for equal variances = 29.877, $p < 0.001$ indicated that the variances between genders based on parental monitoring was

not similar. The t-test results were $t = 4.577$, $df = 710.255$, $p < 0.001$ and 95% CI = 0.257 - 0.617. Therefore, there is a statistically significant mean difference between parental monitoring reported by females (mean = 11.126, standard deviation [s] = 1.228) than males (mean = 10.690, $s = 1.567$).

- Parental communication: Levene's statistic of $F = 2.940$ with p-value of 0.087 indicated similar variances between males and females in relation to parental communication. The independent t-test gave the following results: $t = 2.951$, $df = 920$, $p = 0.003$ with 95% CI of 0.213 and 1.060 indicating that there is a statistically significant mean difference in parental communication between gender. Females (mean = 9.967, $s = 3.331$) reported a higher degree of communication with their parents compared to males (mean = 9.330, $s = 3.092$).
- Cultural identity: Levene's test statistic for equal variances between males and females was 1.367 with p-value of 0.243 indicating similar variances between males and females. Therefore, the t-test output for equal variances was utilized. The t-test results were $t = 2.593$, $df = 901$, $p = 0.010$ and 95% CI = 0.256 – 1.849 indicating that there was a statistically significant difference between genders and how well they identified with their culture. Females (mean = 35.445, $s = 5.778$) in the sample identified more with their culture than males (mean = 34.393, $s = 6.349$).

Table 13

Results for independent samples t-test.

Independent variable	Dependent variables	Test statistic (t)	df	p-value	Confidence interval
Gender (dichotomous)	Parental monitoring (continuous)	4.577	710.255	<0.001	0.257-0.617
	Parental communication (continuous)	2.951	920	0.003	0.213 – 1.060
	Cultural identity (continuous)	2.593	901	0.010	0.256 – 1.849

Bold indicates statistical significance at $\alpha = 0.05$.

Multivariate analysis results

For the total 1108 participants in the sample Table 14 illustrates the outcome of the logistic regression model assessing how well the independent variables (parental education, parental monitoring, parental communication, parental income, cultural identity, and gender) at time one predicted the use of a condom at last sexual intercourse in emerging adulthood (time two). Results suggested that 19.6% of selected cases were included in the analysis. Without inclusion of any predictors, the model was 54.8% predictive of condom use. After including the predictive variables, the model's predictive ability increased to 62.7%. Hosmer and Lemeshow test indicated that the model was a good fit for the data with $X^2 = 12.737$, $df = 8$, and $p = 0.121$. Nagelkerke R squared showed that 7.4% of the variance in condom use was predicted by the regression model.

H1: Active parental supervision/monitoring in adolescence increases the likelihood of condom use during emerging adulthood.

The hypothesis anticipated that parental monitoring during adolescence would increase the likelihood of using condoms later in life. The data did not support this hypothesis as parental monitoring was not found to be a statistically significant predictor of condom use (odds ratio [OR] = 0.837, $p = 0.160$, 95% CI = 0.654 – 1.073).

H2: The more parents communicate with their adolescent children, the more likely the child will use a condom as an emerging adult during sexual intercourse.

There was support for the hypothesis that greater parental communication would be associated with condom use. Parental communication was statistically significantly predictive of condom use at the .05 level of significance (OR = 1.116, $p = 0.025$, [95% CI] = 1.014-1.123). As hypothesized, parental communication is a protective variable for the use of a condom in emerging adulthood. Higher parental communication was associated with a 12% increase in the odds of using a condom as compared to those with lower levels of parental communication. The confidence interval indicated that condom users were about 1.4% to 12.3% more likely to report communicating with parents compared to non-condom users.

H3: Higher socioeconomic status (parental income) results in increased condom use in the emerging adult.

Although increased parental income was expected to be predictive of emerging adult sexual behavior with a positive trajectory, analysis of the proxy variable showed no

statistical significance toward predicting condom use (OR = 1.027, $p = 0.944$, 95% CI = 0.490 – 2.153).

H4: Higher parental education results in increased condom use in the emerging adult.

Both paternal and maternal educations were not statistically significantly predictive of condom use ($p = 0.924$, $p = 0.377$, respectively) in emerging adulthood.

H5: Increased cultural identification increases the likelihood the emerging adult will utilize condoms during sexual intercourse.

The hypothesis indicated that the more a person identifies with his or her culture, the more likely he or she will display a healthy sexual behavior; in this case, the use of condoms during sexual intercourse. However, the cultural identification scale tested in this model was not found to be a significant predictive factor for condom use (OR = 0.996, $p = 0.876$, 95% = 0.946 – 1.049).

H6: Female emerging adults are more likely than male emerging adults to use condoms during sexual intercourse.

The resulting output of the logistic regression model for gender was not statistically significant to predict condom use (OR = 0.836, $p = 0.549$, 95% CI = 0.466 – 1.501).

Table 14

Logistic regression model for predicting emerging adult sexual behavior

Predictors	Outcome Sexual behavior		
	Exp(B)	p-value	95% CI
Parental monitoring	0.837	0.160	0.652 – 1.073
Parental communication	1.116	0.025	1.014 – 1.229
Parental income	1.027	0.944	0.490 – 2.153
Paternal education		0.924	
Some high school	0.814	0.582	0.392– 1.692
High school graduate	1.066	0.888	0.435 – 2.615
Some college	0.678	0.476	0.233 – 1.974
College graduate/Advanced degree	0.875	0.809	0.296 – 2.586
Maternal education		0.377	
Some high school	1.627	0.223	0.744 – 3.558
High school graduate	0.939	0.886	0.396 – 2.223
Some college	1.076	0.876	0.429 – 2.699
College graduate/Advanced degree	0.498	0.209	0.168 – 1.479
Cultural identity	0.996	0.876	0.946 – 1.049
Gender	0.836	0.549	0.466 – 1.501

Exp(B) = odds ratio (OR)

Bold indicates statistical significance at $\alpha = 0.05$.

Interaction effects of gender on condom use

Logistic regression model results for all variables as well as the effect on condom use by the interaction between gender and all variables were not statistically significant.

Of particular interest was parental communication and maternal education that had a direct effect on condom use but was not significant in aggregate when controlling for other variables: parental communication (OR = 1.067, $p = 0.280$, 95% CI = 0.949-1.200).

The aggregate model was 65.4% correct at predicting condom use Hosmer-Lemeshow goodness-of-fit test showed that this was a better predictive model than with only direct

effects with $X^2 = 10.149$, $df = 8$, and $p = 0.255$. Additionally, Nagelkerke R squared indicated that the predictors in this new model could explain 10.4% of the variances in condom use.

Gender association between parental education and condom use

Layered chi square analysis of association between paternal education and condom use by gender indicated no overall statistically significant association ($X^2 = 1.913$, $df = 4$, $p = 0.752$). Association between maternal education and condom use by gender also showed no statistically significant relationship between the variables ($X^2 = 8.323$, $df = 4$, $p = 0.080$).

CHAPTER 5

DISCUSSIONS

The basis for this section is to discuss the findings as well as whether or not the findings from this study agree with current literature on the subject of emerging adult sexual behavior. If the results do not agree with the general consensus, then possible explanations for the difference are offered. The first part of the chapter discusses the result of the logistic regression analyses for each hypothesis and delves into why a few findings differ from those from literature sources. The latter part of the discussion delves into various factors that limit the generalization of the results from the sample to a larger population. The purpose of this investigation is to explore whether parental factors during adolescence can predict sexual behavior during the emerging adulthood stage.

Demographic characteristics

During high school, the average age of the sample was approximately 16 years. There were approximately the same number of males and females. Most of the students received free or reduced lunch at school which indicated that 80 percent of the sample were from households with income was at 130% of the national poverty level to qualify for free school lunch or between 130% and 185% of poverty level to qualify for reduced price school lunch (United States Department of Agriculture [USDA], 2013).

For both maternal and paternal levels of education, the majority of parents (more than 50 percent) had limited education with at most some high school education. According to the Aud, Fox, and KewalRamani's 2010 report for the U.S. Department of Education, in 2008, there were more Hispanic/Latinos with children between ages 6 and 18 years who did not complete high school (39.3% of mothers and 41.1% of fathers)

compared with other ethnic groups. Furthermore, there were fewer Hispanic/Latino parents who held a doctorate or professional degree (0.5% mothers and 1.1% fathers) in comparison to other ethnicities.

Based on the ethnic background of the sample in 10th grade, it is assumed that Spanish is the “other language” they are likely to speak aside from English. At home, they tended toward equally speaking both languages likely because of speaking English with siblings. The sample also trended toward speaking English more with friends as they are more likely to encounter other races outside the home. And they tended to speak Spanish with parents. The gradient of linguistic capability indicated the adaptability of the respondents to different situations and people.

During early adulthood, the respondents were about 21 years old on average. Almost all were single rather than married. Unlike during high school where they tended to speak English and Spanish almost equally at home, the respondents indicated they were more likely to speak English than Spanish. This may further indicate that with time, the sample became more adapted to the American culture and system as suggested by Jensen et al (2011). However, the language spoken with friends and parents are unchanged from high school; mainly English with friends and Spanish with parents. Again, this unchanged linguistic behavior agrees with Jensen et al’s (2011) point that today’s youth are more adaptive due to increased globalization and with the findings of Guarini et al (2011) that younger generations are more likely to adopt the American way of life compared to older generations.

Parental monitoring

H1: Active parental supervision/monitoring in adolescence increases the likelihood of condom use during emerging adulthood.

Extant literature has repeatedly shown parental monitoring to be a protective factor for risky health behaviors among adolescents (DiClemente et al, 2001; Burlew et al, 2009; Albert, 2009). Although, some authors found this protection continued into early adulthood, the results of this study did not support this trend for emerging adults (Padilla-Walker et al, 2008). For the participants in this study, the level of parental monitoring was not different between those who reported using condoms and participants who did not. And neither did it predict the use of condoms in emerging adulthood. This results indicated that for the sample, on its own parental monitoring was not an important factor in relation to risky sexual behavior. Therefore, other factors may play a role for this result such as gender differences in parental monitoring as indicated by the two-independent samples t-test. There was a significant difference between men and women and degree of parental monitoring with women reporting more monitoring than men during adolescence. This is consistent with the conclusion of Bigg et al (2010) that adult Latinas report higher parental monitoring as teenagers compared to Latinos, namely in effort that adolescent Latinas fulfilled the *marianismo* expectation of piety and virtue into marriage (Guarini et al, 2011). As a result, they are more likely to communicate more with and thereby acquire some sexuality information from their mothers in an attempt to dissuade them from any form of sexual experience (Kim & Ward, 2007). However, the interaction of gender and parental monitoring were not predictive of condom use and may indicate

that studying the interactional effect of parental monitoring with other variables could explain these findings.

Because emerging adulthood is a period in which people experience first-time freedom from parental oversight, being out of the control of parents or guardians allows the emerging adult to experiment the new possibilities the world has to offer (Arnett, 2004). Therefore, an emerging adult has the ability to engage in behaviors that he or she would normally not do under direct parental supervision. Such behavior is supported by Jensen et al (2004) whose findings revealed that emerging adults are more likely to lie to their parents about their sexual behavior due to increased autonomy. Latinas, who therefore are away from direct parental monitoring, may be more likely to inform parents of the maintenance of the *marianismo* expectation especially if they perceive their relationship with their parents, in particular their mothers, as a quality relationship (Urry, Nelson, & Padilla-Walker, 2011).

Another possible explanation for the insignificant association and prediction found in this study may be individual belief in the importance of female virginity. Deardorff, Tschann, Flores, and Ozer (2010) discovered in their study of the association between culturally-based sexual values and sexual behaviors of Latino youths (16-22 years old) residing in San Francisco, that belief in the importance of female virginity was negatively associated with young Latinas' lifetime and recent number of sexual partners. Such an outcome may be associated with increased condom use because the authors found that this same belief in importance of female virginity was also found to be positively associated with both Latino men and women's inconsistent use or non-use of condoms during the first month of sexual relationship. A likely reason for this positive

trajectory may be the level of trust in the fidelity of the sexual partner. Therefore, the intrapersonal process for decision-making for sexual behavior and relationship dynamics are important considerations to apply when educating young Hispanics about safer sexual practices.

Parental communication

H2: The more parents communicate with their adolescent children, the more likely the child will use condoms as an emerging adult during sexual intercourse.

The parental variable, parental communication that was positively associated with condom use is consistent with prior research findings that parental communication is protective of emerging adult sexual behavior. The more parents and adolescents communicated with one another the more likely it is that they would discuss sexuality and healthy sexual behaviors as founded by Haglund and Fehring (2010). In a study by Caruthers, Van Ryzin, and Dishion (2014), the authors wanted to determine whether a family-based prevention intervention that targets antisocial behavior in adolescence will also reduce high-risk sexual behavior. The outcome revealed delayed sexual debut in the sample thereby indicating that improved parent-adolescent relationships may have encouraged communication about high-risk sexual behavior, associated sexually transmitted infections and HIV, and the necessity for regular tests. Such discussions may have promoted less engagement in high risk sexual behavior. As such emerging adults who had strong communication in their relationships with parents as adolescents are less likely to engage in risky sexual behavior as seems to be the case for the sample in this study.

As with parental monitoring, more females than males reported higher communication with parents. However, this increased degree of communication may be due to parental need to protect the virtue of their daughters as noted with parental monitoring. Voluntary disclosure of activity by the emerging adult is important in the maintenance of open communication with parents. The high degree of communication reported by the sample resulting in significant condom use by the study participants may indicate an open communicative relationship with parents which may have been an avenue for discussion of sexual topics. As indicated by other studies, a good parent-child communication relationship can reduce risky sexual behavior in the adolescent and perhaps the emerging adult (Aspy et al, 2007; Commendador, 2010). The authoritative parenting style intimates to a balanced relationship between parent demandingness and responsiveness. Therefore, good parental communication can be indicative of authoritative parenting approach. As such, the sample, for the most part, may be from households that practice such an approach.

Interestingly, parental communication and gender combined were not predictive of condom use although the study indicated higher parental communication among females compared to males and that more females used condoms than males in frequency. This indicates that, in itself, parental communication is a powerful force for influencing health behaviors but is not significant between genders. It is likely that parental communication may be a stronger predictor of sexual behavior when other demographic variables are taken into account such as socioeconomic status, even though both parental income and level of education were not significant predictors for the sample.

Parental income

H3: Higher parental income results in increased condom use in the emerging adult.

Income was not predictive of condom use even when analyzed by gender for this sample. Moreover, although analysis found no relationship in condom use between sexes, the data trended toward females and males who received reduced/free lunch using condoms more than those who do not receive reduced/free lunch and even more so among females than males. While exploring STI diagnosis based on within-ethnic group socioeconomic gradient differences, Harling et al (2013) found that generally, STI diagnosis decreased as income increased which may indicate income as a protective factor.

However, as indicated previously, such is not the case for the 1108 participants analyzed for this study. Although condom use is not statistically significant, it is significant quantitatively indicating that Hispanic emerging adults from lower socioeconomic status are more likely to follow safer sex practices than their counterparts from higher socioeconomic status. It is very likely due to the participants' ability to negotiate easily both within and outside the home. In other words, they showed indications of acculturation. Findings indicate that while at home or with parents, the respondents were at ease speaking English or another language while transitioning to speaking English with friends. Such flexibility would make it easier to comprehend sexual education as well as knowing where and how to obtain condoms. Vivancos et al (2013) found that among university students, school-based sex education reduced risky sexual behavior and STIs among those that were sexually active. Therefore, it is likely that another reason that the sample contradicts expected outcome may be the availability and access to condoms at locations accessible to adolescents such as schools and teen

clinics which has proven effective in the reduction of teenage pregnancy and sexually transmitted infections (Advocacy for Youth, 2014).

Parental education

H4: Higher parental education results in increased condom use in the emerging adult.

Overall, paternal education was not significantly associated with whether or not an emerging adult would use condom, although as studies indicate education is a measure of socioeconomic status and increased socioeconomic status tends to improve health behavior among individuals. Paternal education was not directly predictive of emerging adult sexual behavior at all level of education for this sample. Even when combined with gender, paternal educational had no predictive value. According to literature, Hispanic/Latinos are the least likely of all races to complete high school education in the United States. Therefore, it is likely that with increased education, more knowledge about sexual behavior and protective strategies may be acquired and thus fathers may have better health behaviors that will benefit and influence their children (Case & Paxson, 2002).

Although parental education of high school or higher decreased health impairment as found by Ross and Mirowsky (2011), worldwide, increased maternal education more than paternal education tends to have positive impact on health (Caldwell & MacDonald, 1982; Gakidou et al, 2010; Lam et al, 2013). More educated mothers tend to work longer hours but there is no general consensus that they spend less time with their children (Meghir, Carneiro, & Parey, 2013). It was not the case in this study for maternal education, similarly to paternal education, also was not predictive of condom use among

the sample. This finding suggests that other factors aside from maternal education are more protective against risky sexual behavior. As with paternal education, gender interaction with maternal education was not predictive of condom use in all levels of education. However, it is likely that maternal education in association with other demographic factors may show significant influence within the sample.

Increased parental education is linked with better health outcome due to increased knowledge and accessibility to services (Namisi et al, 2013; APA, 2014b; Case & Paxson, 2002). A parent with above 8th grade level of education may become more knowledgeable about risky sexual behavior and may be able to advise his or her adolescent child about safer sexual behaviors as well as where to access condoms. With the sample indicating it speaks English more often at home than Spanish, it is likely that parents are also well-versed in English which may be an indication of parental acculturation to the American way of life. Therefore, communication is easier between parent and child that may facilitate increased understanding between parent and child as parents may be less embarrassed to discuss sex-related topics.

Cultural identity

H5: Increased cultural identification increases the likelihood the emerging adult will utilize condoms during sexual intercourse.

That stronger identity with one's culture, particularly a collectivistic culture, generally is associated with positive health behavior with adolescents and emerging adults is evidenced in literature (Unger et al, 2009; Schwartz et al, 2011). However, such was not the case in this study as cultural identity was not predictive of safer sexual practices. A

possible explanation is that there is absence or miniscule presence of parent-child acculturation discrepancy, a concept explored by Unger, Ritt-Olson, Soto, and Baezconde-Garbanati (2009). The concept describes a difference between the child and parent's perception of U.S. orientation among first and second generation immigrants. As children are exposed to the American education system, learn the English language and become more integrated into the American culture, they develop the need to integrate both cultures and may identify with one culture than the other. Parents, on the other hand, may tend to identify with their primary culture.

Portes and Rumbaut (2001) suggested that as children acclimate to their new environment, they may abandon their culture or parents may become reliant on their children to navigate the system thus creating a strained relationship. This strained relationship is the result of the difference in acculturation and so a child may be more likely to participate in risky health behaviors. As mentioned earlier, cultural identity was not predictive of the outcome for the sample of this study and this may be due to higher number of educated parents. Most of the parents of the participants had at least some high school education which then implies that they are exposed to American culture and to some extent acculturated themselves. Parents and children, therefore, exhibit fewer differences. However, the cultural identity of the sample is likely still transitional, therefore making cultural identity non-predictive for condom use.

However, the sample displayed a significant difference in reported degree of cultural identity between Hispanic men and women. As with previous variables (parental monitoring and parental communication) females tended to identify more with Spanish culture than males. As supported by literature, this trend is possible because of greater

expectations on the part of daughters to preserve and continue cultural tradition and because family relationships are more influential on females than males (Juang & Syed, 2010). And although, gender differences exist within cultural identity, the interaction between gender and cultural identity failed to predict condom use among the sample. As such, it is still possible that cultural identity may predict condom when other factors are taken into consideration.

Gender

H6: Female emerging adults are more likely than male emerging adults to use condoms during sexual intercourse.

Studies indicate that power equity within relationships is a mediator of parental influence on emerging adult women's use of condoms in a romantic and sexual relationship (Kogan, et al, 2013). This may explain why females in the studied sample tended to use condoms more than males even in the face of gender being non-predictive for condom use. In a study of African American women at high-risk for acquiring STI/HIV, Crosby et al (2008) showed that women in male-dominated relationships may fear negotiation of condom use with their male partners and that perception of condom use self-efficacy along with the ability to negotiate condom use and prior understanding of condom use with partners are predictive of consistent condom use among high-risk STI/HIV African American females (Crosby et al, 2013).

Exavery et al (2012) also noted that in a study to explore a woman's ability to negotiate condom use with her sexual partner(s), condom use was highest among single never-married women compared with women who were married or living with partners

as married. This is particularly due to fear of mistrust from the latter group's intimate partner as condoms are more likely to be used for family planning rather than disease prevention. Single women, on the other hand, are more confident to negotiate condom use with sexual partners with less fear of repercussion especially in view of protection from STIs. The case is probably likely for the participants in this study since the sample is composed of mostly singles and women. It is very likely that the quantitative skew in condom use among the women is due to their independent status and less need to be as faithful to partners as are married or committed women. Consistent with this finding is the result of the longitudinal study conducted by Namisi et al (2013) which showed that was more common among females than males indicating that females tend to take fewer sexual risks than males.

Males and females may require different parental approaches to reduce risky sexual behaviors (Kincaid, Jones, Sterrett, & McKee, 2012). The authors found in a review of literature that although adolescents benefited from parental monitoring overall, it tended to be more protective for boys than girls. Such a result indicated that boys require structure and consistent rules in comparison to girls who tended to benefit from quality parent-child relationships that are high in warmth and support. Furthermore, the review revealed that monitoring by fathers was more protective of girls against sexual risk-taking.

Limitations

Several limitations affect the generalizability of this study. Limitations inherent with secondary data analysis and survey data collection exist as well as internal and

external threats to validity associated with the original study. Since I was not involved in the collection of the data in the original study, I am not privy to issues that may have arisen with the data collected. The data may be incomplete, errors in coding may have occurred, and I do not know how missing data were handled.

Additionally, a few of the survey questions do not reflect my research question. The question on ethnicity was asked in such a way that the students could select all ethnic categories that apply to them and those that identify themselves as Latino/Hispanic also had sub-ethnic groups from which to select. The population of interest for my study was Latino/Hispanic as a whole. Therefore, I had to collapse all the sub-ethnic groups into one. As a result, the combination resulted in a sample size larger than the total participants. Doing so, in turn, affects the generalizability of my findings limiting them to populations predominantly Hispanic/Latino backgrounds who reside in an urban setting with economic, ethnic, and social characteristics similar to that of Southern California.

Another question on the survey that does not reflect my research question relates to determining parental income. Due to the data set, I was restricted to utilizing the question related to free/reduced lunch as a proxy to make this determination. If the categorization was more comprehensive, subtle findings may be discovered during analysis. My interest was to look into parental education in general. However, the questions asked for maternal and paternal education level separately in which case each will be analyzed separately for effect on sexual behavior.

Quality of parent-child relationships was explored in this study rather than specifically asking whether or not parents were knowledgeable and/or monitored adolescent sexual behavior, neither did the specifically study explore whether or not the

participants discussed sexual issues with their parents. Such an approach is understandable given the adolescent sample at during adolescence. However, such areas of questioning could be explored with the sample as emerging adults. Obtaining information on parent-child relationship during adolescence based specifically on sexual subjects may potentially reveal significant and detailed findings particular to Hispanic/Latino adolescents and emerging adults. Furthermore, this study did not explore parent comfort with initiating and discussing sexual-related topics with their children. Such an exploration would add another dimension to parent-child communication about sex-related topics and thus indicate which area of communication parents and adolescents find most useful such as acquisition of knowledge, strategies to initiate sex-related topic, and discussion in an age-appropriate manner.

The operationalization of the outcome variable, condom use, forced the respondents into one of two categories; they either used condoms or did not. Such a measurement is static and does not measure the continuity of condom use. As such it cannot fully measure risk-taking sexual behavior. The word “behavior” in itself bespeaks a habit of a continuous and integrated nature. Furthermore, condom use is only one aspect of sexual behavior. The study does not explore the number of sexual partners the respondents had, or first sexual experience. According to their findings, de Graaf, Vanwesenbeeck, Woertman, and Meeus (2011) concluded that condom use may not be as much a comprehensive indication of sexual health as other measures such as first intercourse, contraceptive use, and quality of sexual intercourse as authoritative and supportive parenting was associated with positive outcomes based on these measures unlike condom use for which there was no statistically significant relationship.

With regards to acculturation, the study focused only on the uni-dimensional variable of language ability as a measure of how well the respondents are acculturated to the American culture. The ability to communicate within the new culture increases access to health education materials, health services, and better communication with healthcare providers (Thomson & Hoffman-Goetz, 2009). However, degree of acculturation involves integration of primary language, place of birth (nativity), length of residence, generational status, language ability and proficiency among other components. It is, therefore, necessary to adopt a more complex tool to measure acculturation in place of language as a proxy.

Self-report to the questionnaire could not be verified. Therefore, the participants may have under- or over-reported some factors and behaviors. They may also have reported in such manners they believed to be desirable to the research and favorable from the standpoint of their families, peers and society.

An assumption made for this study is that the reported use of condoms during the last sexual intercourse implies consistency of condom use by the participants. No other risky sexual behaviors, such as multiple partners, were explored which may indeed bias the outcome. This thesis does not account for other sexual contraceptives (oral contraceptives, female condoms, cervical caps, and spermicidal products) or practices (abstinence or withdrawal) as outcomes among the population of interest. Therefore, it is not a comprehensive study.

Threat to the study's internal validity relate mainly to the original collection of data. Since the original study was longitudinal, participants may have been due lost to attrition particularly after 12th grade. The study participants may have lost interest in

completing the same survey year after year. As a result, many may have left questions unanswered and answers may have changed as the sample grows older and more knowledgeable. The survey may have changed over time and/or administered by different data collectors which could affect the participants' understanding of questions and instructions. Finally, events surrounding the participants may have affected their understanding of questions and instructions as well as they answered the surveys.

CHAPTER 6

CONCLUSIONS

In this last chapter of the thesis, the investigator attempts to condense the findings of the study in a coherent manner. The investigator also proposes various applications of the findings for the field of public health to advise public health professional in more effective approaches to educate the Hispanic/Latino adolescent and parent. Applications, in terms of culturally and gender appropriate health education, increased access to condoms, and empowering parents to initiate and maintain open communication with adolescents while encouraging adolescents to disclose their activities to parents are outlined in this chapter.

Study inferences

Hispanic/Latinos are a large and growing population in the United States and as such contribute tremendously to the health of the nation. Health disparities related to the ethnicity has been long established. However, less is understood of within group factors particularly in heterogeneous groups such as the Hispanic/Latino ethnicity. Since adolescence is a time of physiological, social, and psychological changes that may extend on into adulthood, it is important for health promotion specialists to understand the aspects unique to Latino adolescence that persist into adulthood. Gender specific and cultural tailored programs to decrease the prevalence of sexually transmitted infections and unplanned pregnancies through consistent use of condoms are a necessity.

This study was carried out to explore the relationship and predictability of emerging adult sexual behavior based on parental influential factors during adolescences.

The study outcome indicates a higher usage of condoms reported by emerging adult Latinas compared to the men which may be a testimony to communication between parents and adolescents. As noted earlier, Hispanic girls are more likely to receive instructions about and/or discuss the subject of sex from parents than boys, particularly from their mothers, albeit negative messages to dissuade them from sexual relationships outside of marriage. Receiving such instructions contribute to their increased likelihood to observe safer sex practices.

The study also found consistent with the literature that parent-child communication plays a significant role in the health outcome of the offspring and is more predictive of emerging adult sexual behavior. The more an adolescent maintained open communication with parents, the more likely that line of communication will remain open into emerging adulthood and thus serve as a means for partaking in protective behaviors even when out of parental oversight. Gender differences exist in the degree of parent-child communication and parental monitoring mainly in favor of Latinas which may in part due to cultural expectations for fulfilling societally accepted gender roles and continuing cultural traditions in comparison to males who are less restricted socially.

It is also important to take note that, although parental education was not a significant finding in this study, parental education (particularly maternal education) can still play an important role in the sexual behavior of the Hispanic/Latino emerging adult due to general findings from other studies. In general, increased parental education may be protective of Hispanic/Latino emerging adults mainly through better acculturation to the American system, acquisition of sex-related information, access to needed health services, and perhaps even healthier behaviors that can be imparted on to the offspring.

Implications for public health

Parent-child communication has continually been demonstrated to positively facilitate healthier behaviors among adolescents and emerging adults and the Latino population is no different. Programs that encourage parents and adolescents to effectively broach and discuss sexual activity are required especially for a generally conservative ethnic group as Latinos. Such programs must equip parents with accurate information to pass on to their children, develop strategies and skills for effective communication, and also provide available resources for contraception and contraceptive use to which parents can direct their children. Discussing a sensitive issue such as sex in a non-reactive manner will hopefully keep the communication channel open for other subjects that may be important to the adolescent while encouraging and creating boundaries for the adolescent. Keeping communication open from adolescence will encourage the emerging adult to continue to make healthy lifestyle choices.

Aside from improving parent-child communication, the public health professionals could also provide Latino parents with age- and culturally-appropriate approaches to monitor their adolescent children in ways that increase the adolescents' disclosure of activity. Parents should be encouraged to develop the authoritative parenting style in order to facilitate an environment in which the adolescent feels safe to impart and inquire about sensitive information.

Another important aspect of public health work is to focus on inspiring Hispanic/Latinos to at least complete high school education whether through a diploma program or GED. As a collectivistic society, parents may be more inclined to pursue higher education for the benefit of their children than for their own accomplishment.

Studies have shown that parental education serves to instill aspiration in children to pursue higher education themselves (Dubow, Boxer, & Huesmann, 2009). As a result, the gap in educational attainment that is presently experienced by Hispanic/Latinos could become narrower.

However, it is important not to focus exclusively on the parent-child relationship but also empower the adolescent in the decision-making process as well as the proper and consistent use of condom to prevent adverse outcomes of unsafe sex practices. An avenue that has proven successful is through the school system, particularly through trained and certificated sex educators. Sex educators in schools are comprised mainly of physical education teachers, health educators, biology teachers, school nurses or counselors (Byram, 2010). The author also pointed out best practices of successful sex education programs that include: teaching teenagers understanding of their own sexuality; providing understanding of the decision-making process associated with safe sex; ensuring that the sex education program is culturally appropriate and age-specific; and lastly, ensuring confidentiality and privacy so that students feel comfortable to express their feelings and experience about sex with the school personnel.

Implications for health education

The findings from this study are applicable to health education in terms of planning gender specific and culturally tailored programs geared toward Hispanic/Latino adolescents and parents. Firstly, this study is applicable toward program planning in a metropolis with similar demographic and socioeconomic distribution as Los Angeles County. Secondly, the health educator must interpret the findings of this study and

employ it to program planning with caution. Aside from the limitations of the study, it is important to note that the model could only predict condom use about 10% of the time based on the independent variables entered. However, coupled with extant literature, the results can still be of use.

Hispanic/Latinos are family-oriented. Therefore, it is necessary to implement a program that encourages parents, both mothers and fathers to talk to their children in order to strengthen familial bond. Although, studies indicate that mothers tended to be the source of information to children, fathers also must be encouraged to participate as well. Parents will be taught the benefit of open communication with teenage children in view that generations differ with time and opportunities for miscommunication abound. Therefore, it is necessary to teach parents how to encourage free self-disclosure from adolescents which potentially will allow conversations regarding sexual behaviors. Role-playing scenarios that address issues that are common with adolescents will allow parents the chance to practice communication strategies thereby making it easier for them to speak with their adolescent children. The health educator should promote understanding of teenage problems, such as sexuality, substance use, learning problems that parents may find difficult or embarrassing to know. Culturally sensitive materials should also be provided in a language that parents can read and understand. As such, the health educator must be bi-lingual in order to facilitate discussion.

In addition to teaching parents communication strategies, the program must address several topics, one of which is sexuality and sexual behaviors among teenagers. Parents must be taught how to navigate the many sources of information available so as to distinguish and use legitimate ones. They should be provided a list of non-profit and

governmental organizations that specialize in teenage issues that can provide resources to help address such issues as condom use (access and proper usage).

The use of technology and social media is an education medium that is yet fully tapped by public health. The health educator can use this venue to reach, teach and motivate adolescents to adopt healthier behaviors. Vyas et al (2012) found that over 90% of Hispanic/Latino youths in their study of short message service (SMS) and social media as component of health intervention had access to a mobile phone; either by ownership, or through sharing or borrowing one. The study also found that the respondents were avid users of social media and SMS and perceived these as reliable methods of communication. Therefore, health educators could use electronic methods and programs to impart knowledge to Hispanic/Latino youths about condom use and other protective sexual behaviors. Additionally, Hispanic/Latino girls could be empowered through these electronic routes to develop condom negotiation strategies, both direct and indirect via vignettes and short messages that emphasize their right to the decision-making process with a sexual partner in order to protect themselves from unintended pregnancies and STDs. Adolescent boys could also be reached through these methods to encourage them to adopt less risky sexual behaviors as well as to facilitate open communication with their female sexual partners. Included in this online intervention will be resources to direct youths to local resources for free condoms as well as competent personnel who will teach proper usage and emphasize consistent use of condoms to both male and female adolescents.

Recommendations for future studies

There are several aspects of this research that could be further explored or improved upon. Based on the outcomes of this study, the investigator suggests the following as possible future research directions:

1. Explore condom use in association with other sexual health behavior measurements to obtain a more comprehensive view of emerging adult sexual behaviors. In doing so, this author suggests that questions expressing the ongoing nature of the respondents' sexual practice be utilized in place of questions that look into one-point in time. The assumption that one-time use of condoms indicates the routine use of condoms during most if not all sexual intercourse is a misleading notion. It is important to explore the consistent use of condoms as it is a better predictor for safer sexual behavior.
2. There were gender differences in a few parental factors in this study. However, the differences disappeared within the aggregate logistic regression model. Investigation of gender as a mediator along with other predictors rather than as an independent measurement to predict outcomes may be warranted in order to ensure that the results for this study is not misleading, that gender may play a larger role within the predictive model, considering the aggregate model explain only 10 percent of the variances in condom.
3. In view that condoms were reported utilized more by females, it may be of useful to find out if there may be a more significant outcome with female condoms. Female condoms can provide women with the opportunity share the responsibility for condom use and safer sex practices with their partners therefore increasing the

woman's power during sexual negotiation, are effective against STIs when used correctly, can be inserted in advance of sexual intercourse, and can provide lubrication and conduct heat to preserve sensation (Avert, 2014b). Power equity in relationships may make it easier for the woman to use a female condom than to negotiate the use of a male condom with her sexual partner as she will be the one wearing it and also has the opportunity to wear it ahead of time. In view of this, safer sexual practice with use of female condoms should be investigated with a sample of only Latinas.

4. Peer influence is a component of the subjective norms construct of the Theory of Planned Behavior that was not investigated in this research. Peers, as sources of sexual education, may predict the likelihood for condom use among the sample.
5. The majority of studies explored parent-child relationships from the perspective of the child. It may be useful to explore parental perspectives as well. As de Graaf, Vanwesenbeeck, Woertman and Meeus (2011) pointed out parental behavior (parenting style) is likely partly a response to the child's behavior. Parent-child relationships are bi-directional and studying the dynamics of the relationship in relation to health problems will provide a more consistent and reliable result.
6. Ask monitoring and communication questions in neutral manner in order to reduce the idea that monitoring and communication are only initiated and maintained by parents.
7. Explore differences in parental communication (mother and father separately) with males and females. Although literature and this study indicate that females

tend to report more parental communication, this is most likely with mothers. It would be beneficial to study if males would report similar interaction with fathers.

8. Parental monitoring differences by studying fathers and mothers may evince differences between genders due to the socioeconomic status of parents. It is likely that adolescent perception of the level of each parent's monitoring may play varying roles in the adolescent's decision-making process with regards to sexual behavior.
9. Although, this study found no differences between condom users and non-condom users based on parental income, the general consensus in literature indicates that parental socioeconomic status plays a positive role in health behavior as the status increases. However, the measure of reduced/free school lunch utilized as a measurement for parental income may be less valid than other variables such as parental education, occupation, and income (Harwell & LeBeau, 2010). Therefore, a better picture of parental income may be better served using other variables or a combination of them all.
10. This study was deliberately limited to the study of Hispanic/Latinos are a heterogeneous group. The investigator notes that the sample consisted of a mix of ethnicities with unique cultures and family structures. It may be worth future studies to examine if there are unique patterns to parental involvement that may specifically predict sexual behaviors within each group.
11. Finally, the literature search indicates that relationship status may play a role in the likelihood of condom use among Hispanic/Latino youths and that younger generations are more likely to adopt or integrate the culture within which they

live. It may be worthwhile to explore further if relationship status does indeed play a significant role in condom use and whether there are intra-cultural differences. Additionally, whether the influence of relationship status remains consistent through the different generational levels.

Summary

On a final note, this study has yielded some evidences of parental factors as important variables during adolescence that are later associated with and predict condom use in the Hispanic/Latino emerging adult. Overall, the results indicate that parental communication makes the most difference in the outcome behavior and that parental education may contribute to emerging adult sexual behavior to some extent. There is need for further investigation to delve more deeply into essential parental factors among Hispanic/Latino youths and emerging adults. However, this indicates that there is a need for family-based, gender-specific and culturally sensitive interventions that will enhance safer sex practices among adolescents which may extend into emerging adulthood.

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APPENDIX A

Letter of Permission from Lead Investigator of Project RED to use Data set

Keck School of
Medicine of USC

DEPARTMENT OF PREVENTIVE MEDICINE
*Institute for Health Promotion and
Disease Prevention Research*

March 25, 2013

The Institutional Review Board
California State University, Northridge

To whom it may concern:

This letter confirms that Olubukola Omolayo has access to project RED data that were collected between 2005 and 2012. Project RED (Reteniendo y Entendiendo Diversidad para Salud) is a 7-year study of acculturation patterns and health behaviors among Hispanic/Latino adolescents in Southern California. All data have been de-identified and stored on a secure University of Southern California server. The University of Southern California adheres to all Human Subjects Review Board standards and policies.

Access to the USC Institute for Prevention Research buildings is restricted. All staff entrances are secured with limited-access doors. The University of Southern California email and computing system are protected from outside access from the Internet by firewalls and passwords. Identifying information is kept separately from the electronic or hard copy data sets at all times. Only the PI has the key to connect identifying information with subject IDs. During the analysis of the data, only the subject identification number is kept with the data. No information about the identities of study participants will be disseminated in any way. Identifying information is stored on a computer that is not connected to the Internet.

Sincerely,



Jennifer B. Unger, Ph.D.
Professor of Preventive Medicine
University of Southern California
Keck School of Medicine

University of Southern California
2001 Soto N. Street, SSB 3rd Floor, Los Angeles, CA 90089-9239 • Tel: 323 442 8200 • Fax: 323 442 8201



APPENDIX B

Human Subject IRB Approval from California State University, Northridge

California State University
Northridge

Office of the Associate Vice President
Research and Sponsored Projects

May 2, 2013

Olubukola Omolayo
11493 Viking Ave.
Porter Ranch, CA 91326

Re: "Parental Factors as Predictors of Sexual Behavior in Adolescence and Early Adulthood" Research Protocol

Dear Ms. Omolayo:

Enclosed for your records is a copy of the cover sheet of your approved Human Subjects Protocol Form. Please note that your project has been approved as exempt. If there are any changes to your protocol, you must contact the Office of Research and Sponsored Projects to ensure your project is still within the exempt guidelines.

If you have any questions, call this office at (818) 677-2901.

Sincerely,



Katherine Sohn, Interim Compliance Officer
On Behalf of
Committee for the Protection of Human Subjects

APPENDIX C

Project RED Survey Instrument

7/25/13

surveyprintout.htm

About You

Q1 What is your Birthday?

DOB

Q5 What is your sex?

Male

2

Female

1

Q9 In your home, do you speak....

Only English

1

Mostly English

2

English and another language equally

3

Mostly another language

4

Only another language

5

I prefer not to answer

-9

Q10 With your friends, do you speak...

Only English

1

Mostly English

2

English and another language equally

3

Mostly another language

4

Only another language

5

I prefer not to answer

-9

Q11 With your parents, guardians or the person who raised you, do you speak...

Only English

1

Mostly English

2

English and another language equally

3

Mostly another language

4

Only another language

5

I prefer not to answer

-9

Q12 What is the Zip Code of the home where you spend most of your time?

Don't know

888

I prefer not to answer

-9

Tobacco, Alcohol, and Marijuana

Q13 Have you ever tried cigarette smoking, even one or two puffs?

No

1

Yes

2

I prefer not to answer

-9

Q14 During the past 30 days, on how many days did you smoke cigarettes?

0 days

1

1 or 2 days

2

3 to 5 days

3

6 to 9 days

4

10 to 19 days

5

20 to 29 days

6

All 30 days

7

I prefer not to answer

-9

file:///C:/Users/Daniel/Downloads/surveyprintout.htm

1/17