THE EFFECTS OF PARENTAL PRACTICES AND ACCULTURATION UPON SEXUAL RISK TAKING AMONG LATINO ADOLESCENTS

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Master of Science

Oklahoma State University

December, 1997

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
July, 2000

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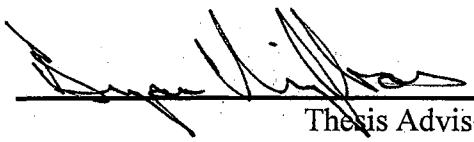

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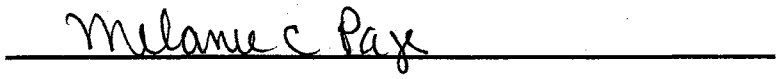

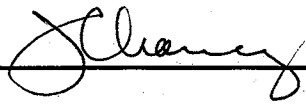

Dean of the Graduate College

ACKNOWLEDGMENTS

There are many important people to acknowledge in the completion of this project. First, I wish to thank Dr. Bryan Neighbors for his excellent mentorship and supervision. His well-developed research and clinical skills have provided me with excellent training as a researcher, clinician, and teacher. I am very grateful for the support, guidance, effort, and flexibility that he has provided for the last four years. Additionally, I would like to thank Dr. Patty Purvis at Children's Mercy Hospital for her great assistance in subject recruitment, as well as her encouragement and mentorship throughout internship and the completion of this dissertation. Furthermore, I would like to offer my gratitude for the involvement of my graduate colleagues, Yvette Segura, Stephen Gillaspy, and Rachel Kung, who were involved in many phases of this project, including theoretical discussions, conceptualization, subject recruitment, data collection, undergraduate supervision, packet preparation, and database management. Their effort, time, and dedication were indispensable. Also, I would like to thank my committee members, Drs. John Chaney, Laura Hubbs-Tait, and Melanie Page for their interest, effort, and flexibility throughout this project's proposal and defense. Thanks is also due to Dr. Steve Simon of Children's Mercy Hospital for his assistance with data analysis. The highest commendations are also due to the school personnel at the Alta Vista Alternative School in Kansas City, Missouri. The dedication and commitment of these teachers, personnel, and staff to their students and their students' families is truly impressive, and their

involvement made this project a success. Similarly, thanks are also extended to the staff and personnel at the Oklahoma City Latino Community Development Agency for their assistance with conceptualization and participant recruitment. I am also very grateful to the Glenn Rapp Foundation and Bryan Neighbors for the financial support of this project. Most importantly, I wish to thank my husband, Mike, for his unwavering support throughout my doctoral work. His help, encouragement, and pride made my graduate work possible. Mike's love and support are among my truest blessings. Finally, I wish to extend my gratitude to my parents, friends, and family who have offered their interest, assistance, and support, particularly Jennifer Perry, Jennifer Robertson, and Jenny Kozel for their feedback, unconditional support, and friendship.

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Introduction

Due to the deleterious effects that sexually transmitted disease and teenage pregnancy can have upon the health and adjustment of adolescents, sexual risk-taking in adolescents is an essential, yet under-researched area of study. The latest findings indicate that approximately 65% of girls and 79% of boys have engaged in sexual intercourse before they graduate high school (CDC, 1995a). Oftentimes, adolescents do not take the precautions necessary to protect themselves from sexually transmitted diseases or pregnancy (Strunin & Hingson, 1992), thus placing themselves at risk for physical and emotional problems.

Research on sexual risk-taking and HIV prevention is particularly needed among Latino populations. Currently, Latinos are the second largest and fastest growing minority group in the United States (Rosenwaike, 1991). However, the amount of existing psychological research is not commensurate with this expansion and growth. Research with Latinos not only increases information regarding cultural and ethnic factors, but provides clinicians improved knowledge concerning service delivery.

According to recent Center for Disease Control data (1995b), Latinos represent 10% of the US population, but account for 18% of the total reported AIDS cases in America. AIDS is the second leading cause of death for Latinos between the ages of 25-44. Because the average life expectancy for someone with HIV is 8-10 years, it is likely that many of these individuals acquired HIV during their adolescent years.

Moreover, empirical findings underscore the importance of studying sexual risk taking and sexual behavior among Latino adolescents. The estimated teenage pregnancy

rates for Latinos are two times as high as those for Caucasian females who are at least age 15, and four times as high as those for Caucasian females under the age of 15 (Darabi, Dryfoos, & Schwartz, 1986). In a study by Aneshensel, Bercerra, Fielder, and Schuler (1990) over 800 adolescent females aged 13-19 were interviewed on two occasions two years apart regarding virginity, frequency of intercourse, pregnancy, childbirth, and abortion. The results indicated that Anglo females were significantly more likely to have had multiple sexual partners than their Latina counterparts. However, when they were sexually active, Latinas were significantly less likely to use contraception. In a study of the effects of self-efficacy, knowledge, and attitudes upon adolescent sexual risk-taking, Faryna and Morales (2000) found that ethnicity consistency was the largest predictor of these behaviors, thus underscoring the importance of examining cultural background and acculturation when studying adolescent risk-taking. Specifically, Latina adolescents had the highest rate of sexual activity in the last month among other ethnic groups, including African Americans, European Americans, Asian Americans, Filipinos, Pacific Islanders, and Native Americans.

Brindis, Wolfe, McCarter, Ball, and Starbuck-Morales (1994) found that Latino adolescents were at higher risk for unintended pregnancies and sexually transmitted diseases than their Caucasian counterparts, particularly if they were not born in the United States. An examination of rates of sexual activity and lack of contraception indicated that Latino immigrants engaged in more sexual risk-taking than native-born Latino or Anglo students did. Of the sexually active students in this study, only 20% of Latino immigrants, 33% of native-born Latinos, and 35% of Anglo-Americans reported always using birth control.

Latino adolescents' sexual behavior is complex, and likely to be controlled by a number of factors. Conceptually, sexual risk-taking among adolescents is often considered a problem behavior. Some researchers (i.e., Costa, Jessor, Donovan, & Fortenberry, 1995) have termed it a problem behavior due to the violation of social norms for an adolescent given their "age and stage in life" (p.94). Other researchers have defined adolescent sexuality as an "abnormality" or "problem behavior" by a "criterion of adjustment" (Adams & Cassidy, 1993, p.9). This means that adolescent sexual behavior is problematic if it interferes with how an adolescent copes with their environment. In other words, if adolescents become ill, pregnant, or suffer psychologically as a result of their sexual behavior, it is considered abnormal. Based on the high rates of sexually transmitted diseases and teenage pregnancy among Latino adolescents, both of which have negative physical and psychological consequences, the classification of sexual risk-taking as a problem behavior appears to be well-justified.

Unfortunately, to date, few studies of adolescent sexual risk-taking have been theoretically driven, thus limiting the organization and systematic study of this field. However, two theories of adolescent behavior offer some explanation for how families may influence Latino adolescents' sexual risk-taking: problem behavior theory and attachment theory. In addition, models of acculturation appear to offer critical insight for understanding the psychological functioning of ethnic minority groups generally, and Latinos specifically, and are likely important to understanding Latino adolescent sexual risk-taking (Fraser, Piacentini, Van Rossem, Hien, & Rotheram-Borus, 1998; Sabogal & Catania, 1996).

Problem Behavior Theory

Problem behavior theory (Jessor & Jessor, 1977) has been the largest source of theoretical information on adolescent sexual behavior. It suggests that adolescent intercourse is a subset of a larger, deviant subset of behavior, which includes alcohol use, drug use, and delinquency. Donovan and Jessor (1985) found support for this concept in a six-year longitudinal analysis of over 384 adolescents. Rates of sexual activity were positively correlated with alcohol/drug abuse, general deviant behavior, lack of church attendance, and poor school performance. Factor analysis of the data demonstrated that these problem behaviors were accounted for by a single factor, which the authors termed "unconventionality."

Problem behavior theory states that these unconventional, or problem behaviors, are determined by the adolescent's perceived environmental system (Jessor & Jessor, 1977) and the adolescents' personality. A number of family and social factors are conceptualized as a part of the perceived environmental system, including parental support, parental controls, parental attitude toward problem behavior, parent-friend incompatibility, friend support, friend control, and parent-friend influence. If the adolescent has high levels of both parent and friend support and control, it is theorized that the adolescent's sexual activity and other problem behavior will be deterred because of the constraints that support and control offer. In the absence of these constraints, it is hypothesized that adolescents will engage in problem behaviors, including sexual activity.

These researchers found support for the influence of sexual activity by determining that parental and peer constructs were related to the frequency of adolescent

sexual intercourse across time in a sample of Anglo adolescents (Jessor & Jessor, 1975; Jessor & Jessor, 1977). They also found a relationship between parental support and control and the age at which female adolescents first have intercourse (Jessor, Costa, Jessor, & Donovan, 1983).

However, research based on problem behavior theory is limited in its ability to explain sexual risk taking. First, these researchers only studied sexual intercourse and the age of first intercourse. The relationship between family factors and other sexual behaviors or sexual risk-taking is less frequently examined. Secondly, the parental constructs measured by these researchers were not based upon questionnaires with proven reliability and validity, which may have affected the accuracy of their findings. Third, although problem behavior theory demonstrated an overall model fit for an ethnically diverse sample of adolescents (Costa et al., 1995), the effects of parental control and support upon adolescent sexual behavior were not equivalent between groups of Latino, Anglo and African-American adolescents. For example, parental disapproval was predictive of early sexual intercourse for Latino and Anglo adolescents, but this relationship was not significant for African-American adolescents. Thus, problem behavior theory has not been adequately tested regarding the effects of parental influence on Latino adolescent sexual behavior.

Despite these limitations, research based on the problem behavior theory has helped to establish the importance of parental factors for adolescent sexual behavior. However, little is known about the mechanisms for this effect. For example, although parental-friend influence and parental-friend incompatibility are related to adolescent sexual intercourse, the mechanisms or concepts underlying the parent-adolescent

relationship are unknown. More effort needs to be taken to determine which aspects of the parental relationship, independent of peer relationships, influence adolescent sexual behavior. Moreover, a closer analysis of which parental practices affect adolescent sexual risk-taking among ethnic minority groups such as Latinos is also needed. Other studies have attempted to address some of these limitations by examining the role of parental control and parental support in adolescent sexual behavior.

Parental Control. Jessor and Jessor (1977) defined parental control as "the perception that others hold relatively strict standards for behavior and would exercise sanctions against behavior they disapprove of" (p.29). Techniques cited in the literature that could be conceptualized as parental control include primarily parental discipline and parental monitoring. Both discipline and monitoring practices have been determined to be linked to other facets of problem behavior, such as delinquency in both adolescents and children (Loeber & Stouthamer-Loeber, 1988; Patterson et al., 1995).

Researchers have found evidence linking these aspects of parental control and adolescent sexual activity. For example, Metzler, Noell, Biglan, Ary, and Smolkowski (1994) examined the impact of parent discipline and monitoring upon sexual behavior in the context of other family factors. The sample in this study consisted of 609 male and female adolescents (63% female, 37% male), aged 14 to 17. Parental constructs were assessed by having both the adolescent and one parent complete questionnaires.

A path analysis was used to examine the effects of parenting practices upon the child's sexual risk taking. The model explained 17% of the variance in sexual risk-taking for the adolescents. Poor parental monitoring directly predicted sexual risk-taking, as well as deviant peer interactions, which indirectly predicted sexual risk-taking. Parental

involvement had no direct relationship to sexual risk-taking, but adolescents who were more involved with their families reported receiving more parental monitoring than adolescents who had low family involvement.

There is further evidence for the effect of low parental monitoring upon adolescent sexual intercourse. Ensminger (1990) studied over 700 inner-city, African-American adolescents over a period of eight years, starting at the third grade. Sexual activity was assessed as the frequency of intercourse. By the time they reached adolescence, 56% of the females and 93% of the males in this sample reported having intercourse. Males who had high rates of sexual activity had lower levels of parental supervision than males with lower rates of sexual activity. Girls who engaged in high rates of sexual intercourse were twice as likely to report low levels of parental supervision when compared to girls who did not engage in sexual intercourse.

Likewise, in a sample of over 2000 adolescents, Small and Luster (1994) found that parental monitoring was one of the strongest predictors for adolescent sexual intercourse for both males and females. Lower levels of parental monitoring were associated with a higher likelihood of non-virginity in adolescence. Thirty-nine percent of the participants in this study were Latino, suggesting that parental monitoring may be a factor among this subgroup.

In addition to higher levels of parental monitoring, there may be an optimal level of parental discipline necessary to prevent adolescent sexual risk-taking. Miller, McCoy, Olson, and Wallace (1986) surveyed approximately 2500 high school students, ages 15 to 18. Parenting factors were assessed by having the student complete six questions regarding parental strictness, monitoring, discipline, and rules. The results indicated a

curvilinear relationship between parenting factors and the presence/absence of adolescent sexual activity. Adolescent report of high levels of parental discipline, strictness, and rules about dating were associated with increased sexual activity, as were low levels of parental strictness and rules. Lack of sexual activity was associated with moderate levels of these parenting variables. Fathers' report of discipline was consistent with this curvilinear trend, but mothers' report did not indicate a clear pattern between parental variables and adolescent sexual behavior. However, over half of the participants in this study were affiliated with the Mormon Church, a group known to have extremely conservative views regarding premarital sexual activity, which may limit the external validity of these findings.

The role of parental controls in adolescent sexual behavior may differ based on the adolescent's gender. In a study by Moore, Peterson, and Furstenberg (1986), parental monitoring was assessed by interviews of the adolescent's parent regarding the proportion of their child's friends that they knew. The results indicated that high parental monitoring was associated with lower rates of female adolescent sexual activity. However, parental monitoring did not affect males' level of sexual activity.

Within Latino populations, the findings regarding parental control and adolescent sexual behavior are mixed. Some research has failed to find a relationship between parental control and adolescent sexual behavior. For example, Slonim-Nevo (1992) examined parental monitoring and the incidence of premarital intercourse among 706 Mexican-American and 317 Anglo-American female high school students, ages 13 through 19. Perceived parental monitoring was measured by adolescent self-report assessing the extent to which parents controlled whom she dated, where she went on

dates, and when she should return home. Parental monitoring was not related to adolescent sexual behavior for Mexican-Americans or Anglo-Americans. The assessment of parental monitoring in this study was more specific than what has typically been used in research, which may explain their lack of findings regarding parental monitoring and adolescent sexual behavior.

Other studies have found positive results between parental control and Latino adolescent sexual behavior. For example, Marchi and Guendelman (1995) studied 176 Latino high school students, ranging in age from 15 to 19 years. The outcome variables included: abstaining from sex, the frequency of "making out" with someone of the opposite sex, and the frequency of sexual intercourse. Greater severity in perceived punishment was associated with greater frequency of "making out" for female adolescents, but not with the frequency of kissing alone or sexual intercourse. In a sample of young Latino men (average age was 18-years-old), Goodyear, Newcomb, and Allison (2000) found that a history of family abuse, characterized by parenting patterns of abuse and neglect during childhood, was a robust predictor of sexual activity in young adulthood.

Another aspect of discipline, which has yet to be studied with regard to adolescent sexuality, is discipline consistency. Discipline consistency has been linked to other behavior problems in Latino children, such as conduct disorder and depression (Dumka, Roosa, & Jackson, 1997). Additionally, inconsistent discipline has been linked to problem behaviors in other adolescent samples, such as noncompliance, substance use, and delinquency (Patterson et al., 1995, Robinson, 1978, Vicary & Lerner, 1986). Based

on these studies, it is likely that parents who use discipline in an inconsistent manner may have adolescents with higher rates of problem behaviors, including sexual risk-taking.

In sum, these studies indicate that parental control techniques have not been systematically investigated for Latino adolescent sexual behavior. Because the methods of measurement of parental control vary, it is difficult to compare and contrast existing studies. The findings seem to indicate that parental monitoring is likely to decrease the rates of adolescent sexual intercourse among Anglos, but the relationship between monitoring and sexual behavior has not been adequately studied among Latinos. It is unknown how parental monitoring influences other aspects of adolescent sexual behavior, like risk-taking.

The findings regarding the effects of parental discipline upon adolescent sexual behavior are even less clear. There is some support for a relationship between punitive discipline and higher rates of adolescent sexual behavior in both Latino (Marchi & Guendelman, 1995) and Anglo (Miller, McCoy, Olson, & Wallace, 1986) samples. However, additional studies are needed to replicate these findings. Although found to be related to other adolescent problem behaviors, the effect of inconsistent discipline upon sexual risk-taking is unknown.

Parental Support. Apart from parental control, parental support also seems to have an effect on adolescent sexual behavior. Jessor and Jessor (1977) defined parental support as "the perception of help being available when needed and encouragement and interest from others" (p.29). Problem behavior theory also examined parental support as a possible deterrent of adolescent sexual intercourse. Higher levels of parental support

were found to be linked to a higher likelihood of female virginity in an Anglo sample (Jessor et al., 1977).

In other research, Feldman and Brow (1993) studied the effects of family support, parental style (indulgent parenting and parental rejection), and quality of family interactions on the number of sexual partners among 69 boys. Quality of family interactions was measured by direct observation of family problem-solving and relationship quality during a series of structured tasks. The study was longitudinal, following the adolescent males from the sixth to the tenth grade. The results indicated that maternal rejection and quality of family interactions were associated with the number of sexual partners that the adolescent reported by the ninth grade. Higher levels of support in the family were associated with lower number of adolescent sexual partners. In contrast, parenting styles that were characterized as "indulgent" or "rejecting" were associated with higher levels of adolescent sexual partners. Likewise, Millstein and Moscicki (1995) studied 571 sexually active, female adolescents (ages 13-19) from urban and suburban-based family planning clinics. Parental support, assessed by four items from Jessor's Perceived Support Scale, was not related to risky sexual behavior.

One possible reason for the mixed findings regarding parental support and sexual activity may be due to the effects of other factors, such as gender and age. Treboux and Busch-Rossnagel (1990) surveyed 361 high school students regarding the adolescents' attitudes of sexual behavior, contraceptive knowledge, and actual sexual behavior. The results indicated that the roles parents played differed for males and females, as well as for virgins and non-virgins. For female virgins, parental discussion with their adolescents and parental approval of sexual behavior directly affected the females' attitudes towards

sexual behavior. For male virgins, discussion of sexual topics with parents directly decreased sexual behavior. For sexually active males and females, parental factors had no effect upon sexual behaviors or attitudes. Among adolescent females in grades nine through college, Treboux and Busch-Rossnagel (1995) found that parental influence on sexual behavior varied according to age. For ninth and tenth graders, parental discussion and approval affected sexual behavior indirectly via the adolescent's sexual attitudes. This was not true for older adolescents.

At this time, only two studies have assessed the effect of parental support on adolescent sexual behavior among Latinos. Christopher, Johnson, and Roosa (1993) studied 500 Latino adolescents in San Francisco, most of whom had a lower SES background. Sexual behavior was measured on a continuous scale, ranging from kissing to sexual intercourse. Results indicated that parental warmth, communication, and conflict did not predict adolescent sexual behavior.

Marchi and Guendelman (1995) also examined the effects of parental support upon a range of Latino adolescent sexual behaviors. Adolescents who reported feeling close to both parents, or their father only, were less likely to "make-out" with someone of the opposite sex than adolescents who were not close with their parent(s). For these Latino adolescents, feeling close to both parents was also associated with lower rates of sexual intercourse. This relationship between parental support and lower levels of adolescent sexual intercourse was stronger when there was a close relationship with both parents as opposed to just one.

In sum, there is limited research on the effects of parental support on adolescent sexual activity and risk-taking. The studies that have measured parental support in Latino

and mainstream populations have mixed findings. There is some evidence that parental support may affect adolescents differently based upon their age and gender.

Attachment Theory

Attachment theory also provides a framework that may be useful in understanding adolescent sexual risk-taking. Attachment has traditionally been defined in terms of an accessible, affectionate, and responsive relationship between mother and child (Bowlby, 1977; Ainsworth, 1989).

Secure attachments are hypothesized to provide the child with a secure base from which to learn from their environment (Rice, 1990). Bowlby (1960) postulated that children begin to establish and rely upon "internal working models", or cognitive structures which help to interpret environmental factors and events, based upon this relationship with their parent. These cognitive structures reflect parent-child bonds, and appear to be durable and persistent throughout a person's life (Bowlby, 1982). Attachment differs from parental support on basis of this internal working model. Parental support alone is characterized by warm parent-child relations, but does not account for the adolescent's internalization of the bond they have with their parents.

If the parent-child relationship is secure, as demonstrated by the presence of affectionate interactions and internal working models, the child may learn adaptive, healthy patterns of social, behavioral, and psychological functioning both in childhood and later in life. Supporting research has found that parental-child attachment during adolescence was related to adolescent self-esteem and interpersonal functioning (Ryan & Lynch, 1989; Koback & Sceery, 1989).

When the attachment relationships are insecure during adolescence, the adolescent is more likely to have problems with their behavior, social interactions, and mental health both in childhood and in later developmental stages. Researchers (e.g., Allen, Hauser, Borman-Spurnell, 1996) have examined attachment in parent-adolescent relationships, particularly the levels of trust, responsiveness, and accessibility that these relationships possess, and their role in various forms of adolescent psychopathology. Insecure attachments have been linked to both mental health problems (Allen et al., 1996) and negative social interactions (Bowlby, 1988) among adolescents. Research reviews have supported that adolescents who are not securely attached to their parents have higher levels of problem behaviors, such as drug use, alcohol use, and delinquency (Loeber & Stouthamer-Loeber, 1986).

It is likely then, that attachment also plays a strong role in the sexual behavior of adolescents. If these enduring parent-child bonds are represented by an insecure attachment relationship between the parent and adolescent, the adolescent may be more prone to social and behavioral problems, such as sexual risk-taking.

There seems to be some limited support for this relationship between attachment and sexual risk-taking in the literature. Although there are no documented studies on adolescent sexuality and parental attachment among Latinos, there is more research in this area among other groups. In a series of studies of approximately 1500 adolescents, Benda and colleagues examined parental attachment as a possible predictor of adolescent sexual behavior (Benda & DiBlasio, 1994; Benda, DiBlasio, & Kashner, 1994; & DiBlasio & Benda, 1992). Sexual activity was measured by the frequency of behaviors on dates, ranging from holding hands to having sexual intercourse. Attachment was

assessed by one question asking how close the adolescent felt towards their male and female guardian. Low parental attachment was associated with high rates of sexual activity. This finding offers preliminary support for the importance of parent-adolescent attachment to parents in adolescent sexual behavior.

Additionally, Lauritsen (1994) found support for secure attachment's effects at curbing adolescent sexual activity. This study examined the effect of family factors upon adolescent sexual risk-taking among 2500 adolescents, ages 11 to 17. Attachment was measured by 5 items that assessed the degree to which family members listened to the adolescents' problems, feelings of closeness, lack of loneliness, and feelings of inclusion. Sexual activity was measured based upon a frequency rating of sexual intercourse in the last month. More secure parental attachment predicted lower levels of sexual intercourse in Anglo-American males, but not for African-American males, African-American females, or Anglo-American females. This suggests that attachment to parents may be related to sexual risk-taking in adolescents, although it may operate differently among different ethnic groups and for males and females.

In a study of 800 Latino and African American inner city youth, Smith (1997) studied the effects of contextual and family factors upon adolescent sexual activity (whether or not the teen had sexual relations). Results indicated that secure parental attachment, measured by the Parent's Attitude Toward Child Scale, predicted absence of sexual intercourse by the adolescent. These results supported the relationship between attachment and adolescent sexual behavior in different ethnic populations.

Small and Luster (1994) confirmed the influence of attachment upon adolescent sexual behavior, and demonstrated the importance that gender differences can play in

these behaviors. These researchers studied the effects of attachment, measured by the Inventory of Parent and Peer Attachment, on adolescent virginity. Thirty-nine percent of the sample was Latino. Their findings indicated that higher levels of attachment were related to lack of sexual intercourse for adolescent females, but not males. These findings held similarities to the existing work in this area. Like Lauritsen (1994), this study found evidence that gender differences affect the relationship between attachment and adolescent sexual risk-taking. Similarly, ethnicity differences did not affect this relationship in the results reported by Smith (1997). At this time, however, a more careful examination of attachment measurement and ethnic representation will is needed in order to clarify the divergent findings across studies.

In sum, attachment theory offers promise as a framework for understanding the role that parents play in adolescent sexual behavior. There appears to be preliminary support for the relationship between more secure parental attachment and lower rates of sexual activity for both Latino and Anglo adolescents. There also appears to be some preliminary support that suggests that the effects of parental attachment upon adolescent sexual risk-taking may be different for males and females. However, due to the lack of existing work in this field, research that pays careful attention to measurement of attachment and sexual behavior is needed to carefully examine the influence of gender and ethnic differences on the relationship between attachment and adolescent sexual risk-taking.

Acculturation

In addition to the theories discussed above, the concept of acculturation also may offer some explanation for adolescent sexual risk-taking, as it likely interacts with the adolescents' environment, subsequently influencing their behavior. Acculturation has been defined as "a process of attitudinal and behavioral change undergone by individuals ... who come into contact with a new culture" (Marìn, 1992, p. 236). Basically, it assumes that when exposed to a multi-cultural experience, people will begin to experience behavior, and cognitive changes as a result of the exposure to the different culture. Oftentimes these individuals will participate in the roles and customs of their new culture in addition to, or instead of, the practices and customs of their former culture.

It has also been suggested that these changes are fluid, never-ending, and dependent upon both the individual and the intensity of the contact with the new group (Marìn, 1992). The process of acculturation can be undergone willingly or unwillingly (Casas & Pytluk, 1995).

It is often assumed that acculturation is linear, meaning that acculturation consists of losing the values and beliefs of one culture in favor of another. Some have suggested that this conclusion is erroneous (Padilla, 1980). Rather, some have suggested acculturation may be composed of a simultaneous involvement in both cultures (Padilla, 1980). This means although an individual may hold some traditional values and beliefs, they may also begin to hold values and beliefs from their new culture at the same time.

Measurement of acculturation is quite varied throughout the literature. Traditionally, acculturation has been measured according to the length of time in the

United States, by social factors (ethnicity of peers, etc.), and by psychometric scales (Rogler, Cortes, & Malagady, 1991). However, there appears to be little agreement or consistent use of any of these assessment techniques, thus limiting our knowledge regarding acculturation.

Acculturation in Latino Americans is a process that transpires as they adapt to the dominant culture. They acquire cultural information from many different sources, such as their parents, family members, siblings, friends, school personnel, and community leaders, which affects their behaviors and values. Knight and Bernal (1997) suggest that although cultural change occurs in both directions, in the United States, Latino adolescents tend to take on more of Anglo values, beliefs, and behaviors than Latino ones, given that the Anglo culture is dominant. For example, a Latino adolescent must learn the Anglo language and societal rules upon entering an American school system.

Acculturation and parenting practices. Szapocznik and Kurtis (1993) have found preliminary empirical support for a theory on how acculturation can affect an adolescent's behavior within the Latino culture. These researchers have determined that an adolescent's needs or behaviors need to be understood within both a family and a cultural context. Family and context are not two independent contexts, but rather the family is embedded within a cultural framework. When a family is exposed to new cultural experiences through the process of acculturation, it can affect the behaviors and values of the family as a whole as well as the adolescent as an individual. Specifically, when Latino families are subject to both Anglo and Latino values and customs, the adolescent's behavior is a reaction to both individual and family processes.

According to Szapocznik's theory, acculturation can interact with the family on various levels (Szapocznik & Kurtines, 1993), including increased conflict, changing familial roles, and inconsistent patterns of interaction, ultimately influencing adolescent behavior. When going through the process of acculturation, there is some evidence indicating that the adolescent's social networks, such as family, will become less stable (Fraser et al., 1998; Szapocznik & Kurtines, 1993). Different family members are likely to proceed through acculturation at different rates and times, based upon their experiences, age, and time within the new culture.

Szapocznik, Scopetta, Kurtines, and Armsdale (1978) reported that adolescents in Cuban families tended to acculturate more rapidly to Anglo norms when compared to their families. Parents in these families held onto their Latino traditions, such as a primary emphasis on immediate and extended family, patriarchal family structure, and respect for age and life experience (Casas & Pytluk, 1995), for a longer period of time than the adolescents.

Szapocznik's theory also suggests that once exposed to a multicultural environment, parents struggle to connect with their adolescents, while the adolescents attempt to become more independent within a new cultural system, thus leading to increased rates of conflict and adolescent conduct problems (Szapocznik & Kurtines, 1993). This struggle may be increased by the elevation of the adolescent's position in the family due to the increased responsibilities as translators and social mediators for their parents (Belitz & Valdez, 1997, Falicov, 1983). Hence, assessment of the interaction between acculturation and parental practices is essential to understand adolescent behavior problems among Latino groups.

As a result of the faster rates of adolescent acculturation within the family, these networks are likely to become more inconsistent and less supportive (Fraser et al., 1998). These inconsistent, non-supportive styles have been linked to other child behavior problems, such as conduct disorder (Frick et al., 1996). It is likely that adolescents may engage in other forms of problem behavior, such as sexual-risk-taking, in response to these parenting styles.

By understanding the interactive nature between parenting and acculturation, models that explain the circumstances under which adolescent sexual risk-taking occurs can be formed. Szapocznik et al. (1978) theorized that family and culture can not be understood as independent entities. Rather, they are embedded within each other, and their influence is most accurately studied within this framework. Szapocznik's (1978) theory also implies that existing family roles, relationships and practices change interact with acculturation, causing change within the family. This process of acculturative change within the family is on going (Marìn, 1992), and likely to continue changing over time.

Dumka et al. (1997) attempted to further explore the relationship between parenting practices (inconsistent parenting and supportive parenting), acculturation, and child behavior problems (i.e., depression and conduct disorder) in elementary school-aged children. Acculturation was measured using the ARSMA (Cuellar et al., 1980), which used a multidimensional measurement of acculturation, including language familiarity and usage, ethnic interaction, ethnic identity, and generational status. The results indicated that maternal inconsistent discipline mediated the relationship between higher levels of acculturation in parents and child conduct problems, implying that higher levels

of acculturation increased the likelihood of child conduct problems by reducing the consistency of parental discipline. The effect of the interaction between acculturation and parental discipline was not examined with regards to child behavior. However, it is possible that high levels of acculturation may have interacted with existing parenting practices to predict higher levels of child problem behaviors. More research is clearly needed to expand Dumka et al.'s (1997) work and further explain the relationship between parenting, acculturation, and adolescent behavior.

Limitations of existing work

There are a number of limitations in the existing work on sexual risk-taking, particularly as it relates to Latino adolescents. First of all, it appears that the literature is limited in terms of measurement of sexual activity and sexual risk-taking. Frequently, sexual behavior and sexual risk-taking are measured by a few questions regarding presence/absence of virginity, use of birth control, or the number of sexual partners an adolescent has. Conceptually, research often fails to identify the range of sexual behaviors an adolescent may engage in, and the range of risky sexual behaviors that can cause the adolescent harm. Researchers need to carefully and measure these behaviors in a consistent manner in order to increase the replicability and generalizability of the findings.

The shift in concept measurement has occurred as a function of societal, physical, and political forces. Unfortunately, it has hindered a meaningful, conclusive line of research from being formed, as well as deterring more meaningful measurement of adolescent sexuality. Consequently, the study of adolescent sexual risk-taking from a

disease or health standpoint has only occurred in the last decade, and is in its infancy. More studies are urgently needed to provide empirical information to parents, communities, health personnel, and therapists who work with adolescents, as well as to develop and test theoretical models for adolescent sexual risk-taking.

A similar limitation is that explanations of the variables used by researchers and interpretations of the findings are for the most part limited from a theoretical standpoint. Very few researchers have tested existing models or used existing theory to guide their research. As a result, there are few theoretically valid, empirical studies which can be used to design treatment interventions or guide future studies.

A third limitation in the study of adolescent sexual behavior is that few studies have focused on Latinos. Specifically, when studying the effects of parenting strategies on adolescent sexuality, only a handful of studies have researched populations that were not primarily Caucasian. By not including Latinos into their samples, the ability to apply the results to this population is weakened. Including Latinos in research ensures adequate treatment interventions, as well as increased knowledge and service delivery for this group of people.

Fourth, in the existing work with family factors and sexual risk-taking, the methodology that assesses discipline, monitoring, and involvement is often poorly developed. Few studies have used questionnaires with proven reliability and validity. Often only one or two questions are used to assess each of these constructs.

Purpose of the current study

Given the theoretical frameworks of problem behavior theory, attachment theory, and Szapocznik's work on acculturation, this study proposed to examine a multidimensional model of parental influence on Latino adolescent sexual behavior. The effects of parental strategies, such as inconsistent discipline, corporal discipline, parental monitoring, parental involvement, positive parenting practices, and parent-adolescent attachment were examined. This study also attempted to determine whether acculturation moderated the relationship between certain parenting practices (parental involvement and inconsistency) and adolescent sexual behavior. It was expected that the results of this study would provide information about which aspects of the parent-child relationship facilitated responsible sexual behavior in adolescents.

Second, this study attempted to control for the limitations discussed above. Construct measurement was conducted in a more thorough manner than contained in much of the literature. A wider definition of sexual risk-taking was used than was typically found in the literature. Sexual risk-taking included behaviors that placed the adolescent in harm's way through unintended pregnancy or contact with sexually transmitted diseases. Specifically sexual intercourse, the number of sexual partners, frequency of sexual activity in the last year, nonuse of birth control, sex with promiscuous partners, sex under the influence of drugs/alcohol, history of sexually transmitted diseases, nonuse of condoms, and sex with unknown partners was measured.
The measurement of acculturation included a variety of constructs, such as language, cognitions, and behaviors surrounding Latino heritage. Furthermore, the measures of

parenting practices assessed a number of meaningful constructs regarding parenting, including inconsistent discipline, parental monitoring, parental involvement, positive practices, corporal punishment, and parent-adolescent attachment. For all constructs, a series of empirically based questions within psychometrically valid instruments were administered. This is an improvement over other similar research studies, as typically one or two questions are used to measure a construct, regardless of lack of empirical support.

Finally, this study took place within the Latino community, which as previously discussed, is an underserved population. More qualitative studies, such as this one, will serve to provide a better understanding for therapists, practitioners, and researchers who work with Latino families.

Hypotheses

There were two main hypotheses in this study. The primary hypothesis was that parenting practices would be related to Latino adolescent sexual risk taking. A positive relationship was expected between parental corporal discipline and sexual risk taking. Also, a negative relationship was expected between discipline consistency, positive parenting, parental involvement, parental monitoring, and parent-adolescent attachment and adolescent sexual risk taking. Specifically, higher rates of corporal discipline, less consistent discipline, lower parental involvement, fewer positive parenting practices, lower levels of parental monitoring, and less secure parental-adolescent attachment were predicted to be directly related to higher rates of sexual risk-taking among a group of Latino adolescents.

For the second hypothesis, it was proposed that the level of acculturation moderated the relationship between certain parental practices and Latino adolescent sexual risk taking. High acculturation was defined as high levels of traditional Latino beliefs and behaviors. Specifically, based on Szapocznik's work, two interactions were proposed. First, it was predicted that high levels of adolescent acculturation would moderate the effects of parental involvement and parental consistency upon adolescent sexual risk-taking. It was expected that high levels of adolescent acculturation would interact with these parenting practices, decreasing their effectiveness, and increasing the rates of adolescent sexual risk-taking.

Method

Participants.

One-hundred-seven Latino adolescents participated in this study. Adolescents were recruited through schools and community centers. Fifty-five percent of the respondents were male (n =59) and 45% of the respondents were female (n = 48). Ages of participants ranged from 12 to 18 (mean = 15.9, s.d. = 1.62). (See Table 1).

All adolescents received a $10 gift certificate for their participation in the study, and their name was entered in a drawing for a 13-inch color television. Subjects recruited through mail received an additional one-dollar incentive in the questionnaire packet. Parental consent was required for all participants. Sources of subject recruitment are detailed below.

Participants were recruited from four primary sources. First, adolescents were recruited from Latino communities in Oklahoma City, OK and Sioux City, IA via the Hispanic student services coordinator of the OKC Latino Community Development Agency, a community psychologist in Sioux City, IA, advertisements, and announcements. Second, adolescents were recruited through an alternative high school in Kansas City, MO. The high school was a charter school targeted at serving Latino adolescents' educational needs. Third, students were recruited through an alternative high school for Latino students in Oklahoma City. Fourth, adolescents were recruited through mail surveys. These surveys were mailed to adolescents who were identified as Latino through the Hispanic student services coordinator of the OKC public schools.

Measures

Demographic Variables. The adolescents completed a questionnaire to assess key demographic variables. The questionnaire included the age of each of the participants, gender, number of generations, family composition, grade, and place of birth (see Table 2).

Independent Variables. A series of independent variables designed to measure key dimensions of the parent-adolescent relationship and parenting behaviors were assessed. The independent variables were parental control (inconsistent administration, punitive practices, and parental monitoring), parental support (positive parental practices and positive interactions), and parental-adolescent attachment (ongoing parent-adolescent relationship).

Parenting practices were assessed by the Alabama Parenting Questionnaire (APQ) (see Appendix B). The APQ (Frick, 1991) is a 42-item, self-report rating scale which assesses parenting practices. Each item is assessed upon on a five-point Likert scale with the respondent indicating whether a parental response typically occurred, "never, almost never, sometimes, often, or always." For example, adolescents were asked to rate how often they engaged in certain behaviors with their parent, such as, "You have a friendly talk with your mom," and "Your mom threatens to punish you and then does not actually do it." Parent, adolescent, and interview forms are available. However, this study utilized only the adolescent report form. The subscales used in this study were parental involvement, positive parenting, poor monitoring/supervision, inconsistent discipline, and corporal punishment.

Item content for the APQ was based upon previous research on parenting practices and child misbehavior, specifically Loeber and Stouthamer-Loeber (1986), Capaldi and Patterson (1989), and the Child Report of Parental Behavior Inventory (Schaefer, 1965). Items went through reviews by parents and children to increase item clarity.

Preliminary research on the APQ demonstrated adequate test-retest reliability, with coefficient alpha rates ranging from .69 to .89 across a 4-week time frame. On the child report form, internal consistency rates, measured with Chronbach's alpha, ranged from .90 to .92 for parental involvement, .83 to .83 for positive parenting, .72 to .75 for parental monitoring, .66 to .69 for inconsistent discipline, and .41 to .58 for corporal punishment (Shelton, Frick, & Wootton, 1996). For this sample, Cronbach's alpha was .88 for maternal involvement, .86 for paternal involvement, .71 for positive parenting, .71 for parental monitoring, and .70 for inconsistent parenting. Two items were dropped from the corporal discipline subscale due to the sensitivity of the questions (i.e., "Your parents slap or hit you as punishment," etc.) and the lack of age-appropriateness for an adolescent sample (e.g, "Your parents use time-out (makes you sit or stand in corner) as a punishment."). As a result, only one item remained in the corporal discipline subscale, and internal consistency could not be assessed. For this reason, the corporal discipline subscale was not used in this study.

Validity of the APQ was established by testing the association of the APQ subscales to childhood diagnoses of ADHD, Oppositional Defiant Disorder, and Conduct Disorder obtained using the Diagnostic Interview Schedule for Children (Parent and Teacher report forms) and the Comprehensive Behavior Rating Scale for Children. The APQ was able to distinguish effectively between children with and without disruptive

behavior disorders for these ages (Shelton, et al. 1996), thus supporting the criterion validity of the measure. It was determined that this association was not due to shared item, or common source, variance because the teacher report was used to determined child diagnosis.

It is recognized that this measure has not been normed for an adolescent sample. Nevertheless, this scale was selected for this study for the following reasons: 1) There were very few existing measures which assessed a variety of parental discipline practices with adolescents. 2) The APQ possessed good initial psychometric properties. 3) The APQ had good item clarity and could be read and understood by persons of low to average educational levels.

To ensure that the APQ adequately measured the intended constructs, one of the items were modified to more accurately reflect adolescent issues. Specifically, item 4 stated, "Your mom helps with some of your special activities (such as sports, boy/girl scouts, church youth groups)." The phrase "girl/boy scouts" was dropped from this item.

Adolescent attachment to their parents was assessed by the Inventory of Parent and Peer Attachment (IPPA) (see Appendix B). The IPPA (Armsden & Greenberg, 1987) is a 75-item, self-report instrument that assesses the quality of parent and peer attachment in adolescents. Each item is assessed on a five-point Likert scale with the respondent choosing a response category of, "never or almost never, seldom, sometimes, often, almost always or always." Respondents were asked to rate questions, such as "My parents respect my feelings," and "I have to rely on myself when I have a problem to solve." The IPPA follows the assumption that internalized attachment, represented by trust, accessibility, and responsiveness of the peer/caregiver, would be associated with

positive psychological health (Bowlby, 1969). Based on a factor analysis of the responses of 179 college students, aged 16-20 years, the IPPA supports three subscales: Trust, Alienation, and Communication. These subscales are then combined to create a parental attachment scale. There are separate ratings of attachment for mother and father.

The IPPA demonstrated strong test-retest reliability, with Coefficient alpha estimates ranging from .86 to .93 over a three-week period (Armsden & Greenberg, 1987) in a sample of 78 college students, ages 17 to 20, and strong internal consistency in a community sample of young adults (Papini, Roggman, & Anderson, 1991).). For this sample, Cronbach's alpha was .91 for maternal attachment and .93 for paternal attachment. Researchers have also used the IPPA to successfully link attachment to family climate (Armsden & Greenberg, 1987) in a sample of college students, as well as other problem behaviors in adolescents (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990). These studies determined that the IPPA demonstrated convergent validity across other measures of family functioning in college students, with correlations of .78 with the Tennessee Family Self-Concept Scale. Criterion validity was also supported by finding significant relationships between the low scores on the IPPA and low scores on measures of adjustment in college students, such as self-esteem, depression, anger, anxiety, and life satisfaction (Armsden & Greenberg, 1987).

Moderator Variable. The level of acculturation of adolescents was assessed with the Acculturation Revised Scale for Mexican Americans-II (ARSMA-II). The ARSMA-II (Cuellar, Arnold, & Maldonado, 1995) is a 48-item scale which measures the construct of acculturation in Latino populations in both adolescents and adults by assessing the degree to which "individuals having different cultures come into continuous first-hand contact

with subsequent changes in the original cultural patterns of either or both groups" (p.276). The ARSMA-II assesses four factors: 1) language use and preference, 2) ethnic identity and classification, 3) cultural heritage and ethnic behaviors, and 4) ethnic interaction separately for each culture, Anglo and Mexican American. Based upon these factors, this measure yielded two scores: 1) the Mexican Orientation/Anglo Orientation score, and 2) the Marginality or Acculturation score. The Mexican Orientation Score (MOS) was a sum of 17 items, and the Anglo Orientation Score (AOS) was a sum of 13 items. Respondents were asked to choose a response category of, "not at all, very little or not very often, moderately, very often, or extremely often or almost always."

An Acculturation Score is determined by subtracting the MOS from the AOS. Convergent validity for the Acculturation Score of the ARSMA-II has been tested by correlating the mean acculturation scores with generational status of Latinos. Results demonstrated that as the number of generations in the United States increased, the scores on the Anglo orientation increased, scores on the Mexican orientation decreased, and the Acculturation Score increased (Cuellar et al., 1995). For the purposes of this study, the higher the Acculturation Score, the less likely the respondent was to identify with traditional Mexican values and customs.

The authors of the ARSMA-II demonstrated acceptable reliability and internal validity in a sample of 379 Mexican American adults living in the United States between one and five generations. Chronbach's Alpha was .86 for scale one (Mexican Orientation score) and .88 for scale two (Anglo Orientation score) (Cuellar et al., 1995).). For this sample, Cronbach's alpha was .80 for the American Orientation Scale, and .89 for the Mexican Orientation Scale. Test-retest reliability for a one-week period was .96 (Cuellar

et al., 1995) (see Appendix B).

Dependent Variable. There was one primary dependent variable in this study: adolescent sexual risk-taking. Adolescent sexual risk-taking behavior was defined as any sexual behavior which adolescents engaged in that placed them at harm for sexually transmitted diseases or unintended pregnancy. These behaviors included sexual activity with unknown partners, unprotected intercourse, and sexual intercourse with more than one person.

Adolescent sexual risk-taking was assessed with the Scale of Sexual Risk-Taking (SSRT) (see Appendix B). The SSRT (Metzler et al., 1992) is a 13-item, self-report questionnaire, designed to measure sexual activity in adolescents. Three of the items are administered in a yes/no format, and three of the items are given in an open-ended format where the respondent indicates the number of times in which they engaged in a particular behavior. For example, the SSRT asked, "How many times in the last year have you had sexual intercourse with someone of the opposite sex?" The remaining seven items are administered in a 4-point, Likert scale format, where the respondent indicates whether they participated in a behavior "never, once, twice, or three times." For example, the SSRT asks, "Have you had sex with someone who injects drugs?" The normative sample for the SSRT consisted of 240 adolescent volunteers from a community sample, and 640 adolescents subjects recruited through an HMO organization to participate in a smoking cessation program. All participants ranged in age from 15 through 18 years.). For this sample, Cronbach's alpha was .68 for the SRT Score.

The SSRT was developed through a three-step procedure. First, items were developed based upon behaviors that placed individuals at high and moderate risk for

contacting HIV. Second, a principal components analysis was performed to define the factors that comprise high and moderate risk. Third, the 13 variables with loadings of at least .40 on the principal components analysis were averaged into a composite sexual risk taking score, with high-risk items receiving twice the weight as low-risk items.

In this study, the SSRT was scored in three steps. First, the scores on these items were transformed into standardized scores, namely z-scores, based upon the means and standard deviations of the sample in this study. Second, the z-scores were then multiplied by the factor loadings of the principal components analysis reported by the authors of the SSRT (Metzler et al., 1992). Specifically, following z-score transformations, sex with adolescent promiscuous partners was multiplied by 0.82, number of sexual partners was multiplied by 0.82, history of STD infection was multiplied by 0.41, nonuse of condoms was multiplied by 0.61, sex with unknown partners was multiplied by 0.74, frequency of sex with promiscuous partners was multiplied by 0.82, nonvirgin status was multiplied by 0.90, frequency of sex within the last year was multiplied by 0.80, nonuse of birth control was multiplied by 0.78, alcohol associated with sex was multiplied by 0.62, and drugs associated with sex was multiplied by 0.57. Third, these scores were summed to arrive at a sexual risk taking score. Because anal sex was not measured in this study, this construct was not added into the SSRT score.

Procedure

Community / mailing recruitment and data collection. Possible participants in Latino communities were identified through contact persons within these communities.

Materials were either handed to these adolescents or mailed to them. Instructions were provided in the packet of materials, which included informed consent documents and a description of the study. Rewards for their participation were also described. Subjects who were recruited through mail received one dollar as an added incentive to return the packets of information. Participants were instructed to obtain parental consent, complete the questionnaires at home, and mail these materials in a postage-paid, addressed envelope to the researchers. Spanish versions of the informed consent, description of the rewards, and purpose of the study were also provided.

School recruitment and data collection. For the participants from the high school settings, parental consent was obtained by a brief presentation at a parent-teacher conference. An interpreter was present to assist with the presentation. Written information about the study was also presented to the parents in English and Spanish. Those parents who were interested in having their students participate were encouraged to sign the informed consent documents. School personnel sent home the description of the study to parents who were not in attendance at the conference.

Data collection was held the following week within the school setting. After informed consent was received and the participant's confidentiality was ensured, a list of students who returned the consent forms was given to the school counselor. The school counselor requested the presence of students with parental consent to participate in completing questionnaires. They were informed that their participation was voluntary. Prior to data collection, the psychology graduate student presented information about the study to the students. The process of informed consent was explained to them, as were the incentives for their participation.

Data was collected from the adolescents via groups of 20-30 students during a study hall period. During this time, the adolescents completed the demographics form, the APQ, the ARSMA-II, the IPPA, and the SSRT. After they completed the questionnaires, the adolescents were given the incentives for participating (gift certificate and registration for a drawing for a television) and were permitted to return to their classrooms.

Power analysis

Preliminary power analyses were conducted to determine whether the number of subjects in this study provided enough power to detect the effects of the independent variables upon the dependent variable. The "nQuery Advisor" Statistical Package was used to conduct the analyses (see Appendix C for reference). Population effect size was estimated from analyses of similar constructs published in peer review journals, and ranged from 0.17 (Metzler, Noell, Biglan, Ary, and Smolkowski, 1994) to 0.37 (Smith, 1997). Research has classified this range as a medium effect size (Cohen, 1992). Results of these analyses indicated that a sample size ranging from 75 to 167 subjects would be necessary to attain power of 0.80, which is recommended as a "very desirable" power level in order to detect the effects of the independent variable (Pagano, 1994, p.241). Based on these analyses and recommendations in the literature (Cohen, 1992), this study's sample size of 107 participants fell within the range necessary to detect effects for this population.

Data Analysis

Two participants were categorized as outliers and dropped due to their extreme responses on the SSRT. Five participants were dropped from the analyses due to large amounts of missing data (more than 10% of their responses) from one or more of their questionnaires. Eleven of the participants did not complete the questionnaire items related to paternal involvement and paternal attachment, and were excluded from the analyses related to these constructs. An average item response was imputed for participants who were missing less than 10% of their responses on the questionnaires (n = 12). The benefit of imputing data in this study included increased power to detect an effect of the independent variables in the dependent variable. Additionally, by imputing these responses, the external validity of the sample was increased by including subjects who would have ordinarily have been dropped from the study due to missing data. However, the data that was imputed was estimated, and may not have reflected the intended response of the participant. Five participants' ages were estimated based upon the average age for the grade they reported. Based on these adjustments, the final N for this study was 84 or the analyses surrounding paternal variables, and ranged from 95 to 103 for the analyses of the other constructs. Due to incomplete data, an Independent T-Test was conducted to compare the subjects who were dropped from the analyses to the subjects who were used in the analyses based upon the dependent variable. Results indicated no significant differences between these two groups on the dependent variable, sexual risk taking.

In order to determine if age was related to the dependent variable, sexual risk taking, a two-tailed bivariate correlational analysis was utilized (See Table 3). In order to determine if gender was related to sexual risk taking, an Independent T-test was conducted between males and females on basis of the SSRT (see Table 4). Neither age nor gender was related to the dependent variable, and neither of these constructs was controlled for in the analyses.

Hierarchical multiple regression analyses were conducted in order to examine whether parenting practices were associated with adolescent sexual risk-taking among Latinos (Hypothesis 1). Utilizing Jessor and Jessor's (1977) theoretical constructs of parental support and control, two regression equations were computed: one which regressed indices of parental support on adolescent sexual risk-taking, and one which regressed indices of parental control on adolescent sexual risk-taking. Based on Jessor and Jessor's definition of parental support, "the perception of help being available when needed and encouragement and interest from others" (p.29), parental support practices were conceptualized as parental involvement and parent-adolescent attachment. Therefore, in the first regression equation, parental involvement and parent-adolescent attachment scores were regressed on sexual risk-taking.

Based on the definition of parental control of Jessor and Jessor (1977), "the perception that others hold relatively strict standards for behavior and would exercise sanctions against behavior they disapprove" (p.29), parental control was conceptualized as parental practices directly targeted at changing adolescent behavior. Therefore, in the second regression equation, positive parenting, poor monitoring/supervision, and inconsistent discipline were regressed on sexual risk-taking.

Hypothesis 2. Maternal involvement, paternal involvement, maternal attachment, paternal attachment, and parental inconsistency were statistically tested to determine if acculturation moderated their relationship to sexual risk taking (Hypothesis 2). Specifically, the second hypothesis would be tested via five separate regression equations, in which the independent variables were regressed onto sexual risk taking in two blocks: acculturation and a single parenting variable (e.g., maternal involvement, paternal involvement, maternal attachment, paternal attachment, or parental inconsistency) (block 1), and the interaction between acculturation and the parenting variable (block 2). When measuring the effects of the interactions, the variables were centered. If the interaction was found to be significant, the nature and direction of this interaction would be determined through visual inspection. The Acculturation Score would be divided into quartiles, and the relationship between the parenting construct (i.e., maternal involvement, paternal involvement, maternal attachment, paternal attachment, or parental inconsistency) and sexual risk taking would be graphed via scatterplot for each of the Acculturation Score quartiles.

Results

Results of visual inspection of the independent and dependent variables indicated normal distributions for each of these variables. The means and standard deviations for each of these variables are presented in Table 2. There were no significant differences between males and females on the dependent variable, sexual risk taking (see Table 4).

Correlations. Results for the correlation between the independent variables, dependent variables, and age appear in Table 3. There was no significant relationship between age and sexual risk taking in this sample of Latino adolescents. Sexual risk-taking, the dependent variable, was significantly and positively correlated with parental monitoring. Additionally, sexual risk taking was significantly and negatively correlated with maternal attachment, maternal involvement, paternal attachment, paternal involvement, and positive parenting strategies. Although the results of the correlational matrix indicated numerous important relationships between variables in this study, a series of hierarchical regression analyses offered the benefit of examining the moderative effects of acculturation upon maternal attachment, paternal attachment, maternal involvement, paternal involvement, and inconsistency.

Hypothesis 1. The results of the first regression equation revealed one marginally significant association between parental support practices and Latino adolescent sexual risk taking (see Table 5). Specifically, greater security in paternal attachment was associated with lower rates of adolescent sexual risk taking ($p<.08$), accounting for approximately 12% of the variance in the SSRT Index score.

The results of the second regression equation revealed that parental monitoring

was significantly and positively related to sexual risk taking ($p<.002$) (see Table 6). Additionally, a significant trend between positive parenting and adolescent sexual risk taking emerged ($p<.08$). Specifically, more frequent use of positive parenting practices and lower levels of parental monitoring were associated with lower rates of adolescent sexual risk taking. These two variables combined to account for approximately 15% of the variance in adolescent sexual risk taking.

Hypothesis 2. The results of the moderation analyses revealed that the interaction between paternal attachment and acculturation significantly predicted adolescent sexual risk taking ($p<.01$), thus accounting for 10% of the variance (see Table 7). In order to further explore the nature and direction of this interaction, the acculturation score was regrouped into quartiles. Next, the relationship between paternal attachment and sexual risk taking was graphed via scatterplot for each of the four levels of acculturation (See Figure 1). Visual inspection of this graph revealed that for levels of acculturation in the bottom quartile, (Acculturation Score of –17 or below), a strong relationship was evident for lower levels of paternal attachment and higher levels of sexual risk taking. For acculturation scores in the top three quartiles, (Acculturation Score of above –17), a strong relationship between paternal attachment and sexual risk taking was not evident.

The results of the moderation analyses also revealed that the interaction between maternal attachment and acculturation significantly predicted adolescent sexual risk taking ($p<.05$), thus accounting for 5% of the variance (see Table 8). The acculturation score was regrouped into quartiles, and the relationship between maternal attachment and sexual risk taking was graphed via scatterplot for each of the four levels of acculturation (See Figure 2). Visual inspection of this graph revealed that for levels of acculturation

below the median, (Acculturation Score of –3 or below), a relationship was evident for lower levels of maternal attachment and higher levels of sexual risk taking. For acculturation scores above the median, (Acculturation Score of more than -3), a relationship between maternal attachment and sexual risk taking was not evident.

Discussion

The primary hypothesis in this study was that parenting practices would be related to Latino adolescent sexual risk taking. Specifically, higher rates of corporal discipline, less consistent discipline, lower parental involvement, fewer positive parenting practices, lower levels of parental monitoring, and less secure parent-adolescent attachment were predicted to be directly related to higher rates of sexual risk taking. This hypothesis was not entirely confirmed by the findings of this study. Rather, higher levels of parental monitoring were associated with higher levels of adolescent sexual risk taking. Additionally, there were significant trends for associations between greater security in maternal attachment and lower levels of sexual risk taking, as well as more frequent use of positive parenting practices and lower levels of sexual risk taking.

Parental Control. Although most researchers have found low parental monitoring to be associated with higher rates of adolescent problem behaviors, such as sexual risk taking (i.e., Jessor & Jessor, 1977; Metzler et al, 1994), some researchers have found higher rates of a related construct, parental discipline, to be associated with higher rates of adolescent sexual behaviors. Specifically, Miller et al (1986) reported higher rates of adolescent sexual behavior among parents who were characterized as "strict" and parents who were characterized as "permissive." The parents who were strict were more likely to be endorsed by adolescents as having "too many rules," and "knowing who, when, and

how often" the adolescent dated. These strict behaviors are consistent with the concept of high parental monitoring in the current study. Specifically, the current study measured parental monitoring by adolescent report of their parents knowing where they were, who their friends were, having a set time to be home, knowing the adolescent's friends, having limits on going out after dark, and communicating to their child where they were. It is possible that parents who are highly "strict" may have children who rely more upon their peer group and/or societal norms rather than their parents to guide their decisions on responsible sexual behaviors. Adolescents whose parents are overly cautious about their friends and whereabouts may be more likely to rebel against parental values and sanctions, thus increasing the likelihood for problem behaviors, such as sexual risk taking.

When considering these results, it is important to interpret the relationship between adolescent sexual risk taking and parental monitoring as an association, and not as causation. For example, parents who knew or suspected that their adolescent was engaging in high rates of sexual risk taking may have been more likely to respond to their behavior with increased monitoring. Longitudinal analyses are necessary to further examine this relationship for causative processes by being able to determine temporal priority. For example, parental monitoring early in adolescents should be examined for its association with adolescent sexual behavior at a later time, thus further assessing temporality between the variables.

In previous research of adolescent sexual risk taking, peers have also emerged as an important factor. Specifically, factors, such as parent-friend incompatibility, and parent-friend influence have been found to be influential on adolescent non-virginity

(Jessor & Jessor, 1977). Also, the influence of peers appears to have greater influence on adolescent sexual behavior as adolescents become older (Treboux & Rossnagel, 1990). Research, which systematically examines the relationship between parents and peers across different ages upon adolescent sexual behavior has not been studied in Latino populations. Such research would help to identify options for parents to increase responsible sexual behavior of their adolescent based upon their age and social needs.

The trend between higher levels of positive parenting practices and lower levels of sexual risk taking is important to note, as few studies have examined this dimension of parenting in adolescents. Positive parenting in this study examined behaviors, such as informing the adolescent when they did a good job, rewarding the adolescent for good behavior, complimenting the adolescent, praising the adolescent, and demonstrating physical affection with the adolescent. These are parental practices that are specifically targeted at increasing proactive, positive behaviors among adolescents. These practices differ from general parental support, as they reflect a specific attempt from the parent to increase specific, appropriate behaviors from the adolescents. Among younger children, these parental practices are often labeled "attending skills", and have been found to increase task-appropriate behavior, such as compliance (Forehand & McMahon, 1975). These practices are rarely studied in adolescence, and have not been documented in previous studies of sexual risk taking among Latinos.

Attachment. The trend between higher levels of maternal attachment and lower adolescent sexual risk taking has been supported in previous research. Research has demonstrated that secure attachment relationships are associated with a variety of adaptive adolescent behaviors. For example, studies have found that secure parental-

attachment during adolescence is related to higher adolescent self-esteem and more successful interpersonal functioning (Ryan & Lynch, 1989; Koback & Sceery, 1989). In addition, a number of studies have found secure parental attachment to be related to lower levels of sexual risk taking in Anglo and ethnically diverse samples (Benda & DiBlasio, 1994; Benda, DiBlasio, & Kashner, 1994; & DiBlasio & Benda, 1992, Lauritsen, 1994, Smith 1997). The current study is the first to document such a relationship among a sample of Latino adolescents.

This study is also the first to document an interaction between acculturation and parental attachment upon Latino adolescent sexual risk taking. This study found that for adolescents who reported lower levels of acculturation, lower levels of sexual risk taking were associated with higher levels of parental attachment for both mothers and fathers. For adolescents who reported higher levels of acculturation, the relationship between parental attachment and sexual risk taking was not evident. These findings indicate the importance of parental attachment in preventing sexual risk taking behaviors in adolescents with more traditional customs and beliefs. This is consistent with existing research which underscores the importance of family customs and values upon Latino adolescent behaviors (Casas & Pytluk, 1995; Fraser et al., 1998; Marchi and Guendelman, 1995; Smith, 1997; & Szapocznik and Kurtis, 1993).

Implications. These findings have interesting implications for parents of Latino adolescents. First, factors such as higher levels of positive practices and parental monitoring appear to be related to higher rates of adolescent sexual risk taking. Thus, positive practices, such as praise and rewards, appear to have implications for adolescents by also decreasing the likelihood that adolescents will participate in sexually risky

behaviors. For adolescents who report more traditionally Latino customs and beliefs, the relationship between parents and their child appears to be very important. Specifically, for adolescents who report lower levels of acculturation, attachment to both mothers and fathers may reduce the likelihood that they will participate in sexually risky behaviors. Therefore, it appears that male and female Latino adolescents may benefit from efforts to improve bonding with mothers and fathers. Prevention programs that emphasize increasing parent-child attachment (particularly when children are younger), as well as positive parenting strategies with adolescents, are likely to help decrease the levels of adolescent sexual risk taking.

Limitations of this study. There were a number of limitations of this study. First, all of the dependent and independent variables were measured by self-report. Due to the nature and sensitivity of the dependent variable, direct observation was not possible. Therefore, it is possible that the adolescents' responses were influenced by their perceptions, and hence subject to distortion. Also, because of the use of a single reporter, common source variance cannot be ruled out as an explanation for significant relationships found. Second, this study utilized only adolescent report to reflect parenting strategies. It is likely that parents' report may have differed, and hence shown a different pattern of relationships with adolescent sexual risk taking. Differences between parent and adolescent report of parental practices upon adolescent behavior have been demonstrated in research. Specifically, mother reports of family functioning were related to alcohol abuse, whereas adolescent reports were not (Clark, Neighbors, Lesnick, Lynch & Donavan, 1998). Third, although the number of participants was sufficient to detect changes in the dependent variable as a function of the independent variables, a larger

number of participants would have offered certain advantages. Specifically, more subjects would have increased the amount of power to examine trends in the research findings, thus increasing the likelihood that the significance of those findings were accurately examined.

Strengths. This study also offered a number of strengths. First, this study was conducted within the Latino culture, and attempted to be socially and psychometrically sensitive to the needs of this group. It is hoped that studies like this one will spur additional hypotheses, research, and improved service delivery to Latino families, particularly with regard to sexual risk taking. Second, this study measured the independent and dependent variables with instruments which have established, sound psychometric properties. This is important because much of the previous research in this area has utilized instruments without such empirical support.

In conclusion, research within the Latino population is greatly needed. This study found that the relationship between adolescent sexual risk taking and parental practices among Latinos is not a simple, direct relationship. It is likely that a plethora of other factors, such as age, background, ethnicity, and peers may interact with parenting to affect adolescent sexual risk taking. Future studies will need to examine parent and adolescent report, and utilize longitudinal data to explore these research questions.

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Table 1

Demographic Variables of Adolescents According to Data Collection Source

	Community Recruitment (n=11)	School Recruitment (n=80)	Mail-out Questionnaire Recruitment (n=10)	Total Sample (n=107)
Mean age in years	14.5	16.1	15.8	15.9
Age Range in years	12 - 17	12 - 18	14 - 17	12 - 18
Gender (%)				
Female	4 (36)	34 (43)	7 (70)	48 (45)
Male	7 (64)	46 (58)	3 (30)	59 (55)
Return Rate (%)	13	80	10	34
Grade (%)				
6^{th}	2 (18)	5 (6)	0 (0)	7 (7)
7th	0 (0)	4 (3)	0 (0)	3 (3)
8^{th}	5 (46)	1 (1)	3 (30)	13 (11)
9^{th}	0 (0)	31 (39)	4 (40)	36 (35)
10^{th}	2 (19)	17 (10)	0 (0)	21 (20)
11^{th}	2 (2)	12 (15)	2 (20)	16 (15)
12^{th}	0 (0)	10 (13)	1 (10)	11 (10)
Place of Birth (%)				
United States	7 (62)	68 (85)	7 (70)	86 (80)
Mexico	4 (38)	10 (13)	3 (30)	19 (18)
South America	0 (0)	1 (1)	0 (0)	1 (1)
Central America	0 (0)	1 (1)	0 (0)	1 (1)
Living arrangement (%)				
Mother only	0 (0)	21 (26)	0 (0)	23 (21)
Father only	0 (0)	3 (4)	0 (0)	3 (3)
Two Parents/step-parents	11 (100)	41 (51)	10 (100)	66 (61)
Other	0 (0)	15 (19)	0 (0)	15 (14)
Mean Generation in the US	2.64	2.83	2.2	2.69

Table 2

Descriptive Analyses for Independent and Dependent Variables

	M	SD	Minimum	Maximum
Parental Support Measures				
APQ Father Involvement	25.87	8.81	10.00	30.00
APQ Mother Involvement	30.10	9.42	10.00	44.00
APQ Positive Parenting	19.88	5.79	6.00	30.00
Parental Control Measures				
APQ Corporal Punishment	1.37	.79	1.00	5.00
APQ Inconsistent Discipline	15.14	4.60	6.00	30.00
Attachment Measure				
IPPA Maternal Attachment	66.38	19.51	10.00	100.00
IPPA Paternal Attachment	56.66	21.26	6.00	98.00
Acculturation Measure				
ARSMA-II Acculturation	-10.25	17.31	-54.00	31.00
SSRT				
Sexual Risk-Taking	-.36	2.75	-2.83	10.78

Table 3

Intercorrelations of Independent and Dependent Variables Using Two-Tailed Bivariate Correlations

	1	2	3	4	5	6	7	8	9	10	11
1. APQ Maternal Involvement	-										
2. APQ Paternal Involvement	.66**	-									
3. APQ Positive Parenting	.73**	.64**	-								
4. APQ Corporal Punishment	-.07	.04	-.12	-							
5. APQ Inconsistent Discipline	.17	.03	.16	.01	-						
6. Parental Monitoring	-.16	-.15	-.05	-.07	.46**	-					
7. IPPA Mother Attachment	.69**	.58**	.61**	-.04	.13	-.19	-				
8. IPPA Father Attachment	.29**	.64**	.46**	-.05	-.19	-.22**	.44**	-			
9. ARSMA-II Acculturation	-.04	-.09	-.12	.03	-.01	.01	-.21*	-.09	-		
10. SRT Score	-.20*	-.21*	-.20*	.02	.12	.35**	-.19*	-.26**	.03	-	
11. Age	-.19*	-.18	-.23*	-.10	-.24*	.08	.02	-.11	.03	.10	-

*p < .05, **p < .01

Table 4

Mean Differences Between Male and Female Participants on the Dependent Variable, Sexual Risk Taking

	Males (n=57) M (SD)	Females (n=48) M (SD)	t	Df
Sexual Risk-Taking	-.21 (2.87)	-.56 (3.04)	.637	98

*p < .05, **p < .01

Table 5

Hierarchial Regression Equations of Parental Support Practices Predicting Sexual Risk-Taking Among Latino Adolescents (n=84)

	β	F	R^2	$\triangle R^2$ for block
Block 1		2.87*	.12	.12
APQ Maternal Involvement	-.14	.62		
APQ Paternal Involvement	.01	.00		
IPPA Maternal Attachment	-.04	.06		
IPPA Paternal Attachment	-.25	3.06[1]		

*p < .05, **p < .01

[1]= The F-value for this variable approaches significance (p < .08)

Table 6

Hierarchial Regression Equations of Parental Control Practices Predicting Sexual Risk-Taking Among Latino Adolescents (n=103)

	β	F For Block	R^2	$\triangle R^2$
Block 1		5.915**	.15	.15
APQ Positive Parenting	-.17	2.85[1]		
APQ Inconsistent Discipline	-.00	.00		
APQ Parental Monitoring	.34	10.36 **		

*p < .05, **p < .01

[1]= The F-value for this variable approaches significance (p < .08)

Table 7

Hierarchial Regression Equations of the Interaction between Paternal Attachment and Acculturation Predicting Sexual Risk-Taking Among Latino Adolescents (n=87)

Step	β	F	R^2	$\triangle R^2$
Block 1		3.04**	0.07	0.07
Acculturation	.05	.26		
Paternal Attachment	-.25	5.50*		
Block 2		5.64**	0.17	.10
Acculturation	-.71	7.72**		
Paternal Attachment	-.08	.48		
Paternal Attachment X Acculturation	.86	10.18**		

* p<.05
** P<.01

Table 8

Hierarchial Regression Equations of the Interaction between Maternal Attachment and Acculturation Predicting Sexual Risk-Taking Among Latino Adolescents (n=97)

Step	β	*F*	R^2	$\triangle R^2$
Block 1		1.42	.03	.03
Acculturation	-.01	.02		
Maternal Attachment	-.17	2.78		
Block 2		2.80*	.08	.05
Acculturation	-.78	5.14*		
Maternal Attachment	-.07	.44		
Maternal Attachment X Acculturation	.83	5.43*		

* p<.05
** P<.01

Table 9

Hierarchial Regression Equations of the Interaction between Parental Inconsistency and Acculturation Predicting Sexual Risk-Taking Among Latino Adolescents (n=99)

Step	β	F	R^2	$\triangle R^2$
Block 1		.95	.02	.02
Acculturation	.03	.06		
Parental Inconsistency	.14	1.85		
Block 2		.70	.02	.00
Acculturation	.18	.26		
Parental Inconsistency	.10	.64		
Parental Inconsistency X Acculturation	-.16	.21		

* p<.05
** P<.01

Table 10

Hierarchial Regression Equations of the Interaction between Paternal Involvement and Acculturation Predicting Sexual Risk-Taking Among Latino Adolescents (n=95)

Step	β	*F*	R^2	$\triangle R^2$
Block 1		1.85	.04	.04
Acculturation	.04	.18		
Paternal Involvement	-.19	3.35		
Block 2		2.10	.06	.02
Acculturation	-.40	1.82		
Paternal Involvement	-.10	.67		
Paternal Involvement X Acculturation	.49	2.53		

* p<.05
** P<.01

Table 11

Hierarchial Regression Equations of the Interaction between Maternal Involvement and Acculturation Predicting Sexual Risk-Taking Among Latino Adolescents (n=99)

Step	β	F	R^2	$\triangle R^2$
Block 1		1.71	.03	.03
Acculturation	.02	.04		
Maternal Involvement	-.18	3.36		
Block 2		1.41	0.04	.01
Acculturation	-.31	.67		
Maternal Involvement	-.12	.92		
Maternal Involvement X Acculturation	.35	.81		

* p<.05
** P<.01

Figure 1

The Relationship Between Paternal Attachment and Sexual Risk Taking by Quartile Estimates of the ARSMA Acculturation Score for Latino Adolescents

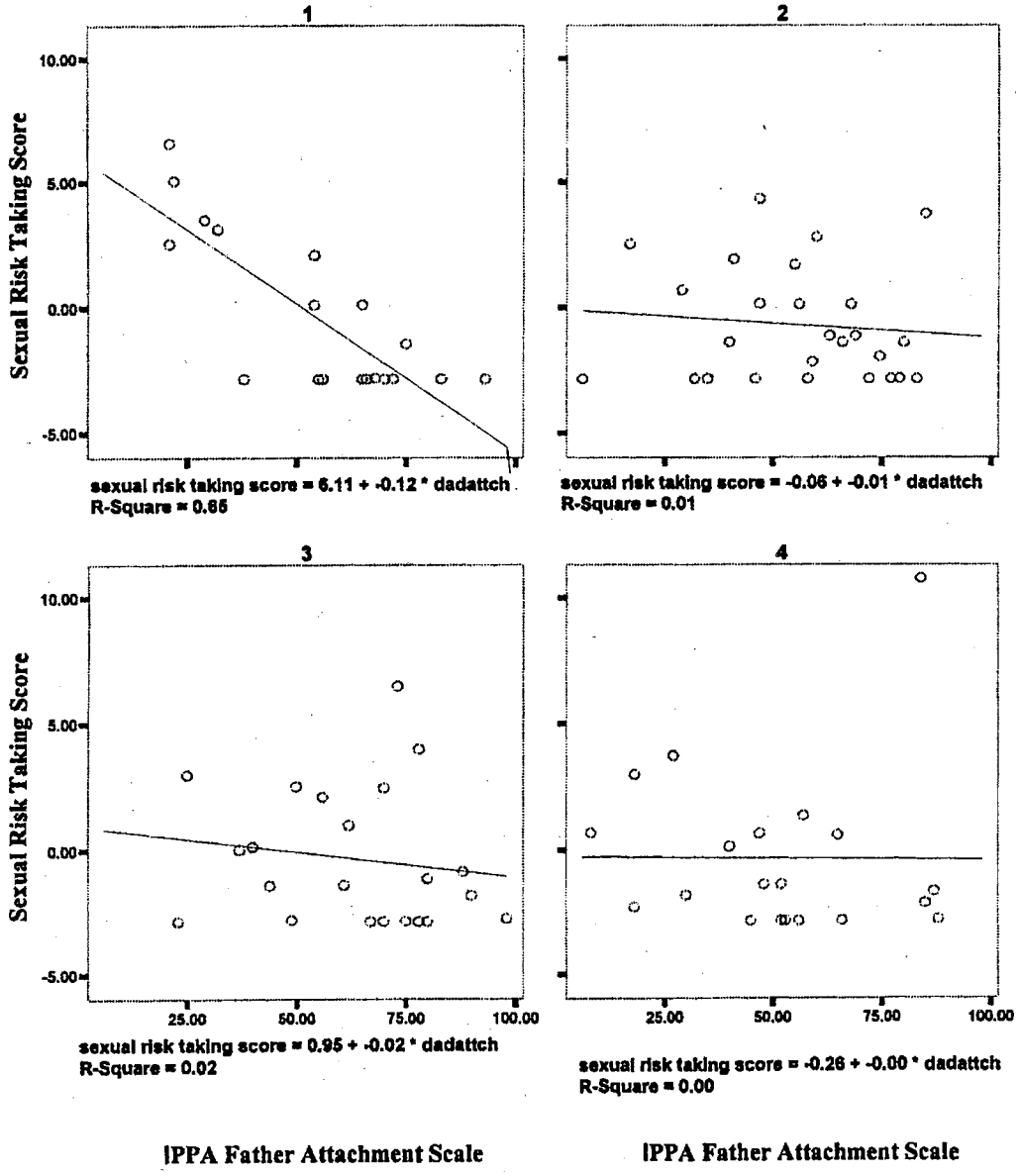
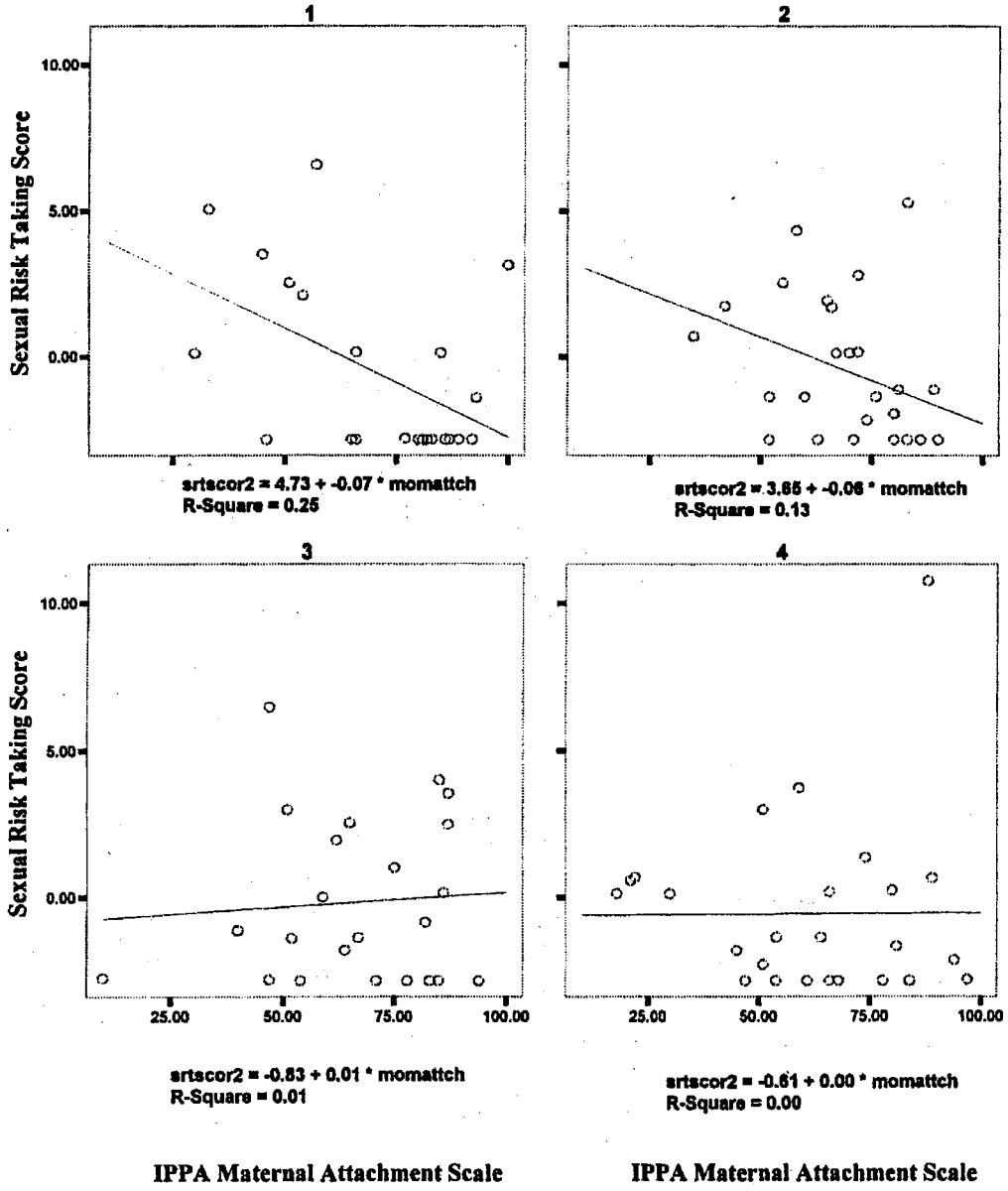


Figure 2

The Relationship Between Maternal Attachment and Sexual Risk Taking by Quartile Estimates of the ARSMA Acculturation Score for Latino Adolescents



Appendix A: Questionnaires

Family Studies Program
Oklahoma State University

Code #:

APQ (Child Form)

Child's Name_____ **ID#:**_____

Instructions: The following are a number of statements about you family. Please rate each item as to how often it TYPICALLY occurs in your home. The possible responses are Never (1), Almost Never (2), Sometimes (3), Often (4), Always (5). If your dad or mom is not currently living at home with you, then skip the questions that ask about that person.

	Never	Almost Never	Sometimes	Often	Always
1. You have a friendly talk with your mom	1	2	3	4	5
A. How about your dad	1	2	3	4	5
2. Your parents tell you that you are doing a good job	1	2	3	4	5
3. Your parents threaten to punish you and then do not do it	1	2	3	4	5
4. Your mom helps with some of your special activities (such as sports, church youth groups)	1	2	3	4	5
A. How about your dad	1	2	3	4	5
5. Your parents reward or give something extra to you for obeying them or behaving well	1	2	3	4	5
6. Your fail to leave a note or let your parents know where you are going	1	2	3	4	5

7. You play games or do other fun things with your mom	1	2	3	4	5
A. How about you dad	1	2	3	4	5
8. You talk your parents of punishing you after you have done something wrong	1	2	3	4	5
9. Your mom asks you about your day in school	1	2	3	4	5
A. How about your dad	1	2	3	4	5
10. You stay out in the evening past the time you are supposed to be home.	1	2	3	4	5
11. Your mom helps you with your homework	1	2	3	4	5
A. How about your dad	1	2	3	4	5
12. Your parents give up trying to get you to obey them because it's too much trouble	1	2	3	4	5
13. Your parents compliment you when you have done something well	1	2	3	4	5
14. Your mom asks you what your plans are for the coming day	1	2	3	4	5
A. How about your dad	1	2	3	4	5
15. Your mom drives you to a special activity	1	2	3	4	5
A. How about you dad	1	2	3	4	5
16. Your parents praise you for behaving well	1	2	3	4	5

17. Your parents do not know the friends you are with	1	2	3	4	5
18. Your parents hug or kiss you when you have done something well	1	2	3	4	5
19. You go out without a set time to be home	1	2	3	4	5
20. Your mom talks to you about your friends	1	2	3	4	5
A. How about your dad	1	2	3	4	5
21. You go out after dark without an adult with you	1	2	3	4	5
22. Your parents let you out of a punishment early (like lifts restrictions earlier than they originally said)	1	2	3	4	5
23. You help plan family activities	1	2	3	4	5
24. Your parents get so busy that they forget where you are and what you are doing	1	2	3	4	5
25. Your parents do not punish you when you have done something wrong	1	2	3	4	5
26. Your mom goes to a meeting at school, like a PTA meeting, or parent/teacher conference	1	2	3	4	5
A. How about your dad	1	2	3	4	5
27. Your parents tell you that they like it when you help out around the house	1	2	3	4	5

28. You stay out later than you are supposed to and your parents don't know it	1	2	3	4	5
29. Your parents leave the house and don't tell you where they are going	1	2	3	4	5
30. You come home from school more than an hour past the time your parents expect you to be home	1	2	3	4	5
31. The punishment your parents give depends on their mood	1	2	3	4	5
32. You are at home without an adult being with you	1	2	3	4	5
33. Your parents spank you with their hand when you have done something wrong	1	2	3	4	5
34. Your parents ignore you when you are misbehaving	1	2	3	4	5
35. Your parents slap you when you have done something wrong	1	2	3	4	5
36. Your parents take away a privilege or money from you as a punishment	1	2	3	4	5
37. Your parents send you to your room as a punishment	1	2	3	4	5
38. Your parents hit you with a belt, switch, or other object, when you have done something wrong	1	2	3	4	5
39. Your parents tell or scream at you when you have done something wrong	1	2	3	4	5

40. Your parents calmly explain to you why your behavior was wrong when you misbehave	1	2	3	4	5
41. Your parents remove privileges from you (phone time, time with friends, driving time, etc.) as a punishment	1	2	3	4	5
42. Your parents give you extra chores as a punishment	1	2	3	4	5

Family Studies Program
Oklahoma State University

Code #:

ARSMAII

English Version

Directions: Circle the generation that best applies to you. Circle only one.

1. 1st generation = You were born in Mexico or other country.
2. 2nd generation = You were born in USA; either parent born in Mexico or other country.
3. 3rd generation = You were born in USA; both parents born in USA and all grandparents born in Mexico or other country.
4. 4th generation = You and your parents born in USA and at least one grandparent born in Mexico or other country with remainder born in the USA.
5. 5th generation = You and your parents born in the USA and all grandparents born in the USA.

Directions: Circle a number between 1-5 next to each item that best applies.

	Not at all	Very little or not very often	Moderately	Much or very often	Extremely often or almost always
1. I speak Spanish	1	2	3	4	5
2. I speak English	1	2	3	4	5
3. I enjoy speaking Spanish	1	2	3	4	5
4. I associate with Anglos	1	2	3	4	5
5. I associate with Latinos and/or Hispanic Americans	1	2	3	4	5
6. I enjoy listening to Spanish language music	1	2	3	4	5
7. I enjoy listening to English	1	2	3	4	5

language music					
8. I enjoy Spanish language TV	1	2	3	4	5
9. I enjoy English language TV	1	2	3	4	5
10. I enjoy English language movies	1	2	3	4	5
11. I enjoy Spanish language movies	1	2	3	4	5
12. I enjoy reading (e.g., books) in Spanish	1	2	3	4	5
13. I enjoy reading (e.g., books) in English	1	2	3	4	5
14. I write (e.g., letters) in Spanish	1	2	3	4	5
15. I write (e.g., letters) in English	1	2	3	4	5
16. My thinking is done in the English language	1	2	3	4	5
17. My thinking is done in the Spanish language	1	2	3	4	5
18. My contact with my country of origin has been	1	2	3	4	5
19. My contact with the USA has been	1	2	3	4	5
20. My father identifies or identified himself as Latino or Mexicano	1	2	3	4	5
21. My mother identifies or identified herself as Latina or Mexicana	1	2	3	4	5
22. My friends, while I was	1	2	3	4	5

growing up, were of Latino origin					
23. My friends, while I was growing up, were of Anglo origin	1	2	3	4	5
24. My family cooks foods from my country of origin	1	2	3	4	5
25. My friends now are of Anglo origin	1	2	3	4	5
26. My friends now are of Latino origin	1	2	3	4	5
27. I like to identify myself as an Anglo American	1	2	3	4	5
28. I like to identify myself as Hispanic American	1	2	3	4	5
29. I like to identify myself as Latino or Hispanic I like to identify myself as an American	1	2	3	4	5
30. I like to identify myself as Latino or Hispanic	1	2	3	4	5
31. I like to identify myself as an American	1	2	3	4	5

Family Studies Program
Oklahoma State University

Code #:

SSRT

Directions: How often you engage in the following behaviors with someone of the opposite sex?

1. Holding hands?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

2. Kissing?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

3. French kissing for a long time?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

4. Touching of breasts over clothes?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

5. Touching breasts with no clothes on?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

6. Touching genitals over clothes?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

7. Touching genitals with no clothes on?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

8. Sexual intercourse?
   never _____
   almost never _____
   sometimes _____
   often _____
   almost all the time _____

9. How many times in the last year have you had sexual intercourse with someone of the opposite sex?

10. Altogether during the past year, how many different people of the opposite sex have you had as sexual partners?

11. In the past year, how many times have you had sex with someone you didn't know very well?
   _____ Never
   _____ Once
   _____ Twice
   _____ At least three times

12. Have you had sex with in the past year with a partner who you knew was having sex with other people?
   _____ Never
   _____ Once
   _____ Twice
   _____ At least three times

13. How many times have you had sex in the past year with a partner who you knew was having sex with other people? _____

14. Generally, in the last year, has alcohol been a part of your sexual actiivites?

_____ Never
_____ Occasionally
_____ Half the time
_____ Often
_____ Always

15. Generally, in the last year, how often have marijuana or drugs other than alcohol been a part of your sexual activities?

_____ Never
_____ Once
_____ Twice
_____ At least three times

16. Have you had sex in the last year with someone who injects drugs?

_____ Never
_____ Once
_____ Twice
_____ At least three times

17. When you have heterosexual sex (sex with someone of the opposite sex), how often do you use some kind of birth control?

_____ Never
_____ Once
_____ Twice
_____ At least three times

18. When you have sexual intercourse, how often do you or your partner(s) wear a condom?

_____ Never
_____ Once
_____ Twice
_____ At least three times

19. Have you ever had a sexually transmitted disease such as gonorrhea, syphilis, or chlamydia?

_____ Yes
_____ No

Family Studies Program
Oklahoma State University

Code #:

IPPA (mother)

Directions: Some of the following statements ask about your feelings about your mother or the person who acted as your mother. If you have more than one person acting as your mother (e.g., natural mother and step-mother) answer the questions for the one you feel has most influenced you. Please read each statement and circle the ONE number that tells how **true the statement is for you now**.

	Never	Seldom	Sometimes	Often	Always
1. My mother respects my feelings.	0	1	2	3	4
2. I feel my mother does a good job as my mother.	0	1	2	3	4
3. I wish I had a different mother.	0	1	2	3	4
4. My mother accepts me as I am.	0	1	2	3	4
5. I like to get my mother's point of view on things I'm concerned about.	0	1	2	3	4
6. I feel it's no use letting my feelings show.	0	1	2	3	4
7. My mother can tell when I'm upset about something.	0	1	2	3	4
8. Talking over problems with my mother makes me feel ashamed or foolish.	0	1	2	3	4
9. My mother expects too much from me.	0	1	2	3	4
10. I get upset easily around my mother.	0	1	2	3	4
11. I get upset a lot more than my mother knows about.	0	1	2	3	4

12. When we discuss things, my mother cares about my point of view.	0	1	2	3	4
13. My mother trusts my judgment.	0	1	2	3	4
14. My mother has her own problems, so I don't bother her with mine.	0	1	2	3	4
15. My mother helps me to understand myself better.	0	1	2	3	4
16. I tell my mother about my problems and troubles.	0	1	2	3	4
17. I feel angry with my mother.	0	1	2	3	4
18. I don't get much attention from my mother.	0	1	2	3	4
19. My mother helps me talk about my difficulties.	0	1	2	3	4
20. My mother understands me.	0	1	2	3	4
21. When I am angry about something, my mother tries to be understanding.	0	1	2	3	4
22. I trust my mother.	0	1	2	3	4
23. My mother doesn't understand what I'm going through these days.	0	1	2	3	4
24. I can count on my mother when I need to get something off my chest.	0	1	2	3	4
25. If my mother knows something is bothering me, she asks me about it.	0	1	2	3	4

Family Studies Program
Oklahoma State University

Code #:

IPPA (father)

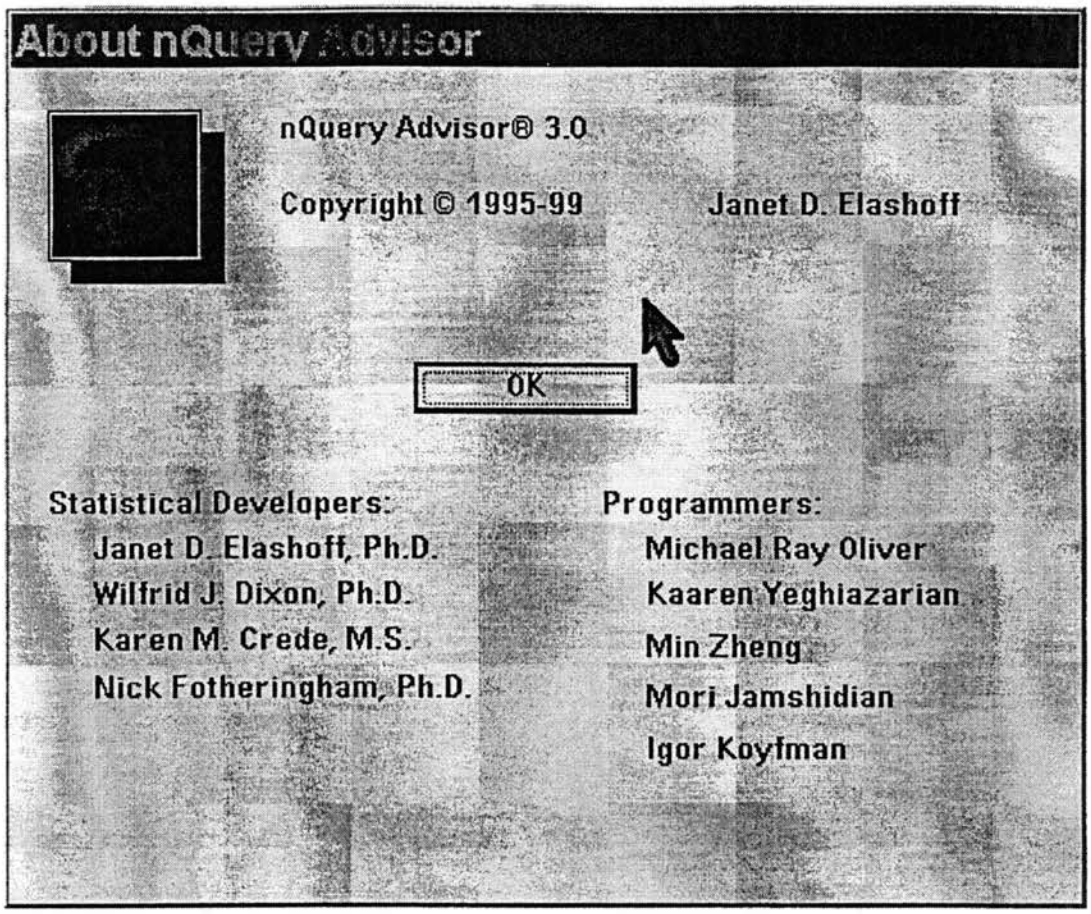
This part asks about your feelings about your father, or the man who acted as your father. If you have more than one person acting as your father, (e.g., natural and step-father) answer the questions for the one who has most influenced you.

	Never	Seldom	Sometimes	Often	Always
1. My father respects my feelings.	0	1	2	3	4
2. I feel my father does a good job as my father.	0	1	2	3	4
3. I wish I had a different father.	0	1	2	3	4
4. My father accepts me as I am.	0	1	2	3	4
5. I like to get my father's point of view on things I'm concerned about.	0	1	2	3	4
6. I feel it's no use letting my feelings show.	0	1	2	3	4
7. My father can tell when I'm upset about something.	0	1	2	3	4
8. Talking over problems with my father makes me feel ashamed or foolish.	0	1	2	3	4
9. My father expects too much from me.	0	1	2	3	4
10. I get upset easily around my father.	0	1	2	3	4
11. I get upset a lot more than my father knows about.	0	1	2	3	4
12. When we discuss things, my father cares about my point of	0	1	2	3	4

view.

13. My father trusts my judgment.	0	1	2	3	4
14. My father has her own problems, so I don't bother her with mine.	0	1	2	3	4
15. My father helps me to understand myself better.	0	1	2	3	4
16. I tell my father about my problems and troubles.	0	1	2	3	4
17. I feel angry with my father.	0	1	2	3	4
18. I don't get much attention from my father.	0	1	2	3	4
19. My father helps me talk about my difficulties.	0	1	2	3	4
20. My father understands me.	0	1	2	3	4
21. When I am angry about something, my father tries to be understanding.	0	1	2	3	4
22. I trust my father.	0	1	2	3	4
23. My father doesn't understand what I'm going through these days.	0	1	2	3	4
24. I can count on my father when I need to get something off my chest.	0	1	2	3	4
25. If my father knows something is bothering me, she asks me about it.	0	1	2	3	4

Appendix B: Statistical Package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OK
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Mori Jamshidian
Igor Koyfman

Appendix C: IRB Approval

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

DATE: 03-12-99 **IRB# AS-99-042**

Proposal Title: FAMILY, FRIENDS, AND CULTURE: INFLUENCE ON LATINO ADOLESCENT BEHAVIOR

Principal Investigator(s): B. Neighbors, C. Nichols-Anderson, Y. Segura, S. Gillaspy

Reviewed and Processed as: Full Board

Approval Status Recommended by Reviewer(s): Approved

Signature: Carol Olson Date: 03-17-99

Carol Olson, Director of University Research Compliance
cc: S. Gillaspy

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

Vita

Cindy L. Nichols-Anderson

Candidate for the Degree of

Doctor of Philosophy

Thesis: THE EFFECTS OF PARENTAL PRACTICES AND ACCULTURATION UPON SEXUAL RISK TAKING AMONG LATINO ADOLESCENTS

Major Field: Psychology

Biographical:

Education: Graduated from Onalaska Luther High School, Onalaska, WI in May, 1988; received Bachelor of Arts Degree in Psychology with a minor in Honor Studies from Winona State University, Winona, MN in February, 1992; received a Masters of Science in Education in School Psychology from University of Wisconsin-Eau Claire, Eau Claire, WI in August of 1993; received a Masters of Arts in Clinical Psychology from Mankato State University, Mankato, MN in July of 1995. Completed the Master of Science degree with a major in Psychology at Oklahoma State University in 12/97. Will complete the requirements for Doctor of Philosophy in Psychology in July, 2000.

Experience: Clinical Psychology Internship and Postdoctoral Fellowship at Children's Mercy Hospital in Kansas City, MO, 1999-2001. Employed by University of Wisconsin Eau-Claire, Mankato State University, and Oklahoma State University as a graduate assistant, performing clinical, research, and teaching activities 1993-1999.

Professional Memberships: Society of Developmental Pediatrics, American Psychological Association, Association for the Advancement of Behavior Therapy.