

THE EFFECT OF A PROMOTORA-GUIDED EDUCATIONAL INTERVENTION
AND PARTNER PRESENCE IN IMPROVING CONDOM USE SELF-EFFICACY
AMONGST PARTNERED LATINO ADULTS

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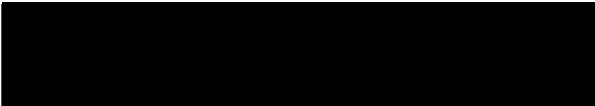
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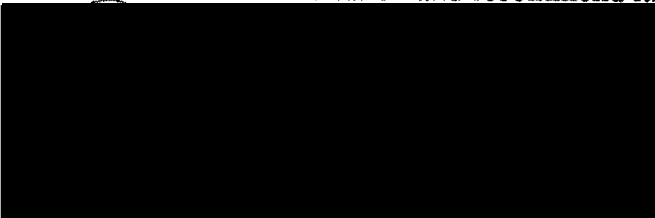
To the Dean of the Graduate School:

I am submitting herewith a dissertation written by Shirley Levenson entitled "The Effect of a Promotora-Guided Educational Intervention and Partner Presence in Improving Condom Use Self-Efficacy Amongst Partnered Latino Adults." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Nursing Science.



Sandra K. Cesario, Ph.D, Major Professor

We have read this dissertation and recommend its acceptance:



Associate Dean, College of Nursing

Accepted:



Dean of the Graduate School

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DEDICATION

To my Lord and Savior, Jesus Christ,
thank you for your saving grace.

To my loving husband, Mark Levenson,
thank you for your continuous support, patience, and love.

To my parents, Mr. & Mrs. Facundo and Manuela Martinez,
thank you for your guidance, love, and encouragement.

To my first born and her husband, Mr. & Mrs. Jason and Kim Belcik,
thank you for your motivation, inspiration and unending love.

To my youngest daughter and her husband,
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To my grandchildren, Lucy & Henry Belcik,
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To all my teachers,
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young family while I completed my education which fulfilled a lifetime dream of becoming a registered nurse, never knowing what the future would bring.

ABSTRACT

SHIRLEY LEVENSON

THE EFFECT OF A PROMOTORA-GUIDED EDUCATIONAL INTERVENTION AND PARTNER PRESENCE IN IMPROVING CONDOM USE SELF-EFFICACY AMONGST PARTNERED LATINO ADULTS

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This study examined the effect of a promotora guided educational intervention in order to improve condom use within the Latino community. Effective and culturally appropriate strategies for promoting condom use within the Hispanic/Latino community in the United States are needed urgently because of the high prevalence of infection with unwanted pregnancy, human immunodeficiency virus (HIV) and other sexually transmitted diseases in the Hispanic/Latino groups.

This was a quasi-experimental two-group pretest-posttest study. The treatment group received an educational intervention that was conducted in English and Spanish in a closed classroom setting. Data were compared among the women entered at the 10 separate sessions as well as compared between the control and treatment groups. There were no significant differences in the 2 groups and the same CUSES scales were used for pre and post intervention.

The study hypothesis was supported by the data. Significant differences between the treatment and control groups at 6 weeks post intervention were found in the CUSES instrument and question number 30, Number of times couples used condoms in the past 30 days. The women in the treatment group reported higher scores in condom use self efficacy and the use of condoms in the past 30 days. There were no significant differences within the control group at 6 weeks post intervention.

Several conclusions and implications can be made regarding the study. Latina's are at a higher risk for developing STD's even if they are in committed relationships. More culturally sensitive classes can be effective teaching women in this population and this educational intervention can serve as a model for other teaching programs. Also, professional healthcare providers who utilize culturally sensitive approaches to their Latino clients will decrease STD morbidity rates in the community they provide care. This study may be useful in helping both healthcare providers and community groups who help raise health awareness in understanding Latino participants in future studies.

Research studies examining Latino couples and condom use have been limited. Therefore, future studies will add to the existing knowledge of reducing STD morbidity through increasing Latino's condom use self efficacy and their understanding of the use of condoms in a committed relationship.

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CHAPTER I

INTRODUCTION

Latinos represent the fastest growing minority group in the U.S. (U.S. Census Bureau, 2006). In Texas, the Harris County Latino population of 8,385,118 marks a 22.8% increase from 1990 to 2000 (U.S. Census Bureau, 2004). The Latino population is young, roughly one-third of Latinos are under 18, compared to one-quarter of the total U.S. population, and the median age is 27.4 years compared to 36.4 years for the U.S. population as a whole (U.S. Census Bureau, 2006).

Latinas accounted for 55% of women, infected with HIV and other STDs through heterosexual contact (Espinoza, Dominguez, Romaguera, Hu, Valleroy, & Hall, 2007a; Espinoza, Hall, Hardnett, Selik, Ling, & Lee, 2007b). Additionally, almost 19%, of individuals who received an AIDS diagnosis in 2005 were Latino, disproportionate to their 14.4% representation in the total U.S. population (Espinoza et al., 2007a). Furthermore, the annual rate of infection for Latinos is three times the rate reported for whites (Espinoza et al., 2007a).

As early as 1993, heterosexual intercourse was acknowledged as the primary mode of STD infection among women (Gomez & Marin, 1996). In the same decade researchers recognized that, there was a pressing need to target STD prevention programs to Latino communities (Flaskerud & Nyamathi, 1997; Flaskerud, Uman, Lara, Romero, & Taka, 1996; Gomez & Marin, 1996; Marin, Gomez & Tschann, 1993; Marin, Tschann, Gomez, & Kegeles, 1993; Shain, Piper, Newton, Perdue, Ramos, Champion,

& Guerra, 1999). The call for culturally relevant interventions has since become more urgent. Studies demonstrated that programs that integrate culture and gender into the design tended to be more effective (Albarracin, Gillette, Earl, Glasman, Durantini, & Ho, 2005). Condom use self-efficacy is a major factor in consistent condom use. Studies showed that behavioral interventions tailored for women effectively produce positive changes in knowledge, self-efficacy, and condom use (Mize, Robinson, Bockting, & Scheltema, 2002).

The Promotora model of health promotion is based on the tenets of peer education and community outreach (Kelly, Lesser, Peralez-Dieckmann, & Castilla, 2007; Savinar, 2004; Sherrill, Crew, Mayo, Mayo, Rogers, & Haynes, 2005). Promotoras are trained community members who act as advisors, advocates, and liaisons between their community and formal health and social service agencies. A key advantage of the Promotora model is that as insiders, Promotoras have credibility and respect in traditionally underserved communities where their caring is appreciated and are acknowledged as informed sources of information (Kelly, et al., 2007).

The Promotora model was first introduced in California as a strategy for grassroots STD prevention efforts (Savinar, 2004). In 1991, the Los Angeles Planned Parenthood program successfully used Promotoras to work with Latinas throughout California on health-related issues. These programs provided evidence of the efficacy of the Promotora model for promoting safe sex practices among Latinas (Savinar, 2004).

Purpose of the Study

The study determined the effectiveness of a sexually transmitted disease (STD) prevention program for Latino couples using the Promotora model of peer education. The study utilized a variation of the Project RESPECT Enhanced Counseling Intervention (Kamb, 1998). The educational intervention was a 60-minute course that targeted factors that influenced condom use such as attitudes, self-efficacy, and perceived cultural norms. The format was a quasi-experimental two-group pretest and posttest study design which involved a sample of 30 partnered women group (n=30) and 30 partnered women alone group (n=30) for a total of 60 participants (n=60). Participants were randomly assigned into: (a) partnered women group and (b) partnered women alone group. The same intervention was provided to each group. Since it is required that the study participants arrive with their partners but may not be chosen the 60-minute intervention was offered to those couples after the study was completed. The primary investigator administered the intervention and the pre and post test using the Condom Use Self-Efficacy Scale (CUSES).

Rationale for the Study

STDs disproportionately affect Latinos and young Latinas are at especially high risk for contracting STDs through heterosexual contact (Espinoza et al., 2007a, 2007b). The stratified gender roles inherent in Latin culture, and particularly the concept of machismo, in which men control sexual activities within the relationship, has been implicated as a key contributor to HIV risk for Latina women (Martinez, 1997; Wood & Price, 1997). Indeed, machismo is frequently cited as the barrier, to effective

communication about condom use by Latinas (McQuiston & Gordon, 2000). However, the balance of power in intimate relationships is much more complex than the stereotype suggests (Hirsch, Higgins, Bentley, & Nathanson, 2002; Soler, Quadagno, Sly, Richman, Eberstein, & Harrison, 2000). Latinas with higher self-efficacy are far more likely to use condoms than their counterparts with low self-efficacy (Pulerwitz, Amaro, De Jong & Gortmaker, 2002).

In addition, machismo has positive as well as negative aspects. Men who adhere to the positive aspects of condom use such as personal honor, responsibility to one's family, and strength are more likely to use condoms (Knipper et al., 2007). Building on familismo, or strong family ties, has been proposed as a basis for culturally relevant STD prevention programs (Hirsch et al., 2002; Knipper, Rhodes, Lindstrom, Bloom, Leichter, & Montano, 2007; McQuiston & Gordon, 2000). For younger Latino couples, the concept of *confianza*, or intimacy, together with respect for family, provides a cultural strong point for targeting intervention (Hirsch et al., 2002).

Given its roots in Latin American culture and success in a range of health promotion efforts, including STD prevention, the Promotora model offers a valuable framework for a culturally sensitive couples STD prevention program. In addition, there are very few studies for STD prevention programs oriented to couples. However, the existing research demonstrated that couples interventions are effective for increasing condom use self-efficacy and condom use (El-Bassel Witte, Gilbert, Wu, Chang, Hill, 2003; Harvey, Henderson, Thorburn, Beckman, Casillas, Mendez, & Cervantes, 2004).

Theoretical Framework

Bandura's (1986, 1997) social cognitive theory of self-efficacy provides the framework for this study. Early on Bandura stated that self-efficacy could be a valuable tool for reducing sexually transmitted disease (Barkley & Burns, 2000). A hallmark of self-efficacy is that it denotes the ability to persist in carrying out one's intentions in the face of difficulties and setbacks (Bandura, 1986, 1997). Numerous studies have disclosed barriers to condom use by Latinos (Fernandez-Esquer Atkinson, Diamond, Useche, & Mendiola, 2004, p. 392; Marin, Gomez et al., 1993; McQuiston & Gordon, 2000; Knipper et al., 2007). At the same time, higher condom use self-efficacy is associated with more consistent condom use (Fernandez-Esquer et al., 2004). Condom use self-efficacy is one of the components of the CUSES, which was used for the proposed study (Brafford & Beck, 1991).

Assumptions

This study was guided by the following assumptions:

1. Participants will answer honestly and accurately.
2. Latinos are heavily influenced by machismo.
3. Latinas perceive themselves to have limited power in a relationship.
4. Participants will accurately report condom use.

Hypothesis

H1: Latina's who attend a Promotora-guided educational intervention with their partners will report more frequent condom use within this relationship when compared to partnered women who attend alone.

Hispanic or Latino

One of the first limiting choices the author had to make was the decision to use the term Latino as opposed to Hispanic. There are many ways of labeling groups and individuals whose culture, language, and/or geography has Latin roots. Indeed, the term "Hispanic" has become the dominant label in the last decade and is used as a descriptor for people of Spanish origin and descent (Baptiste, 1987). Although the term "Hispanic" is used and recognized widely, the author recognizes that this term may be offensive to individuals who would rather identify themselves in terms of their nationality or who want to dissociate from Spanish heritage because of its colonialist implications. The goal of this selection was to use an official and widely recognized term that characterizes those groups that share a common heritage, while respecting geographical differences and the characteristics of the most recent arrivals to this country.

Definition of Terms

The following terms were defined for this study:

Condom Use Self-Efficacy Scale (CUSES): The instrument used in this study was the Condom Use Self-Efficacy Scale (CUSES) (Brafford & Beck, 1991) developed by Linda J. Brafford and Kenneth H. Beck. The authors reported the CUSES with a reliable measure with a Cronbach's alpha of 0.91 and a 2 week test-retest reliability of 0.81 (Brafford & Beck, 1991). CUSES is a 28 item self-report questionnaire that elicits responses using a five-point Likert scale format, ranging from 'strongly disagree' to 'strongly agree.' Each of the responses is scored as follows: 'strongly disagree' = 0, 'disagree' = 1, 'undecided' = 2, 'agree' = 3 and 'strongly agree' = 4. The internal consistency for subscales: Mechanics: Cronbach alpha = 0.78; Partner's Disapproval: Cronbach alpha = 0.81; Assertive: Cronbach alpha = 0.80; Intoxicants: Cronbach alpha = 0.82 (Brien, Thombs, Mahoney, & Wallnau, 1994; Barkley & Burns, 2000). The possible range of scores is 0–112, with higher scores indicating greater condom use self-efficacy (Brafford & Beck, 1991).

Couple: A man and woman paired as partners in any work, recreation, or other activity (Webster's Online Dictionary: The Rosetta Edition www.websters-online-dictionary.org). For this study, the operational definition of a couple was the Latino man and a woman that are bonded by legal marriage vows, common law or a self-disclosed long-term commitment of a year or greater. The couple may or may not be residents or citizens of the United States.

Machismo: Fact or myth, from a Mexican cultural and psychological perspective, machismo relies on theoretical conceptualizations suggesting that it originated in response to the Spanish conquest of the Americas. From this perspective, it is a male gender role emphasizing emotional invulnerability, patriarchal dominance, and aggressive or controlling responses to stimuli, but masking more deeply rooted feelings of inferiority and ambivalence toward women (Kulis, 2003). The second meaning of machismo centers on traits such as honor, respect, bravery, dignity, and family responsibility (Marsiglia, Kulis & Hecht, 2001; Neff, 2001). For this study, the differing conception of machismo operationally defined includes the negative (hyper-masculinity) and more positive (traditional honor) dimensions of machismo was measured in the CUSES.

Male Condom: The male condom is a very thin sheath made from various materials, latex, polyurethane, lambskin or other materials that covers the penis during sexual intercourse. Male condoms can vary greatly in color, size, amount of lubrication and amount of spermicidal agent. The male condom protects against infection and pregnancy by covering the penis and preventing direct contact between the penis and vagina, as well as collecting the semen and preventing it from entering the vagina.

(Webster's Online Dictionary: The Rosetta Edition www.websters-online-dictionary.org)

For this study, operationally defined the male condom was measured by the Project RESPECT interactive activities.

Project RESPECT Enhanced Counseling Intervention Variation: The intervention consists of one interactive 60-minute session targeting factors that influence condom

use such as attitudes, self-efficacy, and perceived cultural norms (Kamb, 1998). For this study the intervention was a variation of Project RESPECT and used as the main study variable.

Promotora: The promotora is a lay health worker from the target population who is well known and respected in the community (Savinar, 2004). They are healthcare providers, community leaders, or volunteers who provide a variety of services such as health promotion, care management, and service delivery activities at the community level. They usually communicate using the language of the people they serve, and incorporate culturally competent practices to best gain trust within the community (Kim, 2004). For this study, the variation of the Project RESPECT defines the promotora as a registered nurse from the community who taught the Project RESPECT intervention class to the study participants.

Self-Efficacy (Condom Use): According to Social Cognitive Theory (Bandura, 1977), confidence in one's ability to perform a behavior is highly related to actual ability to perform that behavior. For this study, condom use self-efficacy was measured by CUSES.

Limitations

This study aims to contribute to the knowledge of encouraging safer sex practices among Latino couples. Though the strategies in this study were pre-identified as culturally tailored, there is no guarantee cultural and personality barriers can be overcome. Because a convenience sample was used, the results of this study could only

be generalizable to the population sampled in the sample frame. The sample may not be reflective of all Latinos.

Summary

In summary, this chapter provides an introduction to the problem of heterosexual intercourse acknowledged as the primary mode of STD transmission in committed Latino couples. The theoretical framework for the study is Bandura's Social Cognitive Theory. One hypothesis for the study was postulated and the variables of interest including the independent and dependent variables were defined. Assumptions for the study were accepted and limitations identified.

CHAPTER II

REVIEW OF THE LITERATURE

The literature presented in this review is drawn from Google and Google Scholar searches along with PubMed and MEDLINE and the following EBSCO databases: Academic Search Premier, AltHealthWatch, MasterFILE Premier, MasterFILE Select, ERIC, Psychology and Behavioral Sciences Collection, and Health Source: Nursing/Academic Education. Keywords used either individually or in combination include: HIV, AIDS, sexually transmitted diseases (STDs), health promotion, Promotora, prevention, intervention, education, program, community, condoms, self-efficacy, behavior, Hispanic, Latino, Latina, minority, culture, acculturation, gender, women, men, couples, relationship, Condom Use Self-Efficacy Scale (CUSES), Centers for Disease Control and Prevention (CDC).

CDC data from 2005 (the last year for which data are available) confirmed that Latinos are disproportionately affected by STDs (Espinoza et al., 2007a). Almost 19%, or 33,398 individuals, who received a STD diagnosis that year, were Latino, disproportionate to their 14.4% representation in the total United States population. Furthermore, the yearly rate of STD diagnosis among Latinos is three times the rate reported for whites. The data analysis also disclosed that the mode of transmission differs by national origin. Researchers emphasized that individuals who identify as "Latino" or "Hispanic" are a heterogeneous group with different attitudes and behaviors thus interventions must be carefully tailored to different population subgroups (Davila &

Brackley, 1999; Fernandez-Esquer, Atkinson, Diamond, Useche, & Mendiola, 2004; Moore & Harrison, 1995). Women accounted for nearly two-thirds (64%) of persons infected with STDs through heterosexual contract, and an alarming 88% of new diagnoses among adolescents and young adults under age 20 (Espinoza et al., 2007b). Latinas comprise 55% of the women in this young age group.

Into the second decade of AIDS, researchers recognized that there was an urgent need to target STD prevention programs to Latino communities (Flaskerud & Nyamathi, 1997; Flaskerud, Uman, Lara, Romero, & Taka, 1996; Gomez & Marin, 1996; Marin & Diaz, 2002; Marin, Gomez, & Tschann, 1993; Marin, Tschann, Gomez, & Kegeles, 1993; Shain et al., 1999). A recurring theme was that stratified gender roles and cultural attitudes toward sexuality placed Latinas at particularly high risk for STDs (Martinez, 1997; Wood & Price, 1997). More recent research confirms the importance of considering gender and culture in STDs (El-Bassel et al., 2001; Espinoza et al., 2007a; Hirsch, Higgins, Bentley, & Nathanson, 2002; Rhodes et al., 2006; Knipper et al., 2007; Peipert et al., 2007; Sanders-Phillips, 2002; Smith, 2003; Zambrana, Cornelius, Boykin, & Lopez, 2004). Behavioral interventions that build on cultural and gender identification tend to be more effective (Albarracin, Durantini, & Earl, 2005; Sanders-Phillips, 2002). At the same time, there is no clear-cut conception of what constitutes cultural competence in STD prevention (Boone, Mayberry, Betancourt, Coggins, & Yancy, 2006).

Promotora Community Programs

One successful strategy for ensuring that intervention programs are culturally relevant is employing insiders from the target community. The Promotora model of health promotion is based on the principles of peer education and community outreach (Kelly, Lesser, Peralez-Dieckmann, & Castilla, 2007; Savinar, 2004; Sherrill et al., 2005).

Promotoras are trained community members who act as advisors, advocates, and liaisons between their community and formal health and social service agencies. A key advantage of the Promotora model is that as insiders, Promotoras have credibility and respect in traditionally underserved communities where they are perceived as caring and knowledgeable sources of information. Promotoras may be either employees or volunteers of the host organization. The many roles they assume include translator, mentor, and role model as well as educator, peer advisor, and advocate.

The Promotora program approach has roots in a Latin American model of community outreach (Savinar, 2004). Philosophically, the approach may be viewed as a descendent of Freire's (1999) model of empowerment education (Kelly et al., 2007). In California, which makes extensive use of Promotoras in public health promotion, the Promotora model was introduced in 1988 by organizations involved in HIV/AIDS prevention (Savinar, 1988). Since the inception of the program *Promotoras* by Planned Parenthood of Los Angeles in 1991, Promotoras have been actively involved in working with Latinos in California on many health-related issues.

Promotora programs encompass a wide range of public health and community concerns. The Promotora literature reviewed in this chapter includes sexual health

(Savinar, 2004), domestic violence (Kelly et al., 2007; cardiovascular health (Balcazar, Alvarado, Hollen, Gonzalez-Cruz, & Pedregon, 2005; Kim, Koniak-Griffin, Flaskerud, & Guarnero, 2004), breast cancer screening (Sauaia et al., 2007), and health service utilization (Sherrill et al., 2005; Zuvekas, Nolan, Tumaylle, & Griffin, 1999). One unique program applied the Promotora model to STD risk reduction among newly arrived male immigrants involved in a Latin American soccer league (Knipper et al., 2007; Rhodes et al., 2006).

Latin Gender Roles

One area in which research is severely lacking is in relationship interventions for Latino couples (El-Bassel et al., 2001; Harvey et al., 2004). In a focus group study involving six single gender groups of Mexican women and men, *machismo* was mentioned in all six groups as a prospective barrier to using condoms (McQuiston & Gordon, 2000). However, personal attitudes varied considerably. The major obstacle was that the women equated communication with safe sex while the men equated trust with safe sex, and "The time for talking and the time for trusting for the women and men was not congruent" (p. 286). The qualitative responses demonstrated the complexity of relationship dynamics in negotiating condom use. The couples-based intervention described by El-Bassel et al. (2001, 2003) addresses relationship dynamics and communication.

Some studies have focused on power in heterosexual relationships as a factor in condom use and STD risk reduction (Gomez & Marin, 1996; Harvey, Beckman, & Bird, 2003; Harvey, Beckman, Browner, & Sherman, 2002; Pulerwitz, Amaro, De Jong, &

Gortmaker, 2002; Soler et al., 2000). The findings of Pulerwitz et al. (2002) in particular, show a distinct relationship between a woman's self-efficacy, relationship power and safer sex practices. Conversely, women in abusive or violent relationships are especially vulnerable to STDs (Davila & Brackley, 1999; Raj, Silverman, & Amaro, 2004). These studies also reveal that self-efficacy is much more complex than stereotypical notions of traditional Latin gender roles (Soler et al., 2000).

Traditional Latin gender roles are based on the concepts of *machismo* and *marianismo* (Wood & Price, 1997). According to machismo, men are dominant in sexual relationships, sexually aggressive, and entitled to have sexual encounters outside of a marital or primary relationship. There is ample evidence that a substantial proportion of Latinos engage in sexual activity with one or more secondary partners thereby putting their primary partner at risk for STDs (Fernandez-Esquer et al., 2004; Hirsch et al., 2002; Marin, Gomez et al., 1993; Marin, Tschann et al., 1993; Moore & Harrison, 1995; Martinez, 1997). Marin, Gomez et al. (1993) found that 40% of the men in a large sample of Latinos had at least one secondary sex partner. In addition, sexual encounters may include bisexual activity (Espinoza et al., 2007a; Essien et al., 2005). Gay or bisexual contact in Latino culture is heavily enshrouded in denial (Martinez, 1997).

It is agreed among Latinos that machismo must be addressed in interventions promoting condom use (Knipper et al., 1997; McQuiston & Gordon, 2000; Rhodes et al., 2006). However, it is inaccurate to assume that the power dynamics in heterosexual relationships are governed by rigid adherence to traditional gender roles (Pulerwitz et al., 2002; Soler et al., 2000). Financial resources, employment, education, acculturation, and

perceived physical attractiveness are factors that influence women's (and men's) self-efficacy (Abel & Chambers, 2004; Harvey et al., 2002, 2003; Hirsch et al., 2002).

The feminine complement to machismo is *marianismo* (Wood & Price, 1997). Named for the Virgin Mary, marianismo is rooted in the belief that the traditional Latina views herself "to be morally superior and spiritually stronger than the man", p. 45). The "good" woman dutifully cares for her family and tolerates her husband's infidelity as evidence of his moral weakness and her moral superiority. From this perspective, women are supposed to be faithful and engage in sex to fulfill their husband's desire. Therefore, any attempt to initiate sexual activity or condom use is viewed as a transgression of the traditional feminine gender role.

While there appears to be little doubt that machismo plays an important role in condom use among Latinos, there is marginal evidence to support the idea that women adhere to the tenets of marianismo. Women in abusive relationships may be submissive and tolerate their husband or partner's infidelity. However, the decisive factors are lack of resources and fear of additional violence (Davila & Brackley, 1999). If marianismo is invoked, it is more appropriate to say that the juxtaposition of machismo and marianismo interferes with open and honest discussion about sexuality (Martinez, 1997).

One consequence of marianismo is that women who have multiple sexual partners may be reluctant to have conversations about sexuality that might disclose their behavior (Moore & Harrison, 1995). The term "sexual silence" has been used to imply that sex and disease are taboo topics in the Latin culture (Martinez, 1997). The current literature suggests that this is primarily related to male homosexual behavior, although

that does not deny the relevance to women whose partners may have bisexual encounters (Essien et al., 2005; Espinoza et al., 2007a).

There is recognition that the most effective behavioral interventions are theory driven (Fishbein, 2000, 2001). The focus on condom use in STD prevention is based on awareness that successful behavioral interventions target specific behaviors and concentrate on changing a single behavior (Fishbein, 2000). In their research with STD prevention staff from community organizations, Freedman et al. (2006) found that “most front-line providers view their clients’ individual risk behavior in the context of their social, cultural, and economic environment” (p. 224).

Although they worked with diverse populations, there was a striking degree of concordance at what the respondents perceived as key to behavior change. As one respondent stated:

I think what helps them is having a sense of community. Having a sense of power... I think that’s what it boils down to. “If I can make a difference within my family, and I can make a difference within my circle of friends and my community...then I have the power to stay safe now.” (Freedman et al., 2006, p. 221)

This philosophy is central to the Promotora model of health promotion (Kelly et al., 2007; Savinar, 2004; Sherrill et al., 2005). The following section outlines demographic trends in STDs and condom use.

Demographics and Trends

Sexually Transmitted Diseases

The CDC data include cases of STDs diagnosed in Latino adults and adolescents age 13 or older for the years 2001-2005 in 33 states that have adopted name-based reporting as of 2001, along with individuals living with HIV or AIDS in all 50 states and the District of Columbia in 2005 (Espinoza et al., 2007a). The majority of Latinos were infected via male-to-male sexual activity (61%), with 17% each infected through heterosexual contact or injection drug use (IDU). In 1993, heterosexual intercourse surpassed IDU as the primary pathway for HIV infection among women (Gomez & Marin, 1996). Among Latinas, roughly three-quarters (76%) were infected through heterosexual activity, with 23% infected through IDU (Espinoza et al., 2007a). The highest risk age categories differed by gender; infection was highest among men between 30-39 years and women aged 40-49 years.

Across ethnicity, women comprised 26% new AIDS cases diagnosed in 2005, more than double the 11% reported in 1990 (CDC, 2008). Black women accounted for the majority of new HIV/AIDS diagnoses (66%), followed by white women (17%), and Latinas (14%). HIV/AIDS was the leading cause of death among Latinas between the ages of 35-44 years.

When statistics are limited to persons infected with HIV through heterosexual contact, women accounted for 64% of new cases for the years 1999 to 2004 (Espinoza et al., 2007b). In the 19 states reporting, the proportion of women rose to 88% among adolescents (ages 13-19). In this young age group, Latinas comprised 55% compared to

10% among women between 30 and 39, which had the highest concentration of new HIV cases. During the same time period, the proportion of Latino men infected through heterosexual activity increased by 6.1%, a significant increase from previous data.

The CDC researchers noted that, “The HIV epidemic has been concentrated in groups that traditionally have limited access to prevention services, medical care, and effective therapies” (Espinoza et al., 2007b, p. 147). They theorized that lack of accurate information about HIV, presumptions of lower risk, substance use, or culturally distinct interpretations of safer sex might be contributing factors to the higher incidence of HIV infection among black and Latinas. Additionally, given the tendency to have partners of the same cultural background, the higher prevalence of HIV/AIDS among black and Latinos translates into higher risk for women of the same ethnicity. To some extent, the increasing number of heterosexually transmitted HIV cases among Latinos may reflect the rapid growth of the Latino population in the U.S. Nevertheless, the investigators emphasize that this pattern demonstrates “a growing trend for HIV prevention and care services for this population” (p. 147).

Condom Use

Since its inception in 1972, the General Social Survey has been gathering information on a range of socially relevant topics from a national probability sample of adults aged 18 or older (Anderson, 2003). Data from the 1980s onward show increasing use of condoms among adults and adolescents in the wake of STD prevention campaigns. The 2000 General Social Survey presented data for the years 1996, 1998, and 2000, marking the first national survey of condom use since the mid-1990s.

The results fell far short of national goals (Anderson, 2003). One of the goals of *Healthy People 2000: National Health Promotion and Disease Prevention* was to increase the proportion of unmarried adults using condoms to 50%. Among the adults surveyed, an estimated 35.5% used condoms during their last sexual intercourse. Overall, using condoms was much more prevalent with non-regular partners (42.9%) than in the context of continuous relationships (17.5%). However, the pattern differed somewhat for higher risk individuals. In the higher risk group, 35.8% reported using condoms versus 16.2% for lower risk individuals. Nevertheless, the data show that nearly two-thirds of adults at increased risk for HIV were not using condoms with their regular partners thereby "placing their partners or themselves at risk for acquiring or transmitting HIV" (Anderson, 2003, p. 913).

Peipert et al. (2007) presented data on condom use and unprotected sexual intercourse among women using baseline data drawn from Project PROTECT. Project PROTECT is a randomized trial funded by the National Institute of Child Health and Human Development (NICHD) to assess the effectiveness of a individualized, computer-based intervention in encouraging the utilization of dual methods of contraception. The focus is on STD and pregnancy prevention. A limitation is that in the study only English speaking women were eligible for participation. Nonetheless, the data offer an overview of STD risk behavior among women. All participants were between the ages of 13 and 35. For the purpose of the study, high-risk women were defined as: 1) all sexually active women between 13 and 24, and 2) sexually active women aged 25 to 35 whose

personal history included an unplanned pregnancy, STDs, inconsistent contraceptive use, more than one sex partner within the past six months, or alcohol or drug abuse.

More than half the women were black, Latina, or multiracial (Peipert et al., 2007). Roughly two-thirds of the sample reported engaging in two or more episodes of sexual intercourse without using condoms. In descending order, the three most prevalent factors in having unprotected sex were the use of hormonal contraception, more frequent sexual intercourse, and a male partner's resistance to using condoms. With respect to men's unwillingness to use a condom, Peipert et al. (2007) invoked Pulerwitz et al. (2002), who reported that women with a high degree of self-efficacy were five times more likely to use condoms steadily than women with low self-efficacy.

In their study of low-income Latinas in Los Angeles, Flaskerud et al. (1996) found that the use of condoms by married women was contingent on their partner's willingness to use them. Although condom use increased over the course of the study, it was mainly as a method of preventing pregnancy. The focus of Project PROTECT is to encourage condom use to protect against STDs, even among women who use other forms of contraception (Peipert et al., 2007).

Peipert et al. (2007) found self-efficacy to be a predictor of condom use, particularly in young women under age 20. Self-efficacy for using condoms is incorporated into the Center for AIDS Prevention Studies (CAPS) instrument (Marin, Gomez et al., 1993). Condom use self-efficacy is often assessed in research on HIV prevention (Barkley & Burns, 2000; Fernandez-Esquer et al., 2004; Fishbein, 2000, p. 275; Knipper et al., 2007; Soler et al., 2000).

The main recommendation of Peipert et al. (2007) is that programs to reduce STD risk should be tailored according to gender and culture. In addition, they called for future research into sexual assertion and effective techniques that could be employed by women to persuade partners to use condoms, including those with less willingness or inclination to do so. The researchers also advocate interventions to enhance condom use self-efficacy in adolescent women. The high rate of HIV infection in that age group reinforces that assertion (Espinoza et al., 2007b).

The Promotora Model

As Spanish-speaking community members, Promotoras make excellent outreach workers in traditionally underserved communities that are often suspicious of outside authorities and where linguistic and cultural differences pose barriers to communication (Kelly et al., 2007; Savinar, 20004). Promotoras have three unique characteristics that set them apart from other agency volunteers or representatives (Sherrill et al., 2005). First, their insider status imbues them with a sense of credibility and respect that allows them to build a relationship with community members that can be difficult for an outsider. Second, they often offer advice within the context of informal, everyday social interactions thus they “can ‘blend in’ to community groups” (p. 361). Third, the Promotoras’ access to informal social networks provides a channel for addressing the attitudes, beliefs, and behaviors of community members. In many cases, the Promotora model was adopted in response to recognition of an urgent need for community-based health promotion efforts for Latinos and other underserved populations.

California Promotora Outreach

Since the inception of the Promotora model in HIV/AIDS prevention 20 years ago, California has made ample use of Promotoras (Savinar, 2004). Promotora programs throughout the state address a wide variety of health and social issues including general health, cardiovascular health, cancer, diabetes, sexual health, geriatric care, housing, lead poisoning prevention, violence prevention, and psychological health. Although there are no hard data on the number of Promotoras engaged throughout the state, it is recognized that the overwhelming majority of Promotoras are women.

Vision y Compromiso is a California organization dedicated to creating a statewide network for information related to health care, general well-being, and social policy (Savinar, 2004). One of its projects is the Community Health Workers/Promotoras Network. The statement of executive director Maria Lemus is applicable to the Promotora model in general:

Promotoras have a natural ability to relate and speak to the people with whom they share a common neighborhood. Trust is the basis for their successful and efficient community labor. They bring the health care system to the community. And from a community perspective, Promotoras provide credibility to health care organizations. (Savinar, 2004, p. 1)

In 1991, Planned Parenthood of Los Angeles introduced the program Promotoras which has since been adopted by Planned Parenthood branches throughout California (Savinar, 2004). The program is designed to empower Latinas to manage their reproductive and sexual health by providing information and health care in a culturally

sensitive manner. Each Promotora program has a specialized training program (Balcazar et al., 2005; Kelly et al., 2007; Kim et al., 2004; Sauaia et al., 2007; Sherrill et al., 2005; Zuvekas et al., 1999). The Planned Parenthood Promotora candidates undergo six months of intensive training to prepare them for educating community members on a range of health-related topics (Savinar, 2004). Activities led by Promotoras include mother and daughter seminars, educational performances (the main educational theatre piece is entitled "*La Decision*"), and two-hour workshops on topics including HIV/AIDS, substance abuse prevention, domestic violence, prenatal care, values and sexuality.

The outreach component includes mobile health care services that break down transportation barriers (Savinar, 2004). Visits may be conducted at the client's choice of location. This is especially helpful to individuals with disabilities. Since the beginning of the Los Angeles Planned Parenthood Promotoras program, Promotoras have served more than 75,000 Latinas in Los Angeles alone.

Domestic Violence

Latinas in abusive relationships are at elevated risk for STDs (Davila & Brackley, 1999; Raj et al., 2004). In their study of Mexican and Mexican American women recruited from a battered women's shelter, Davila and Brackley (1999) found that *definitional power*, defined as "an individual's ability to impose norms and values, standards of judgment, and situational definitions on another" played a prominent role in the women's portrayals of their ability to initiate and successfully negotiate the use of condoms (p. 351). In the Latin culture, definitional power is explicit in the

conceptualization of machismo (Wood & Price, 1997). Most of the women were in relationships where their husbands or partners were in control (Davila & Brackley, 1999). Women who requested using a condom were often accused of infidelity, which exposed them to physical or psychological abuse. Thus the women were confronted with the dual risks of STDs and further abuse.

At the same time, Latinos who abuse their partners are more likely to have sex with other partners thereby increasing the women's exposure to STDs (Raj et al., 2004). In their sample of primarily immigrant and lower-income Latinas in committed relationships, Raj et al. (2004) found that 20% had been victims of domestic violence. Compared to their counterparts who had no recent histories of abuse, women in abusive relationships were less likely to insist on using condoms despite a realistic appraisal of risk based on their partner's infidelity and lack of knowledge of his HIV status. In addition, women in abusive relationships were somewhat more prone to report that their partner had some history of STD infection. As with the women interviewed with Davila and Brackley (1999) women in abusive relationships tended to report that their partners exerted higher control over sexual activities and condom use within the relationship (Raj et al., 2004).

In advocating the use of Promotoras to educate Latinas about domestic violence, Kelly et al. (2007) state explicitly that, "programs must understand the specific cultural background of the larger community" (p. 243). Traditional gender role socialization, combined with the cultural emphasis on family, and challenges related to language, acculturation, poverty, and discrimination are all factors contributing to a sense of

powerlessness in Mexican American women exposed to family violence. Noting that a grassroots approach such as the Promotora model is equally effective for reaching immigrants and Mexican Americans born in the U.S., Kelly et al. reported on the Promotoras de Buena Vida program, implemented in two low-income San Antonio, Texas, communities. Both communities had a high prevalence of mother and child health issues as well as domestic violence complaints. Promotoras de Buena Vida employs techniques derived from Paolo Freire's model of empowerment education (Kelly et al. (2007). Freire (1999) viewed education as a springboard for political action. Dialogue is central to Freire's vision of education as a collaborative process in which teachers and students are active partners in learning. The ultimate goal of the learning process is altering social conditions that promote and sustain oppression. In the Promotoras program, the aim was to heighten awareness of violence against women in the community (Kelly et al., 2007).

Coordinated by a bilingual community activist, the project produced 14 Promotoras who were trained through discourse and problem solving that addressed the issue of violence against women from various perspectives. During the training the women learned presentation skills and had opportunities to offer each other "supportive critiques" (Kelly et al., 2007, p. 244). Upon completing the training, the Promotoras brought their presentations into the community. Ranging in age from 24 to 67, all but two of the Promotoras were monolingual Spanish speakers. Collectively, they brought their community presentations to 385 women spanning an age spectrum from adolescence to 80 years old.

Consistent with Freire's (1999) vision of mutual learning between teacher and student, the Promotoras gained greater awareness of the problem of violence and abuse (Kelly et al., 2007). Some were shocked at the extent of violence against women in their communities while others related their own experiences with violence. They noted that some women were afraid to attend the presentations. As they gained experience, the Promotoras became aware of what strategies were most effective such as the use of small groups and video presentations. Small groups were also found to be most effective by researchers assessing a pregnancy and STD prevention program for Latino couples (Harvey et al., 2004).

The Promotoras became sensitized to cues indicating which women in their audience might be victims of violence and how they could best be approached (Kelly et al., 2007). Helping women in their communities enhanced the Promotoras' personal sense of self-esteem as well as their sense of collective efficacy as they became aware that through collective action they had the power to change negative and oppressive social conditions.

Three themes arose from the women who attended the community presentations: "a personal application of the information, a desire to spread the word in the community, and the need to work with men" (Kelly et al., 2007, p. 249). Approximately 10% of the women were motivated to additional action, including training as Promotoras. Virtually all presentations acknowledged the importance of including men in programs against violence. Kelly et al. noted that a year after the project, the Promotoras were continuing to expand their social support network. Their experience

showed that they faced numerous obstacles to helping immigrant women. To surmount these obstacles, future sessions were proposed to enhance the Promotoras' leadership, facilitation, and mediation competencies. At the time of writing, there were 30 trained Promotoras and an additional 15 on a waiting list. The success of Promotoras de Buena Vida, and the dedication it inspired among participants, highlights the validity of the Promotora model for targeting health promotion efforts to Latinas.

Cardiovascular Health

Salud Para Su Corazon translates as "Health for Your Heart" (Balcazar et al., 2005). The program was conceived in 1994 as a joint collaboration between the National Heart, Lung, and Blood Institute (NHLBI) and the National Council of La Raza (NCLR). In 2001, the program was formally evaluated at seven pilot sites for the purpose of nationwide health promotion. Promotoras at the seven sites engaged in structured training carried out and supervised by the SPSC-NCLR team. The Promotoras were the key players in recruiting Latino families into the program and gathering data on the participants' family risk factors, health habits, health care referrals and screenings, knowledge sharing, and program satisfaction. Evaluation was based on 223 families. In the vast majority of families (91%), the mother was the primary participant.

Balcazar et al. (2005) attribute the success of the seven pilot programs to the efforts of the Promotoras and community organizations. Reflecting Freire (1999), Balcazar et al. (2005) contend that the "train-the-trainer" approach was a major factor in program success because it built on the capability of the Promotoras to work with community members by promoting their knowledge and skills, and by extension,

enabling them to encourage and support community members in making positive lifestyle changes. In addition to working with families, the Promotoras raised the profile of the public health project in the community, created public service announcements linked with the information materials, and engaged in fund-raising, a perennial issue for community health promotion initiatives.

Kim et al. (2004) reported on an NHLBI-NCLR Promotora outreach project developed through partnership between the UCLA School of Nursing, the Los Angeles County Department of Health, and community members from Pacoima in the San Fernando Valley area, which was assessed as having few resources and high risk for cardiovascular diseases. The term *Promotoras de Salud* (health promoters), which is used throughout *Salud Para Su Corazon* (Balcazar et al., 2005), was selected by the Pacoima community advisory board as culturally relevant to the community (Kim et al., 2004). Eleven women and one man were recruited and trained as Promotoras. Available in English and Spanish, the cardiovascular risk reduction curriculum is entitled "Your Heart, Your Life" (*Su Corazon, Su Vida*).

Attesting to the efficacy of the Promotora model, 256 out of 272 community members who enrolled in classes as part of the project completed the follow-up survey, demonstrating a small 5.8% rate of attrition (Kim et al., 2004). A significant proportion of participants could not recall health care providers asking them about lifestyle factors related to cardiovascular disease risk. The vast majority enjoyed engaging in the group activities provided by the classes and made positive strides in diet, physical exercise, and smoking cessation although they admitted to challenges. Consistent with the

Promotoras in the violence prevention program (Kelly et al., 2007), the Promotoras expressed strong satisfaction and enthusiasm for the program, along with intentions to continue their outreach efforts (Kim et al., 2004). The Promotoras also reported applying the information they learned to their own health and their families.

Sherrill et al. (2005) described the successful application of the Promotora model to a rural Latino immigrant community with inadequate access to health care. The Accessible and Culturally Competent Health Care Project (ACCHCP) was created to bring health care to underserved communities in Oconee County, South Carolina. The area has had a dramatic increase in the number of Mexican immigrants, who are typically employed in labor with no health care benefits. Sherrill et al. use the term the “Walhalla Experience” to describe the Promotora program implemented by the town of Walhalla, which links the Walhalla Clinic with the Seneca Lakes Family Practice Residency Program, and provides learning experiences for the medical residents, along with students from Clemson University. Nursing students play a prominent role at the clinic, and Spanish-speaking students are diligently trained to act as medical interpreters.

The Walhalla Clinic makes extensive use of Promotoras (Sherrill et al., 2005). As community members, the Promotoras had the trust and respect of the target community and were able to transcend cultural and linguistic barriers to health care provision. They were able to speak with residents during informal social interactions and were known as “health connectors,” or “access points” in the community, for which patients and community members can obtain information, referrals, and assistance in a non-

threatening environment” (p. 362). The atmosphere of the clinic, with Spanish-speaking staff and trained interpreters, extended the comfort the community members felt with the Promotora program. Similar to the Promotora program described by Kim et al. (2004), Sherrill et al. (2005) ascribed the success of the Walhalla Clinic to the collaboration between the academic programs, the health service delivery system, and the community.

Breast Cancer Screening

The church-based Tepayac Project employed the Promotora model to promote breast cancer screening among Latinas in Colorado (Sauaia et al., 2007). Community participation in the project yielded four key themes for creating a culturally relevant program: *familismo*, or the importance; *fatalismo*, the sense of fatalism in Latin culture; the need for trust; and the importance of having the message conveyed by a trusted source. Two forms of intervention were created based on these issues. The first was the development of a culturally tailored breast health information packet distributed to Catholic churches throughout the state. For the second intervention, local women were recruited and trained as Promotoras who conveyed the health promotion message via personal, one-to-one interactions.

Earlier research focusing on insurance status found that the Promotora intervention was more effective for promoting breast cancer screening in women across Medicare, Medicaid, or fee-for-service methods of payment (Sauaia et al., 2007). The later study reinforced these findings, documenting that regardless of age, income, rural

or urban residence, as well as insurance status, the Promotora strategy was more successful in increasing the rate of breast cancer screening among Latinas.

Zuvekas et al. (1999) noted that despite the proliferation of Promotora programs, relatively few conducted rigorous evaluation of health outcomes. Nonetheless, the researchers acknowledged that there was empirical evidence that many Promotora programs successfully increased access to health care and service utilization in addition to making positive changes in clients' health knowledge and behaviors. The authors also pointed out that there has been increasing pressure from public and private funding sources on programs to provide quantitative evidence of the impact of their programs. *Salud Para Su Corazon* was delivering community outreach for several years before it was formally evaluated (Balcazar et al., 2005). Promotora programs in California have their roots in HIV/AIDS prevention (Savinar, 2000). Their continued expansion and adoption by organizations such as Planned Parenthood attests to their effectiveness.

STD Prevention for Latinos

Regardless of the behaviors targeted by the community health promotion program, the vast majority of Promotoras are women (Savinar, 2004). *HoMBReS: Hombres Manteniendo Bienestar y Relaciones Saludables* (Men: Men Maintaining Well-being and Healthy Relationships) is a sexual risk reduction program developed for recent, non-English speaking immigrants who belong to a multi-country Latino soccer league in North Carolina (Rhodes et al., 2006). The area has the fastest growing Latino population in the U.S., and a disproportionate prevalence of STD infection. A community-based collaborative approach was deemed the most effective strategy for

tailoring STD prevention initiatives to the target population (Knipper et al., 2007; Rhodes et al., 2006). Reflecting the Promotora philosophy, insiders were considered to have more credibility and hence be more effective in working with the community.

The project was conducted in Chatham County, a primarily rural county in central North Carolina (Rhodes et al., 2006). The male lay health advisors recruited from the community were known as *navegantes* (navigators), derived from the soccer players' admission of needing assistance to "navigate" the American health care system. Acting as "health advisors, opinion leaders, and community advocates," the *navegantes* were essentially the equivalent of Promotoras (p. 379). To obtain formative data, 50 recent, minimally acculturated émigrés participated in focus group discussions. Most of the men were from Mexico (80%); other participants were from Guatemala, Honduras, and El Salvador. The program was "designed to build on and bolster existing community strengths and assets and affirm positive social norms through 'maintaining' well-being and healthy relationships" (p. 379).

The focus group data disclosed several themes that drove the design of the program: a) high priority placed on sexual health by participants; b) lack of access to information and resources related to HIV and STD prevention; c) numerous sexual risk behaviors including erratic use of condoms, multiple sex partners, sex with prostitutes, and high rates of alcohol consumption prior to sexual activity; d) obstacles to obtaining health care; e) the influence of machismo on promoting high risk behaviors, and f) the prospective advantages of health promotion and disease prevention initiatives based on the adoption of a Promotora model that builds on the social network of the soccer league

(Rhodes et al., 2006). The subsequent intervention incorporated these themes into two program elements: the *HoMBReS Training Manual* for preparing the *navegantes* and the *HoMBReS Resource Manual* to assist the *navegantes* with sustaining, referring to, and augmenting the information over the duration of the intervention.

Formative assessment revealed two areas for improvement that are relevant to the present study (Rhodes et al., 2006). Assessment of training for the *navegantes* showed that activities related to cultural male gender socialization and masculinity warranted more attention and clarification. In focus groups on safe sex and condom use, Latino men and women both suggested that the cultural construct of machismo might pose a barrier to successful condom use negotiation although personal attitudes varied considerably (McQuiston & Gordon, 2000). In their interviews with the Latino soccer players, Knipper et al. (2007) found that positive qualities associated with machismo such as personal honor and family responsibility predicted more frequent condom use. Overall, the participants gave high priority to the role of gender socialization and masculinity in influencing men's health-related behaviors and by extension, how men can alter the detrimental aspects while building on health enhancing attributes (Rhodes et al., 2006).

A second challenge was that the scope and urgency of the community demand for accurate information on STDs (which was the sole province of the *navegantes*) took precedence over their role in advocating for change at the social policy level (Rhodes et al., 2006). However, rather than viewing this as a shortcoming in the model, it suggests a need to expand the program and train more community health advisors. Rhodes et al.

noted that the *navegantes* were beginning to build relationships with public health officials as well as acquiring a higher profile within the local community. They construed this as a sign of the first stages of policy change.

The Condom Use Self-Efficacy Scale (CUSES)

The Condom Use Self-Efficacy Scale (CUSES) was developed for the purpose of designing intervention to enhance self-efficacy in using condoms (Barkley & Burns, 2000). A factor analysis of the CUSES involving an ethnically diverse sample of college students in which Latinos comprised 63.5% of the sample discerned three discrete factors: *Appropriation*, *Sexually Transmitted Diseases*, and *Partners' Disapproval*. The category appropriation captured one's confidence in the ability to use, purchase, and carry condoms. STDs related to lack of confidence in using condoms with a new partner on the rationale that he or she would think one has had a past homosexual experience, a current STD, or would see it as implication that he or she has an STD. Partners' disapproval encompasses fear of being rejected, uncertainty regarding the partner's feelings about using condoms, and the prospect of feeling embarrassed or awkward at trying to use a condom again if an initial attempt were unsuccessful.

Application of Theory to Research and Intervention

The design of the CUSES is highly congruent with Fishbein's (2000, 2001) theoretical model. According to Fishbein (2001), a "good" behavioral theory is grounded in formative research designed to illuminate the behavior being assessed from the perspective of the target population or culture. By identifying key variables and specific

attitudes and beliefs, a theory-based instrument serves as the foundation for structuring a behavioral intervention.

Fishbein (2000) emphasizes that, “condom use is not a single behavior but a behavioral category”; that is, “condoms are used for different sexual activities with different types of partners” (p. 274). Elaborating on the application of behavior change theory to STD prevention, Fishbein (2000) states that in general terms, the definition of a particular behavior has at least four basic elements: the *action* (using), the *target* (a condom), the *context* (such as sex with one’s primary relationship partner or a bisexual encounter), and the *time period* for which the behavior is observed or expected to take place (ideally, always). The focus on condom use in STD prevention is based on awareness that the most effective behavioral interventions concentrate on altering a single behavior.

Intention is central to Fishbein’s (2000, 2001) Theory of Reasoned Action. Intention is captured by items related to carrying condoms (Marin, Gomez et al., 1993). If the intention exists but individuals are not carrying out the target behavior, an effective intervention focuses on building relevant skills breaking down obstacles to acting on the intention (Fishbein, 2000). Alternately, in the absence of strong intentions to perform the desired behavior, the model outlines three key factors presumed to underlie intentions: personal attitudes toward carrying out the behavior, perceived norms surrounding the target behavior (encompassing beliefs about what others think of the behavior and beliefs about what others are doing), and one’s sense of self-efficacy about performing the behavior (particularly under difficult conditions). According to the model, “attitudes,

perceived norms and self-efficacy are all, themselves, functions of underlying beliefs” (Fishbein, 2000, p. 275).

Condom Use Self-Efficacy

Self-efficacy theory is a cornerstone of health psychology (Bandura, 1997). Perceived self-efficacy is defined as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated levels of performance” (Bandura, 1986, p. 391). High self-efficacy denotes confidence in one’s ability to perform the intended actions even under challenging circumstances and motivation to overcome obstacles to performance.

Bandura (1986, 1997) conceptualized self-efficacy as domain specific. Early on in the AIDS epidemic, Bandura declared that self-efficacy could be a valuable asset for reducing HIV transmission (Barkley & Burns, 2000). Although interpretations may vary, condom use self-efficacy has been defined as “the ability to insist on condom use under challenging personal and interpersonal circumstances” (Fernandez-Esquer et al., 2004, p. 392).

Bandura (1986, 1997) delineated four sources of self-efficacy: mastery experience, vicarious learning or modeling, social persuasion, and the person’s physiological state. According to Barkley and Burns (2000), the CUSES addresses three of the four sources: mastery experience, social persuasion, and physiological arousal. The authors interpret the *Appropriation* factor as “the performance accomplishment component of self-efficacy” (p. 488). The *STD* factor contains statements of “being afraid” of what one’s partner might think, and *fear* can be construed as evidence of

physiological arousal (p. 488). The third factor, *Partners' Disapproval*, can be construed as a synthesis of physiological arousal and social persuasion.

Although Barkley and Burns (2000) deliberately sought an ethnically diverse sample, the overrepresentation of Latinos was largely a reflection of the enrollment of Miami Dade Community College where the study was conducted. Nevertheless, the researchers pointed out that their sample represented the age group that is at highest risk for STDs. Young Latinas are disproportionately affected by STDs (Espinoza et al., 2007b). Overall, the analysis of the CUSES points to its utility for tailoring STD prevention programs to ethnically diverse young adults (Barkley & Burns, 2000).

Bandura (1986, 1997) stated that modeling is more effective when the role model is viewed as most similar to oneself. Indirectly, having friends who use condoms (which was a strong contributor to condom use) is a form of role modeling. Although models are typically construed in terms of models for positive behavior, many STD prevention programs use community members with HIV or AIDS to highlight personal vulnerability to infection and consequently drive positive behavior change. Given the impact of knowing someone with HIV/AIDS on condom use, Marin, Gomez et al. (1993) recommend this strategy in programs tailored to Latinos.

Comfort with sexuality had a strong relationship to self-efficacy for using condoms (Marin, Gomez et al., 1993). The researchers stress that comfort with sexuality must be discussed in a culturally sensitive manner. This was evident in the *HoMBReS* project (Rhodes et al., 2006). The Promotora domestic violence program illustrated how Promotoras sensitively and successfully interacted with women who were often hesitant

to disclose that they were victims of violence (Kelly et al., 2007). The study of San Francisco STD prevention providers also demonstrated the importance of cultural and community influences in tailoring interventions (Freedman et al., 2006).

Men who were less acculturated had a higher probability of carrying condoms and expressed more favorable attitudes toward condom use than their more acculturated counterparts (Marin, Gomez et al., 1993). This should not be surprising in view of the prevalence of multiple sex partners among newly arrived or less acculturated Latinos (Knipper et al., 2007; Rhodes et al., 2006). However, despite their more positive attitudes, less acculturated men did not actually use condoms more frequently (Marin, Gomez et al., 1993). Fishbein (2000) emphasizes that intention does not automatically translate into action. Effective behavioral interventions must address all aspects of behavior change. The strategies recommended by Marin, Gomez et al. (1993) have since been incorporated into many STD prevention programs. These include teaching skills to enhance condom use self-efficacy, providing information in a comfortable, non-threatening atmosphere, and emphasizing personal vulnerability to STDs. Additionally, given the association between depression and sexual risk behaviors, they stressed the need to be aware of individuals who may be psychologically distressed.

Sexual Attitudes and Behavior

Marin, Tschann et al. (1993) explored the influence of acculturation and gender on sexual attitudes and behavior in a sample of 398 Latino and 540 white San Francisco adults. Respondents were recruited from an ethnically diverse neighborhood and all identified as exclusively heterosexual. Of all subgroups surveyed, single Latinas

reported the fewest number of sexual partners. This contrasts sharply with the pattern reported by men of the same ethnic group. Close to half of the English-speaking (48%) and more than one-third of the Spanish-speaking (35%) Latinos reported engaging in sex with multiple partners. Underscoring the risk involved for Latinas who presume themselves to be at low risk for STDs, Marin et al. noted that condom use was lowest among Spanish-speaking Latinas. Not coincidentally, Spanish-speaking men conveyed the most negative attitudes toward using condoms. Spanish-speaking men and women alike seemed to feel they were relatively powerless in preventing STDs, which could be a reflection of the cultural predisposition toward fatalism, or *fatalismo* (Abel & Chambers, 2004; Sauaia et al., 2007).

Zambrana et al. (2004) used data from the fifth cycle of the 1995 National Survey of Family Growth to explore STD risk factors among Mexican American and Puerto Rican women between the ages of 15 and 44. The researchers were struck by the fact that approximately 60% of the women received no sex education from their parents and roughly 20% of the Puerto Ricans and nearly 40% of the Mexican Americans had no access to sex education in school. They suggest that Latino families may not discuss sexuality with their daughters due to traditional gender roles whereby girls are supposed to remain abstinent until marriage (Martinez, 1997; Wood & Price, 1997). STD prevention programs tailored to Latinos build on their strong sense of family (Knipper et al., 2007; Rhodes et al., 2006). As explanation for the lack of sex education in school, Zambrana et al. (2004) noted that most states with the highest concentration of Latino residents either do not require sex education or have abstinence only education.

A disturbing finding was that one-third of the Puerto Rican women and 45% of the Mexican American women said that they never used condoms. Drawing on previous research, Zambrana et al. (2004) suggest that more consistent condom use by Puerto Rican women may be related to higher education and income levels, lower adherence to traditional gender roles, acquiring more sexual knowledge at home and school, and more generally, greater access to health information. Conversely, being unable to negotiate condom use is especially prevalent among low-income Latinas. The association of all these factors with condom use was borne out by research on low-income Latinas in Los Angeles (Flaskerud et al., 1996; Flaskerud & Nyamathi, 1997).

Zambrana et al. (2004) also pointed out that anxiety and depression, which can be exacerbated by immigration, acculturation stress, and poverty, have been linked with unsafe sexual behaviors. This invokes the recommendation of Marin, Gomez et al. (1993) to pay attention to individuals who have signs of emotional distress. The recommendations of Zambrana et al. (2004) are consistent with the community health or Promotora model. They state that harm reduction programs must be tailored to specific audiences within population groups such as women, prospective male partners, and parents of male and female children and adolescents using culturally and linguistically appropriate techniques.

McQuiston and Gordon (2000) conducted a focus group study involving 16 Mexican women and 15 men in three gender-specific focus groups each to explore attitudes toward safe sex practices and condom use. Communication and trust emerged as key issues although they were related in different patterns for women and men. For

women, communication translated into safe sex. In the words of one woman, "The most important thing is to have good communication, and if you don't have it, you have to build good communication to not put yourself at risk of contracting something" (p. 283). Trust and communication tended to be intertwined. Interestingly, the women in two focus groups were very trusting of their partners and did not seem to perceive a need to discuss or use protection against STDs while the women in the third group were much more wary. The overall implication seemed to be that the need for safe sex was contingent on how well a woman knows her partner and feels sure he would not have sex outside of the relationship.

For men, trust in one's partner was the decisive factor in whether or not to use protection (McQuiston & Gordon, 2000). Paradoxically, trust was also central to whether to *talk* about using a condom and trust was construed as something that evolved over time. Specifically, "The contradiction of not needing condoms in a trusted relationship and not being able to talk about condoms until there was trust was evident through the male groups (the Catch 22 of condoms)" (p. 284). McQuiston and Gordon noted that, "The concept of trust, time, and feeling free to discuss the sensitive topics of STD prevention was interwoven very clearly" (p. 284).

Machismo was cited by both women and men as a reason why men might reject using condoms or react negatively at the suggestion (McQuiston & Gordon, 2000, p. 284). However, there was considerable variation in individual attitudes toward condom use. In response to the question of whether they would request that their partner use a condom, the responses of women ranged from, "No, not me" to emphasizing that,

"That's why there is a need for communication" (p. 285). The majority of men stated they would be "Okay" with a request to use a condom although at least one man admitted he would get angry. Several men tended to speak in general terms that left their personal attitudes ambiguous.

McQuiston and Gordon (2000) concluded that, "the timing for condom use was never right. The time for talking and the time for trusting for the women and men, was not congruent" (p. 286). To address this discrepancy, the researchers advocate an intervention that promotes the use of condoms early on in a relationship. They propose that given the cultural value of *familismo*, "this could be framed as staying healthy to fulfill one's role in the family" (p. 286).

Issues of trust and communication arose in an exploration of marital infidelity and STD risk conducted with Mexican migrant women in Atlanta and their female relatives in Mexico (Hirsch et al., 2002). According to the researchers, the Mexican ideal of marriage has been transformed from a focus on *respeto* (respect) to a focus on *confianza* (intimacy). For women over age 35 the marital relationship "centered on mutual fulfillment of a gendered set of obligations" (p. 1230). Younger women were closer to their husbands, spent more time with together, had lower adherence to traditional gender roles, and often engaged in joint decision making on domestic and economic matters. Although the younger women in Atlanta and Mexico expressed similar attitudes toward relationships, sexuality, and gender, those in Atlanta had higher self-efficacy within the relationship.

An especially striking difference between older and younger women was that younger women were much less tolerant toward a husband's infidelity (Hirsch et al., 2002). In particular, younger women with more social and economic resources were least likely to say they would try to work out a relationship upon "hard evidence of infidelity" (p. 1232). In the same way, women with greater resources are most likely to leave an abusive relationship (Davila & Brackley, 1999). In each case, having limited resources means a woman is at higher risk for STDs.

Hirsch et al. (2002) cautioned that the emphasis on *confianza* does not necessarily mean that younger men and women engage in open discourse about safe sex. A commitment to monogamy is implicit in *confianza* thus asking one's husband to use a condom implies distrust. In fact, the younger Mexican women were similar to the Mexican men in the focus groups in that their main emphasis was on trust (McQuiston & Gordon, 2001). Invoking both *respeto* and *confianza*, Hirsch et al. (2002) stated that:

Men and women may not agree on whether men who profess to believe in companionate marriage should ever have outside partners, but they do agree that for a woman to find out about her husband's infidelity represents both a betrayal of trust and a lack of respect on his part. (p. 1233).

Hirsch et al. (2002) argue that HIV prevention programs unduly burden women with the responsibility for using condoms. Even given the greater risk of infection for women, they assert, "but this does not explain why we have assumed that women can modify their sexual behavior to press for condom use but men cannot" (p. 1232). They

believe that health educators can use *respeto* and *confianza* as the basis for culturally relevant messages:

Telling men that ideally they should have no outside partners, but that to protect the *confianza* they have with a spouse and to avoid showing her a *falta de respeto*, a lack of respect, may be one way to frame this important health education message in culturally meaningful terms. (Hirsch et al., 2002, p. 1233)

Although their focus is somewhat different, both Hirsch et al. (2002) and McQuiston and Gordon (2000) advocate building on cultural concepts of family responsibility to promote regular condom use. Supporting the cultural relevance of familismo to use safe sex practices, among the Latino soccer players, men who reported seeking health care information from relatives were more than three times as likely as others to have used a condom during their last sexual intercourse (Knipper et al., 2006). Noting that familismo does not appear to be influenced by acculturation, Knipper et al. suggest that family networks pose a viable channel for promoting condom use among Latinos. Invoking the Promotora model, they propose that outreach interventions in which men are trained to discuss condom use, and more broadly STD prevention, with male relatives may be an effective strategy. Men in their study who had greater knowledge of STDs and prevention were more inclined to use condoms.

In addition, Knipper et al. (2007) found that contrary to their expectations, men who held traditional Latino masculine values were more than twice as likely to use condoms. The focus had originally been on the impact of negative aspects of machismo on safe sex practices (Knipper et al., 2007; Rhodes et al., 2006). The researchers found

that positive aspects of machismo such as a personal honor, family responsibility, and strength translated into higher probability of using condoms (Knipper et al., 2007).

HoMBReS builds on familismo and machismo to promote regular condom use in all sexual encounters (Rhodes et al., 2006).

Fernandez-Esquer et al. (2004) examined condom use self-efficacy in a sample of U.S.-born and foreign-born Latin men and women living in Houston, Texas. The 152 participants were interviewed by seven women and three men in English or Spanish according to their personal preferences. All 50 men were recent immigrants and the women were equally divided between recent immigrants and Latinas born in the U.S.

In general, condom use self-efficacy was linked with condom use although Fernandez-Esquer et al. (2004) observed that condom use self-efficacy was relatively high in the sample and other factors were involved in actual use. Women scored higher on condom use self-efficacy and were more likely to use condoms with their primary sex partner. The researchers suggest this may reflect a realistic appraisal of the potential risk of STDs. Men were more likely to use condoms with secondary sex partners, which is consistent with cultural gender norms. Fernandez-Esquer et al. propose that the lower condom use self-efficacy found in men may be due to items examining the ability to persuade one's partner to use condoms as opposed to assessing the skills to use them. The researchers used an instrument developed by Marin and her colleagues. However, scales used to assess condom use self-efficacy appear to be equally relevant to women and men (Barkley & Burns, 2000), and Marin initially assessed condom use self-efficacy in men (Marin, Gomez et al., 1993).

An intriguing finding was that Latinas born in the U.S. scored higher on self-efficacy on items related to difficult situations with partners while women who immigrated to the U.S. expressed higher self-efficacy on items capturing impulse control Fernandez-Esquer et al. (2004). Control over impulses is intrinsic to marianismo (Wood & Price, 1997), while the ability to overcome challenges is a sign of self-confidence and motivation (Bandura, 1986, 1997). Thus the pattern suggests differences in acceptance of traditional Latin gender roles as a result of acculturation. Noted that this trend had not previously been reported, Fernandez-Esquer et al. (2004) contend that differences in condom use self-efficacy between U.S. and foreign-born Latinas merits further investigation. They assert that STD prevention programs need to be structured so Latinas can talk freely and tailored to specific subgroups of men and women.

Essien et al. (2005) investigated condom use in a sample of 806 men in the Houston area that was deliberately diverse in terms of ethnicity and sexual orientation. The study encompassed "*reported* condom use and *perceived difficulty* of condom use [original emphases]" (p. 4). Latino and African American men who reported engaging in sex with women during the past three months were the *least* likely to have used condoms. Latinos who had sex with women also reported the highest difficulty using condoms during bisexual encounters, and Latinos who identified as bisexual or gay also reported high rates of difficulty using condoms. These findings underscore the need for women to protect themselves against STDs and also for interventions tailored to increase condom use self-efficacy (Barkley & Burns, 2000; Fernandez-Esquer et al., 2004; Marin, Gomez et al., 1993).

Couples-Based STD Prevention

Project Connect was a randomized clinical trial investigating the effectiveness of a relationship-based STD prevention program for heterosexual couples (El-Bassel et al., 2001, 2003; Witte et al., 2004). One of the first challenges the researchers encountered was that there was no protocol for recruiting urban minority couples for a clinical trial (Witte et al., 2004). The strategy they employed was to recruit women first and provide support for women who anticipated a problem in persuading their partner to join. Through a community-based approach, the researchers successfully secured the participation of 217 predominately black and Latino couples living in Bronx, New York.

There are very few studies of couples STD prevention programs (El-Bassel et al., 2001; Harvey et al., 2004). Three reasons were cited for the approach. First, negative perceptions such as fear of rejection or anger and the association of condoms with infidelity and distrust pose obstacles to one partner trying to persuade the other to use condoms (El-Bassel et al., 2001). An “expert” facilitator can frame condom use so that both partners see the advantages of protecting each other and the relationship. Second, working with couples together provides them with opportunities to practice applying their knowledge and communication skills. Third, the supportive, non-threatening environment of couples counseling may facilitate disclosure of sexual encounters outside the relationship, STD histories, IDU, or other sensitive information that provides a more realistic and accurate portrayal of risk.

The overarching idea is that, "A facilitator can help reframe condom use to couples as a positive demonstration of the couple's love and commitment to each other, rather than a symbol of infidelity" (El-Bassel et al., 2001, p. 381). In essence, this is a broad, culturally neutral conception of the culture-specific framework proposed by Hirsch et al. (2002).

Project Connect was based on two theoretical frameworks: the AIDS Risk Reduction Model (ARRM) and Bronfenbrenner's ecological perspective (El-Bassel et al., 2001). ARRM uses an eclectic approach derived from the Theory of Reasoned Action (Fishbein, 2000, 2001), self-efficacy theory (Bandura, 1986, 1997), and health belief models (El-Bassel et al., 2001). The ecological perspective acknowledges the multiple levels of influence on human behavior ranging from the individual to the greater society.

ARRM is comprised of three stages: 1) acknowledging and labeling one's behavior as high risk for HIV infection, 2) committing oneself to reducing high risk behaviors and increasing positive behaviors, and 3) seeking and carrying out strategies to accomplish these goals (El-Bassel et al., 2001). ARRM was adapted for a small group intervention devised to decrease STDs among high-risk black and Mexican American women (Shain et al., 1999). Three sessions successfully reduced infection rates in the target groups. Project Connect added a "maintenance" stage to the behavior change model (El-Bassel et al., 2001).

Outcome data from Project Connect demonstrated that six sessions using the relationship-based approach successfully reduced the number of unprotected sexual acts while increasing the use of a condom (El-Bassel et al., 2003). No significant

differences emerged between women who received the intervention with a partner and women who received the intervention by themselves. However, the researchers point out that since the study involved only couples, the partners of women who received the intervention alone had already demonstrated that they were amenable to engaging in safer sex practices.

Harvey et al. (2004) reported on a randomized trial in which 146 Latino couples were assigned to a STD and pregnancy prevention program or to standard community care for the same purpose. The PARTNERS Project was implemented at two sites, East Los Angeles and Oklahoma City. Only the Los Angeles site was culture specific. The framework synthesized Fishbein's Integrated Behavior Change Model and the Information-Motivation Behavioral Skills (IMB) model of STD Risk Reduction. An intervention based on the IMB effectively increased condom use in a study of women living low-income housing projects in five urban centers (Anderson et al., 2006).

The Los Angeles PARTNERS Project was designed to actively engage both relationship partners using culturally congruent techniques (Harvey et al., 2004). For example, the project utilized small groups, which were preferred by clients of Promotora programs (Kelly et al., 2007). The sessions were English only, Spanish only, or bilingual depending upon the preferences of the participants. Interestingly, despite the diligent preparation that went into developing the program, the couples intervention and conventional community care proved equally effective in promoting greater use of condoms and more effective contraception. Harvey et al. speculated that the enrollment of couples together might have been the decisive factor in promoting behavior change

rather than the specific mode of intervention. This supposition is supported by the finding of El-Bassel et al. (2003) that the sessions involving the woman alone or the couple together were equally effective in facilitating safer sex practices.

Interventions for Women

Comparing the impact of a STD-intensive prevention program and a general women's health promotion in a study of 162 Latinas, Raj et al. (2001) found both to be effective although in somewhat different ways. The STD intervention was somewhat more effective in facilitating negotiation of condom use while the health promotion program resulted in more STD testing. However, the overall findings indicated that either program could be effective for the purpose of reducing STD risk in the target population.

Mize, Robinson, Bockting, and Scheltema (2002) conducted a meta-analysis of 24 studies of HIV prevention programs for women in the U.S. A primary focus was the impact of interventions on women of different ethnic groups. The key outcome variables were knowledge, self-efficacy, and behavior. Overall, the interventions were effective in inducing improvements on all three outcome measures. Knowledge and risk reduction improved for women across ethnicity while increased self-efficacy was less consistent for black women. The most notable finding related to Latinas was that only *one* study focused on risk reduction in Latinos.

Conclusion

CDC data demonstrates that Latinos are disproportionately affected by STDs (Espinoza et al., 2007a). Women represent nearly two-thirds of persons infected through heterosexual contact and 88% of new cases diagnosed in women under age 20 (Espinoza et al., 2007b). Latinas constitute 55% of the women in this young age group. Despite this trend, Latinas are underrepresented in research on STD prevention (Mize et al., 2002), and very few STD prevention programs for couples have been evaluated (El-Bassel et al., 2001; Harvey et al., 2004). Nevertheless, the existing research shows that programs for women and for couples effectively produce positive changes in knowledge of STDs, self-efficacy, and condom use.

Behavioral interventions that take gender and culture into account tend to be more effective (Albarracin et al., 2005; Sanders-Phillips, 2002). One strategy that has proven effective in Latino communities is the use of Promotoras. Promotoras were introduced in California for the purpose of HIV prevention (Savinar, 2004). The Promotora model has since been adopted by Planned Parenthood organizations throughout California. Evidence from a domestic violence prevention program utilizing Promotoras has important implications for application to STD prevention for women of similar heritage (Kelly et al., 2007). *HoMBReS*, a novel HIV prevention program for men who belong to a Latin American Soccer League in the Southeast employs *navegantes*, the equivalent of the predominately female Promotoras (Rhodes et al., 2006).

As insiders, Promotoras elicit trust and respect in traditionally underserved communities, where they act as advocates, advisors, liaisons, educators, translators, mentors, and role models (Kelly et al., 2007; Savinar, 2004; Sherrill et al., 2005).

Research with Latinos suggests that Promotoras can be especially valuable for helping to tailor STD prevention programs by using Latin cultural concepts such as *machismo*, *familismo*, *respeto*, and *confianza* (Hirsch et al., 2002; Knipper et al., 2007; McQuiston & Gordon, 2000; Rhodes et al., 2006). By addressing sexual issues in a culturally sensitive manner, carefully designed programs have the capacity to address obstacles to safe sex practices and increase condom use self-efficacy and regular condom use.

CHAPTER III

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The study utilized a quasi-experimental two-group pretest and posttest design. This design evaluated the effects of an education intervention on condom use self-efficacy with partnered Latino women attending together and partnered Latinas attending alone. In this chapter the setting, population, sample, protection of human participants, instruments, data collection and treatment of data was presented.

The study was conducted at a family practice medical clinic serving primarily a Latino community in a large southwest metropolitan city in the United States. The Latino population makes up a significant proportion of the overall population in Houston and continues to grow on a daily basis (Fernandez-Esquer et al., 2004, p. 390).

Population and Sample

The population of interest was women, who self-identified as Latino, were in committed heterosexual relationships, aged 18 years to 55 and resided in the United States. Women who were eligible to participate in the study were those who had a regular male sexual partner who was identified as a boyfriend, spouse, or lover, and in a long-term relationship. A long-term relationship was defined as involvement with this partner for the past 6 months, intended to stay together for at least 1 year, had at least one episode of unprotected vaginal or anal sexual relations with this partner in the past 30 days, and had not reported any life-threatening abuse by this partner within the past 6 months. The parameters for the power analysis were: a) a planned alpha level ($\alpha=.05$),

b) a specified power level ($1-\beta = .80$), and c) estimated effect size (ES) $\alpha^2=0.59$. Since the 2 tests were spread over two groups the alpha level was set at $\alpha=.025$ Two-Tailed. Power and sample size was established by a review of the current scientific literature and the mean ES effects size was calculated. Condom use negotiation skills (mean ES 0.50; 95% confidence interval [CI], 0.41-0.59) (Johnson, Carey, Marsh, Levin & Scott-Sheldon, 2003). The effect size (ES) mean for skills for condom use negotiations of 22 studies including 42 interventions (N=35,282) the ES is 0.68, with $\alpha=0.05$ (one-tail) (Johnson et al., 2003). $1-\beta=0.80$, ES 0.59 = 16 participants. Taking into account the usual 30% attrition rate brought the sample number to 21 participants for each group but because of the high attrition rate for this type of study 30 participants was required for each group (Cohen, 1998; Lipsey, 1990).

Protection of Human Subjects

The study began promptly, after approval by The Institutional Review Board at Texas Woman's University. Signed informed consent were obtained of all study participants. The confidentiality and anonymity of those who participated in the study were protected by not having names identified on the instruments and interview data. The educational contents were delivered by a Promotora who is a Registered Nurse. The educational interventions were conducted in a large closed meeting room in the clinic. The participants asked questions and obtained answers to their satisfaction. All answers and information were kept confidential. Data was kept in a locked file cabinet at the researcher's private office.

Instrument

The instrument used was the Condom Use Self-Efficacy Scale (CUSES) (Brafford & Beck, 1991) developed by Linda J. Brafford and Kenneth H. Beck. The authors reported the CUSES with a reliable measure with a Cronbach's alpha of 0.91 and a 2 week test-retest reliability of 0.81 (Brafford & Beck, 1991). CUSES is a 28 item self-report questionnaire that elicits responses using a five-point Likert scale format, ranging from 'strongly disagree' to 'strongly agree.' Each of the responses is scored as follows: 'strongly disagree' = 0, 'disagree' = 1, 'undecided' = 2, 'agree' = 3 and 'strongly agree' = 4. The internal consistency for subscales: Mechanics: Cronbach alpha = 0.78; Partner's Disapproval: Cronbach alpha = 0.81; Assertive: Cronbach alpha = 0.80; Intoxicants: Cronbach alpha = 0.82 (Brien, Thombs, Mahoney, & Wallnau, 1994; Barkley & Burns, 2000). The possible range of scores is 0–112, with higher scores indicating greater condom use self-efficacy (Brafford & Beck, 1991).

Results of Pilot Study

In the pilot study, the CUSES instrument was administered to 10 women before and after they received promotora training, and again at the six-week follow-up. For each of the 30 CUSES response sets, the answers to the 28 questions were combined to assign a score in the range 0 to 112 to each response set. It is assumed that Brafford and Beck gave each scale question equal value and that the five levels on the Likert scale are equally spaced. This is a common survey methodology (Murray, Blitstein, & Varnell, 2004). Three response sets—two in the pre-test and one in the immediate post-test—had one question left blank. For the purposes of the pilot study, these response

sets were assigned a score of 28/27 times the sum of the other 27 responses from the same subject. Prior to analysis of the full-scale survey data, a more formal method of handling missing responses will be selected, and a criterion will be adopted for how many questions may be left blank before a subject is dropped from the data set. Two obvious candidates: Throw out every subject who leaves something blank or do a two-way ANOVA on all the responses from one administration of the survey, using the estimated row effect plus estimated column effect to fill in missing cells.

Typically, one expects to see most subjects show an improvement in score between the pre-test and the immediate post-test, with some relapse toward pre-test scores when the follow-up test is given six weeks later. The statistic ultimately of interest to the researcher is whether the subjects enjoy a long-term improvement in their condom use self-efficacy as a result of the training they receive.

The individuals in the pilot study did not conform to the standard pattern. For instance, four subjects showed improved scores on the post-test and further improvement on the follow-up test. It is possible but unlikely that this represents further assimilation of the material after the conclusion of training; there is a significant danger that this represents subjects "learning to give the answer the researcher wants to hear" after being asked the same questions three times—or simply filling out the survey top to bottom with 4's without even thinking about each question. This confirms the wisdom of administering a six-week retest to a control group rather than simply relying on Brafford and Beck's reported two-week reliability as representative.

The mean score and its standard deviation for each of the three administrations of the test are reported in Table 1. The pilot study did reveal a significant improvement in self-efficacy between the pretest and same-day post-test. All subjects showed higher scores on the post-test than the pre-test, with subjects with low pre-test scores showing the largest improvements. The six-week follow-up test shows much more variability, with some subjects posting lower scores than on the pre-test while others posted higher scores than on the same-day post-test. Because of this increased variability, considerably more than ten subjects will be required to achieve statistical significance.

Table 2 reports paired-samples t-tests comparing the pre-test with the same-day post-test, and comparing the pre-test with the six-week follow-up. A repeated measures ANOVA on all three data sets at once also shows significant differences among the data sets (Table 3); but this ANOVA will report a significant difference due to the same-day effect even if the long-term effect is negligible. It is suggested that, for ease of interpretation, the full-scale study concentrate on the paired-samples comparison of the pre-test and the six-week follow-up, with consideration of the size of the temporary same-day boost in scores relegated to a position of secondary importance.

Table 1

Summary Statistics for Each of the Three Administration of the CUSES Instrument

CUSES Scores	Sample Size	Minimum Score	Maximum Score	Mean Score	Standard Deviation
Pretest	10	56	112	94	19
Post-test	10	77	112	104	11
6 Week follow-up	10	90	112	105	7

Table 2

Paired Sample t-tests Comparing the Pretest with Each Post-Test Separately

Pairs	Mean	Standard Deviation	95% Confidence Interval		t	df	Sig. (2-tailed)
			Lower	Upper			
Pretest-Post-test	-10.1	10.2	-17.4	-2.8	-3.1	9	.012
Pretest-6 wk F/U	-10.7	22.2	-26.6	5.1	-1.5	9	.160

Table 3

Result of Repeated Measures ANOVA on All Three Administrations

Effect (Within Subjects Design)	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Pillai's Trace	.667	8.013	2.0	8.0	.012	.667
Wilks'lambda	.333	8.013	2.0	8.0	.012	.667
Hotelling's Trace	2.003	8.013	2.0	8.0	.012	.667
Roy's Largest Root	2.003	8.013	2.0	8.0	.012	.667

Pilot Study Summary

It was observed in the pilot study that some CUSES questions received scores of four from almost every participant even in the pre-test, while other questions showed much more variety in responses. The pilot study's sample size was too small to formally investigate the impact of training on subjects' responses to an individual question. In the full-scale study the same instrument (CUSES) will be used to obtain quantitative data on 60 partnered women who attend a one 60-minute educational intervention using one Promotora. The study will evaluate the effect a promotora-guided education intervention and partner presence in improving condom use self-efficacy amongst partnered Latinos.

CHAPTER IV

ANALYSIS OF DATA

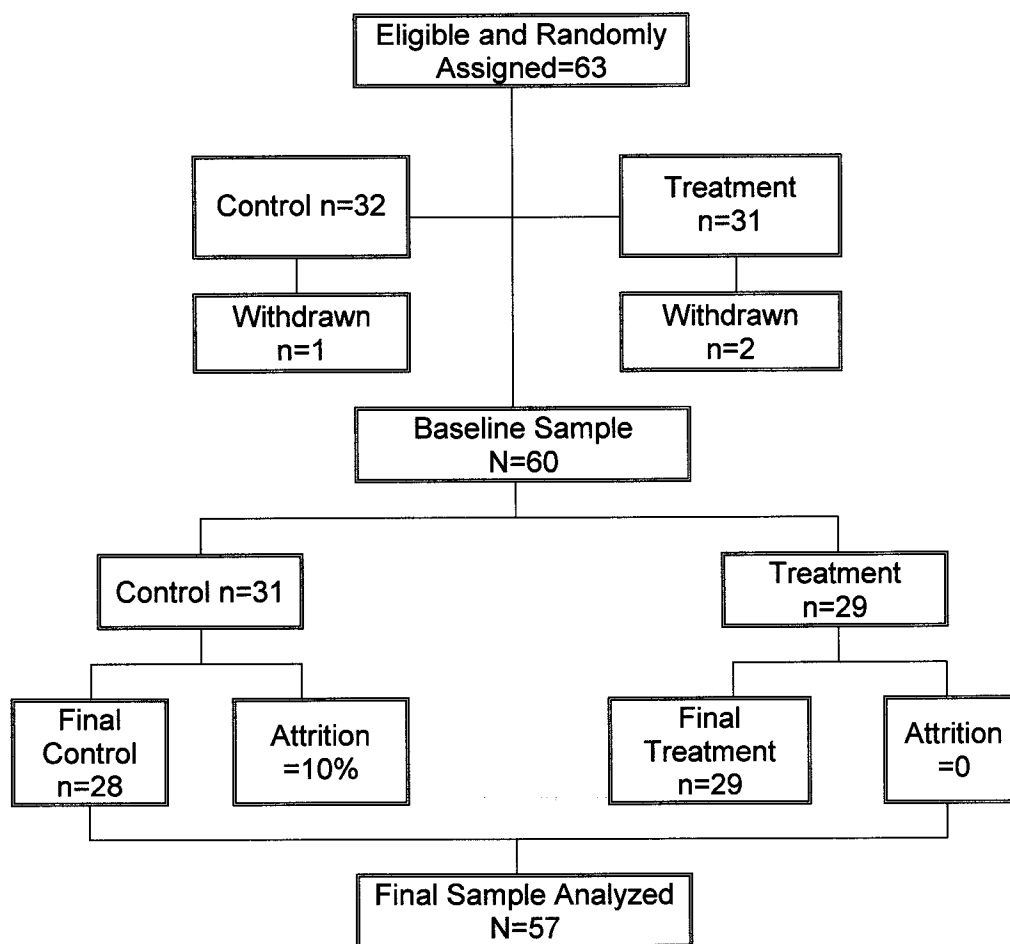
The purpose of the study was to test the effectiveness of a sexually transmitted disease (STD) prevention program for Latino couples using a Promotora model. Descriptive statistics appropriate to the level of measurement were calculated for the demographic data. Chi-square statistics, paired samples *t*-tests and one way ANOVAs along with descriptive statistics were used to evaluate the mean differences between and within the two groups before and 6 weeks after the intervention. Paired samples *t*-tests were calculated for both the treatment and control group to compare the pretest to the posttest mean scores, when appropriate. The level of significance for this study was set at $\alpha = 0.05$. Socio-economic description of the samples and the findings of the research hypothesis were presented in this chapter.

Description of Sample

There were a total of 63 eligible women who came to the study site on the 6 days of data collection (Figure 1). These women were recruited at one of 10 different separate classes that were held on the 6 nonconsecutive days of an educational intervention. On the 6 days that the educational intervention was held, there were 3 women who were eligible for the study but withdrew for reasons such as inability to complete the questionnaires due to fatigue, lack of time, and disinterest. The baseline attrition rate

was 4.8%. At baseline data collection 60 participants were randomly assigned to the control group (31) and the treatment group (29). At the 6 week follow up, the loss to follow up attrition was 4.8% with a total of 57 participants ($n=28$ for the control group; $n=29$ for treatment group). The final sample included 57 women who had completed the baseline and 6 week follow-up questionnaires. A summary of the flow of the participants in the study is presented in Figure 1.

Figure 1.



The Flow of the Participants from Baseline to 6 weeks Post Intervention

Socioeconomic Status Characteristics of the Samples

Data collection occurred over 6 nonconsecutive days, 10 classes were held and the demographic data was analyzed by age, marital status, income level, language, and religion for both the treatment group and the control group. The analysis was performed in order to determine differences between the control and treatment groups.

Age

For the treatment group, the participants' ages ranged from 20 to 52 years ($n = 29$), with a mean of 33.1 years ($SD = 7.8$). The control group participants' ages ranged from 21 to 58 years ($n = 28$), with a mean of 32.9 years ($SD = 7.8$). A one-way ANOVA was used to calculate the mean differences between the control and treatment groups in respect to the age variable. Results indicated there were no significant differences between the control and treatment groups with $F(1, 56) = 0.01$, $p = 0.91$ in respect to age (Table 4).

Table 4

Age Distribution Among the Treatment and Control Groups

Group		Mean (SD)	F	p
Control	($n = 28$)	32.2 (7.8)	$F(1, 56) = 0.01$	$p = 0.91$
Treatment	($n = 29$)	33.1 (7.8)		
Total Sample $N = 57$		33 (7.5)		

Marital Status

For the women in the treatment group, 55.2% reported being married and 45% reported being single. For the women in the control group 28.6% reported being single and 71.4% reported being married. There were two choices for the participants married and single (not legally married). The mean differences among the 2 groups were evaluated using the chi-square statistic, yielding $X^2 (1, N = 57) = 2.4$, $p = 0.121$. This indicated that there were no significant differences among the women (Table 5).

Table 5

Marital Status Distribution among the Treatment and Control Groups

Group		Percentage (n)		
		Married	Single	
Control	(n = 28)	71.4 (20)	28.6 (8)	$X^2 (1, N = 57) = 2.4$
Treatment	(n = 29)	55.2 (16)	45 (13)	$p = .121$
Total Sample N = 57		63.2 (36)	36.8 (21)	

^a 2 women in treatment group did not report their marital status

Income

For the women in the treatment group, 20% reported yearly income in the 0-\$20,000 category, 55% in the \$20,001-\$40,000 category, 25% in the \$40,001-\$50,000 category with no one reporting a yearly income category of greater than \$75,000. For the women in the control group, 27% reported yearly income in the 0-\$20,000 category,

50% in the \$20,001-\$40,000 category, 22% in the \$40,001-\$50,000 category with no one reporting a yearly income category of greater than \$75,000. The mean differences among the 2 groups were evaluated using the chi-square statistic, yielding an $X^2 (2, N = 45) = 6.8, p = 0.03$. This indicated that there were no significant differences among the women. A one-way ANOVA was used to further evaluate the mean differences between the 2 groups with respect to income. Results, $F (2, 55) = 0.043 p = .87$, indicated there were no statistical significant differences between the control and treatment groups (Table 6).

Table 6

Income Level Distribution for Treatment and Control Groups

Group		Percentage (n)	X^2 and F	p
Control	< \$20,000	16.7 (6)		
	\$20,000-40,000	36.7 (12)	$X^2 (2, N = 57) = 6.8$	$p = 0.03$
	\$40,001-50,000	16.7 (5)		
	\$75,000 >	0		
Treatment	< \$20,000	20.0 (5)	$F (2, 55) = 0.043$	$p = 0.87$
	\$20,000-40,000	43.3 (11)		
	\$40,001-50,000	16.7 (5)		
	\$75,000 >	0		

Total Sample $N = 57$

^a 5 women in treatment group and 4 women in control group, did not report their income level

Language

For the treatment group, 82% reported speaking Spanish and 18% reported speaking English. For the control group 82% reported speaking Spanish and 18% speaking English. The mean differences among the 2 groups were evaluated using the chi-square statistic, yielding $X^2 (1, N = 57) = 23.1$, $p = 0.00$. There were no significant differences between the 2 groups (Table 7).

Table 7

Language Distribution among the Treatment and Control Groups

	Percentage (n)		X^2	p
	Control Group	Treatment Group		
Spanish	82	82	$X^2 = (1, N = 57) = 23.1$	
English	18	18	$p = 0.00$	

Total Sample $N = 57$

^a 1 women in treatment group did not report their language at home

Religion

For the treatment group, 80% reported being Catholic and 10% were Baptist and 3% reported other religion. 5 participants did not report a religion. For the control group, the participants reported 76% Catholic and 18% were Baptist and 8.9 % reported other religion. The mean differences among the 2 groups were evaluated using the chi-square

statistic, yielding an $X^2 (2, N = 57) = 39.1, p = 0.00$. Results indicated there were no significant differences between the control and treatment groups (Table 8).

Table 8

Religion Distribution among the Treatment and Control Groups

	Percentage (n)		X^2	p
	Control Group	Treatment Group		
Catholic	78.6	62	$X^2 = (2, N = 57) = 39.1$	
Baptist	11.5	24.1	$p = 0.00$	
Other	3.8	13.8		

Total Sample $N = 57$

^a 1 woman in the treatment group and 2 women in control group, did not respond to this question

In summary, there were no significant differences between the 57 participants in the 10 classes, and between the treatment and control groups. A typical participant was a married woman with an age of 33, whose income was \$20,000-\$40,000, spoke Spanish at home and belonged to the Catholic Church (Table 9).

Table 9

Demographic Data of 57 Participants at Baseline

	Control	Treatment	<i>F</i> and X^2	<i>p</i>
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		
Age	<i>n</i> = 28	<i>n</i> = 29	<i>F</i> (1, 56) = .01	.91
	32.9 (7.8)	33.1 (7.8)		
Marital Status	% (<i>n</i>)	% (<i>n</i>)		
Married	71.4 (20)	55.2 (16)		
Single	28.6 (8)	45 (13)	X^2 (1, <i>N</i> = 57) = 2.4	.121
Yearly Income				
0-\$20,000	27 (6)	20 (4)		
\$20,001-40,000	50 (11)	55 (11)	X^2 (2, <i>N</i> = 57) = 6.8	.03
\$40,001-50,000	22.7 (5)	25 (5)		
Greater than \$75,000	0 (0)	0 (0)	<i>F</i> (2, 55) = 0.043	.87
Language				
Spanish	82 (23)	82 (23)		
English	18 (5)	18 (5)	X^2 (1, <i>N</i> = 57) = 23.1	.00
Religion				
Catholic	78.6 (22)	62 (18)		
Baptist	11.5 (3)	24.1 (7)	X^2 (2, <i>N</i> = 57) = 39.1	.00
Other	3.8 (1)	13.8 (4)		

Findings

Hypothesis : Latina's who attend a Promotora-guided educational intervention with their partners will report more frequent condom use within this relationship when compared to partnered women who attend alone

The research hypothesis stated that Latina's who attend the educational intervention with their partners would report more frequent condom use within this relationship when compared to partnered women who attended the intervention alone as scored by the CUSES. The CUSES is divided into 4 sub-scales: mechanics, partner's disapproval, assertive and intoxicants. The possible range of scores is 1-112, with higher scores indicating greater condom use self-efficacy and 2 quantitative questions added: #29 (Number of times the couple had sex in the last 30 days) and #30 (Number of times the couple used condoms).

The CUSES instrument was administered to 57 women before and 6 weeks after the educational intervention. Twenty-nine women took the Condom Use Self-Efficacy Scale (CUSES) with their male partners and 28 women took the CUSES without their male partners. For each of the 120 CUSES response sets, the answers to the 28 questions were combined to assign a score in the range 0 to 112 to each response set. It was assumed that Brafford and Beck gave each scale question equal value and that the five levels on the Likert scale are equally spaced. Two response sets—one in the pre-test and one in the posttest were gathered. The adopted criterion for missing cells was handled using the mean series method. Participants showed an improvement in pretest scores with some waning toward pretest scores when the follow-up test was

administered six weeks later. The statistic ultimately of interest to the researcher was whether the subjects enjoyed a long-term improvement in their condom use self-efficacy and in this case increased condom use with their partners as result of the training. The individuals in the study conformed to the usual post-test pattern reliability. Most test participants showed an improved score on the 6 week post-test follow-up.

The mean score and its standard deviation for each of the two administrations of the test are reported in Table 10. The study revealed an improvement in self-efficacy between the pretest and 6 week follow up post test and a significant improvement in use of condom with partner between the pretest and 6 week follow up. All subjects showed higher scores on the post-test than the pre-test. The six-week follow-up test shows a slight increase in variability, with the treatment group participants posting slightly higher scores on the post-test than the control group. The *t* test (Table 11) revealed a statistically reliable difference, in the control group 1.5 (27), $p=.15$ and in the treatment group, 3.4 (28), $p=.002$, $\alpha = .05$.

Two questions were added to the CUSES for participants to answer. Number 29 Number of Times the couple had sex in the last 30 days and number 30, number of times the couple used condoms.

At baseline, for the control group, the number of times the couple had sex had a paired sample mean of 3.5 (SD =2.9). At 6 week-follow up the mean was 3.8 (SD = 2.2). The treatment group, the number of times the couple had sex had a mean of 3.6 (SD = 2.8). At 6 week follow up the mean was 5 (SD = 3.1) (Table12).

At baseline, for the control group, the number of times the couple used condoms had a mean of .19 (SD = .44) and at 6 week follow up the mean was .27 (SD=.48). At baseline, for the treatment group, the number of times the couple used condoms had a mean of .18 (SD = .44) at 6 week follow up the mean was .3 (SD = .49) (Table 12).

Table 10

Summary Statistics for the Two Administrations of the CUSES Instrument

CUSES Scores	Sample Size	Minimum Score	Maximum Score	Mean Score	Standard Deviation
Control Pretest	28	52	99	89	9.4
Control 6 Wk Post-test	28	54	102	92	9.5
Treatment Pretest	29	53	98	90	9.49
Treatment 6 Wk Post-test	29	61	110	96	9.7

Table 11

CUSES Paired Sample t-tests for Control and Treatment Groups

CUSES Pairs	Mean	Standard Deviation	95% Confidence Interval		t	df	Sig. (2-tailed)
			Lower	Upper			
Control Pretest-6 wk F/U	1.17	4.35	-.46	2.79	1.5	27	.15
Treatment Pretest-6 wk F/U	3.5	5.64	1.4	5.60	3.4	28	.002

Table 12

Mean Scores of Number 29 and 30 Pre and Post Intervention

	Control Group		Treatment Group		F	p
	M	SD	M	SD		
#29 No. of Times Had Sex						
Pre Intervention	3.5	2.9	3.66	2.8	F (1, 56) =0.114 ^a	.59
Post Intervention	3.8	2.2	5	3.1		
#30 No. of Times Used Condoms						
Pre Intervention	.19	.44	.18	.44	F (1, 56) =0.845 ^a	.32
Post Intervention	.27	.48	.3	.49		

^a Between the groups

Summary of the Findings

The analysis of the CUSES in regard to Latino couples pre intervention indicated there was no significant mean difference between the control and treatment groups. However, in the 6 week post 1-hour intervention, the mean scores for condom use self efficacy had increased for the treatment group. Both group mean scores were increased 6 week post intervention. Nevertheless, there were significant differences found within the treatment group in respect to the use of condom self efficacy post intervention and condom use with the paired partner. The treatment group was more likely to report higher condom use self efficacy and increased condom use with the paired partner.

For the question of number of times the couple had sex in the last 30 days, pre and post intervention, there were no significant mean differences in the number of times the couple had sex in the past 30 days ($p=0.77$) in the control group and ($p=0.59$) in the treatment group.

For the question of number of times the couple used condoms, pre test, there were no significant mean differences in the past 30 days ($p=0.9$) in the control and treatment groups. Post intervention, a statistically significant mean difference was detected between the 2 groups ($p=0.05$). At 6 weeks post intervention, the 1-hour education intervention had a medium effect in the treatment group and this accounted for 10% of the variance of the condom use. There was no significant difference found within the control group. The Cronbach's coefficient alpha ranged from 0.75 to 0.94 indicating this instrument (CUSES) was highly reliable in this study sample.

In relation to the increase in numbers of times the couple used condoms 6 weeks post intervention, there was a statistically significant mean difference between the control and treatment groups. For the self-report of condom use activity 6 weeks after the educational intervention, there was a statistically significant mean difference found between the 2 groups. However, the majority of the participants, in both control (88%) and treatment (86%) groups, reported that they had not used condoms.

There was a significant difference of condom use self-efficacy and condom use found when comparing the pre and post intervention mean scores within the treatment group. The confidence level for numbers of times the couple used condoms, post intervention, there was a significant mean difference between the control and treatment groups, with the education intervention accounting for 22% of the variance of the condom use self efficacy and condom use. A summary of statistical finding of the hypotheses 6 weeks post intervention can be found in Table 13.

Table 13

Summary of Statistical Findings of the Hypothesis Post Intervention

Hypothesis	Statistical Test	Findings
#1 Increase in self reporting in condom use	F-test -Between groups -Within groups	F (1, 56) = .114, $p < 0.9$ Treatment: F(1, 28) = 0.09, $p = .05$ Control: F (1, 29) = .045, $p = 0.77$

CHAPTER V

SUMMARY OF THE STUDY

According to CDC (2008), over 25 diseases are spread through sex. The annual rate of infection for Latinos is three times the rate reported for whites (Espinoza et al., 2007a). Moreover, Latinas account for 55% of women, infected with HIV and other STDs through heterosexual contact (Espinoza, Dominguez, Romaguera, Hu, Valleroy, & Hall, 2007a; Espinoza, Hall, Hardnett, Selik, Ling, & Lee, 2007b). Disproportionately to their 14% representation in the total U.S. population, almost 19%, of individuals receiving an AIDS diagnosis in 2005 were Latino (Espinoza et al., 2007a). Cultural factors may play a part in the higher rates of STDs among Latinas. It may be hard to talk about sex and even harder to convince a partner to use a condom (National Information Women's Center). Therefore, the study of Latino couples in improving condom use self-efficacy remains paramount in reducing morbidity.

The aim of this study was to test a culturally appropriate and culturally sensitive education using a promotora model intervention on Latino couples. The following hypothesis was tested. Latino couples 18 years and older, who received a 1-hour condom use educational session with or without their significant other, who received an educational encounter provided at a Latino clinic by a Promotora (registered nurse) reported 1) a significant change in condom use self-efficacy; 2) an increased condom use with present partner; 3) dispelled old wives tales. Bandura's (1986, 1997) social cognitive theory of self-efficacy served as the main theoretical framework to guide

the study. Since cultural sensitivity was a factor due to the targeted population being Latinas women who were mostly born and raised in Spanish-speaking countries, components of Bandura's theory were incorporated into the design of the education intervention. The focus of chapter 5 was to: (a) summarize the study (b) discuss the findings (c) discuss the conclusions and implications (d) to made recommendations for future study.

Summary

This was a quasi-experimental two-group pretest-posttest study that evaluated the effects of an education intervention on condom use self efficacy with a group of Hispanic women living in Houston and its surrounding area. The sample was recruited via flyers posted at the target clinic frequented by the targeted population. To enhance the sample size, the baseline data collection was scheduled on the weekends with 10 sessions. Including 2 sessions per weekend day and one session during the weekdays the intervention was held. After obtaining informed consent, the women were randomly assigned to either the control or treatment group. The treatment group received a one-hour educational intervention that was conducted in English or Spanish language and in a closed classroom setting. The researcher provided hands-on practice and answered any questions that the participants had regarding condoms and condom usage. After accounting for attrition during the baseline and 6 weeks post intervention data collection, the final sample size consisted of 57 women: 28 in the control group and 29 in the treatment group. Data were compared among the women entered at the 10 separate sessions as well as compared between the control and treatment groups. There were

no significant differences in the 2 groups and the same CUSES scales were used for pre and post intervention except for the addition of the 2 added questions #29 Numbers of times the couple had sex in the last 30 days and #30 Number of times the couple used condoms. The 6 week follow up was conducted via CUSES reported in self-addressed envelopes. The overall attrition rate was 10%. Several telephone attempts at different times of the day were made to contact participants for their responses.

Baseline data for the dependent variables of the hypothesis were compared to determine if there were differences between the control and treatment groups. There were no significant differences between the control and treatment groups for all baseline measurements.

The study hypothesis was supported by the data. Significant differences between the treatment and control groups at 6 weeks post intervention were found in the CUSES instrument and question number 30. The women in the treatment group reported higher scores in condom use self efficacy and the use of condoms in the past 30 days. There were no significant differences within the control group at 6 weeks post intervention.

Discussion of the Findings

Differences in Condom Use Regarding Condom Knowledge and Condom Use

The significant differences, post intervention, found within the 4 subscales of the CUSES, had demonstrated that the educational intervention study had made an impact on both control and treatment groups. Post intervention the control group when compared the mean differences within their own group, the results indicated that the

participants in this group had perceived there were barriers to condom use self efficacy and an almost non existent use of condoms in their spousal relationships and had reported a significant difference in the mean scores of the condom use between pre and post intervention.

Condom Use Self-Efficacy Scale (CUSES)

The basis of the current study was made using the CUSES because it was developed for the purpose of designing intervention to enhance self-efficacy in using condoms (Barkley & Burns, 2000). The design of the CUSES according to Fishbein (2001), is a "good" behavioral theory grounded in formative research designed to illuminate the behavior being assessed from the perspective of the target population or culture. Fishbein (2000) emphasizes, if the intention exists but individuals are not carrying out the target behavior, an effective intervention focuses on building relevant skills breaking down obstacles to acting on the intention. The significant differences, post intervention, found within the 4 subscales of the CUSES, had demonstrated that the educational intervention study had made an impact on both control and treatment groups.

Condom Use Knowledge by Hispanic Women

Pre and post intervention scores indicated that the women in the both the control group and the treatment group had some knowledge in the use of condoms. When compared the mean differences within their own group, the results indicated that the participants in both groups had used condoms in the past but did not use them in their present committed relationships. This was found in all demographics.

For the treatment group, 6 weeks post intervention, the groups mean scores in condom use self efficacy and number of times the couple used condoms increased. Interestingly, the number of times the couple had sex in the last 30 days stayed the same. This could be because of the effects of the intervention and also number of times the couple had sex in the last 30 days had been under or over reported. The participants in the treatment group had increased their condom use when compared to the control group, could have been because they 1) were trying something new and or 2) had increased their knowledge of condom use after the educational intervention. These findings are congruent with El-Bassell's findings (El-Bassell et al., 2001, 2003). El-Bassell and colleagues studied the effects of condom use in Hispanic couples to reduce STD infection. Although, no significant differences emerged between women who received the intervention with a partner and women who received the intervention by themselves, the researchers pointed out that since the study involved only couples, the partners of women who received the intervention alone had already demonstrated that they were amenable to engaging in safer sex practices.

The findings in this study using Latino couples related to the effectiveness of couples and condom use were also supported by findings in the Harvey (2004) study. In this study, Harvey studied 146 couples to examine the effectiveness of a couple-based intervention and use of condoms. Reports of an increase in use of condoms significantly increased between baseline and follow-up for participants (Harvey, 2004). The Latino participants in this current study reported a change in use of condoms. This finding was also supported by Becker and Robinson's review of health interventions, indicating that

programs targeted at couples were more effective than those targeted at only one partner (Becker and Robinson, 1998). This finding could be a result of being exposed to the education intervention and learning that STDs are serious, especially if HIV/AIDS is detected. The increase mean scores in both the control and treatment groups reflect an increase in knowledge and statistically significant. It is interesting to note, there were increased scores in the control group even though the whole couple was not exposed to the educational intervention. Therefore, just participating in the study, could raise the couple's awareness about the use of condoms to reduce illness.

Condom Use Self-Report After 6 Weeks Educational Intervention

For the pre intervention baseline, the 39% correct answers from the control and 41% correct answers from the intervention group indicated a low level knowledge of condoms. These findings are congruent with previous studies (Peipert et al., 2007). The main recommendation of this study was that programs to reduce STD risk should be tailored according to gender and culture and found self-efficacy to be a predictor of condom use, particularly in young women. The post intervention results indicated there was an increase in condom use between the groups with mean score results [$F(1, 56) = .845, p = 0.32$]. However, there was only one question used to measure self reported condom use in the survey. The overall finding indicates that the educational intervention had successfully increased the condom use in this population.

The indifferent mean change of the 6 week intervention is most likely due to the short time interval, not allowing the participants to act on the gained knowledge and its recommendations. The six week follow up was too short to show any differences

between the treatment and control groups. Thus perhaps given more time, the responses may have been of a better quality.

Conclusions and Implications

Several conclusions from the findings can be made regarding the study. Latina's are at a higher risk for developing STD's even if they are in committed relationships.

Findings from this study support the following conclusions:

1. This educational intervention was effective in raising the awareness of condom use to prevent the spread of infection.
2. Confidence and self-efficacy levels increase as the levels of condom use knowledge increase.
3. Overall condom use increases after a 1-hour educational intervention.
4. CUSES components apply to Latino couples in committed relationships.

Implications

The following implications were derived from this study. Since STDs are common in Latinas, they are at a higher risk for developing HIV infections. More educational effort is needed to emphasize this important aspect so early screening and detections of STDs can be utilized. Culturally sensitive classes were effective in teaching women in this population. This educational intervention can serve as a model for other teaching programs.

Also, professional healthcare providers who utilize culturally sensitive approaches to their Latino clients can decrease STD morbidity rates in the community they provide care. This study may be useful in helping both healthcare providers and

community groups who help raise health awareness in understanding Latino participants in future studies.

1. Continued education in the Latino culture is needed to provide education and assessment of STD knowledge, to assure that the women are using condoms correctly
2. New technology can be shared with Latinas.
3. Culturally sensitive classes can be effective in teaching Latinas.
4. This education intervention can serve as a model for other teaching programs.
5. Similar education programs can be implemented through out the Houston area to reach out to other Latinas.
6. Others can also be trained, so in turn, they can help to teach Hispanic women living close by in their areas such as county clinics and multicultural centers.
7. This research is one of the first experimental studies with an intervention using Latino couples and CUSES.

Recommendations for Further Study

El-Bassell and colleagues (2005) examined the effects of women who attended a 3 session, interactive, couple-based HIV prevention program for Latinas and their male partners. To date this was one of the first clinical trials to examine outcomes of a couple-focused STD prevention program for Latinos. Research studies examining Latino couples and condom use have been limited. Therefore, future studies will add to the existing knowledge of reducing STD morbidity through increasing Latino's condom use self efficacy and their understanding of the use of condoms in a committed relationship.

1. Replicate this study with a broader sampling method so a larger and well-represented population can participate.
2. Re-evaluate the CUSES application in this population with a broader and larger sample.
3. Allow longer duration time for the 2nd data collection to reach more participants so higher quality response can be achieved.
4. Allow at least 1 year time frame for follow-up so participants can have adequate time to respond to condom use self efficacy recommendations.
5. Use broader media such as television or newspaper to recruit participants instead of just flyers to reach more potential participants.
6. Emphasize the important aspects in the questionnaire; eliminate unnecessary questions so the participant will not be overwhelmed or become fatigued.
7. Utilize a more effective incentive to decrease attrition.
8. Study the influence and the practice of alternative health care practitioners on this population.

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APPENDIX A

Condom Use Self-Efficacy Scale in English

Condom Use Self-Efficacy Scale

Do not put your name on your paper. Read each scale item on the left. Put a check mark under the box that best describes your answer to the question. When you are finished answering 30 questions then give your paper to Ms. Levenson. You will have 10 minutes to answer the questions. You will be asked to take this same test twice. The second time will be in 6 weeks.

	Scale Items	0 Strongly Agree	1 Agree	2 Undecided	3 Disagree	4 Strongly Disagree
1.	I feel confident in my ability to put a condom on myself or my partner.					
2.	I feel confident I could purchase condoms without feeling embarrassed.					
3.	I feel confident I could remember to carry a condom with me should I need one.					
4.	I feel confident in my ability to discuss condom usage with any partner I might have.					
5.	I feel confident in my ability to suggest using condoms with a new partner.					
6.	I feel confident I could suggest using a condom without my partner feeling "diseased".					
7.	I feel confident in my own or my partner's ability to maintain an erection while using a condom.					
8.	I would not feel embarrassed to put a condom on myself or my partner.					
9.	If I were to suggest using a condom to a partner, I would not feel afraid that he or she would reject me.					
10.	If I were unsure of my partner's feelings about using condoms, I would suggest using one.					
11.	I feel confident in my ability to use a condom correctly.					
12.	I would feel comfortable discussing condom use with a potential sexual partner before we ever had any sexual contact (e.g. hugging, kissing, caressing, etc.)					
13.	I feel confident in my ability to persuade a partner to accept using a condom when we have intercourse.					
14.	I feel confident I could gracefully remove and dispose of a condom when we have intercourse.					
15.	If my partner and I were to try to use a condom and did not succeed, I would not feel embarrassed to try to use one again (e.g. not being able to unroll condom, putting it on backwards, or awkwardness).					

	Scale Items	0 Strongly Agree	1 Agree	2 Undecided	3 Disagree	4 Strongly Disagree
16.	I would feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I've had a homosexual experience.					
17.	I would feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I have a sexually transmitted disease.					
18.	I would feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I thought they had a sexually transmitted disease.					
19.	I would feel comfortable discussing condom use with a potential partner before we ever engaged in intercourse.					
20.	I feel confident in my ability to incorporate putting a condom on myself or my partner into foreplay.					
21.	I feel confident that I could use a condom with a partner without "breaking the mood."					
22.	I feel confident in my ability to put a condom on myself or my partner quickly.					
23.	I feel confident I could use a condom during intercourse without reducing any sexual sensations.					
24.	I feel confident that I would remember to use a condom even after I have been drinking.					
25.	I feel confident that I would remember to use a condom even if I were high.					
26.	If my partner didn't want to use a condom during intercourse, I could easily convince him or her that it was necessary to do so.					
27.	I feel confident that I could use a condom successfully.					
28.	I feel confident I could stop to put a condom on myself or my partner even in the heat of passion.					

29. Number of times the couple had sex in the last 30 days _____

30. Number of times the couple used condoms _____

APPENDIX B

Condom Use Self-Efficacy in Spanish

Condom Use Self-Efficacy Scale

No ponga su nombre en su papel. Lea cada punto en la escala de la izquierda. Ponga una marca de verificación en la casilla que mejor describa su respuesta a la pregunta. Cuando haya terminado de responder a 30 preguntas, dar a su papel a la Sra. Levenson. Usted tendrá 10 minutos para contestar preguntas. Usted tendrá la misma prueba dos veces. La segunda vez será en 6 semanas.

	Artículos	0 Convenga fuertemente	1 Convenga	2 Indeciso	3 Discrepe	4 Discrepe fuertemente
1.	Me siento en la capacidad de ponerme un condón a mi o mi pareja.					
2.	Tengo la capacidad de comprar condóns sin sentir vergüenza.					
3.	Siento que confidente podría recordar llevar un condón conmigo si yo necesita uno.					
4.	Me siento confiado en mi capacidad de discutir uso del condón con cualquier pareja que puede ser que tenga.					
5.	Me siento confiado en mi capacidad de sugerir el uso de los condón con una nuevo pareja.					
6.	Me siento capaz de sugerir el uso de condón a mi pareja sin que mi pareja se sienta, incomoda.					
7.	Me siento confiado en mi propio o mi pareja capacidad de mantener una erección mientras que usa un condón.					
8.	No sentiría pena ponerme un condón en mi o en mi pareja.					
9.	Si sugiriera el uso del condón con mi pareja, no sentiría miedo que él o ella me rechazaría.					
10.	Si me sintiera inseguro que mi pareja.					
11.	Me siento confiado en mi capacidad de utilizar un condón correctamente.					
12.	Sentiría cómodo discutiendo uso del condón con un socio sexual potencial antes de que tuviéramos nunca cualquier contacto sexual (e.g. abrazo, el besarse, caricia, los etc.)					
13.	Me siento confiado en mi capacidad de persuadir a una pareja de aceptar usando un condón cuando tenemos cópula.					
14.	Siento que confidente podría quitar y disponer agraciado de un condón cuando tenemos cópula.					

	Artículos	0 Convenga fuertemente	1 Convenga	2 Indeciso	3 Discrepe	4 Discrepe fuertemente
15.	Si mi pareja y yo intentamos utilizar un condón y no tuviéramos éxito, no sentiría pena para intentar utilizar uno otra vez (e.g. no pudiendo desenrollar el condón, poniendo lo al revés, o dificultad).					
16.	Sentiría los condones que usan que sugieren confidentes con un nuevo pareja porque tendría miedo que él o ella penso que tenido una experiencia homosexual.					
17.	Sentiría los condones que usan que sugieren confidentes con un nuevo parejo porque tendría miedo él o ella pensaro que tengo una enfermedad transmitiar sexual.					
18.	Si utilezo los condones. Pensario mi pareja que lēngo una enfermedad de transmision sexual.					
19.	Me senteria comodo discutiendo el uso del condón con mi pareja antes de inicias la relacion sexual.					
20.	Siento confianzo enicorporar e condón en mi o en mi pareja en el tiempo de calentamiento.					
21.	Me siento confiado que puedo usar un condón con me pareja sin perturbar su estado emocional.					
22.	Me siento confiado de poner un condón en me o mi pareja rápidamente.					
23.	Siento que podría utilizar un condón durante cópula sin la reducción de ningunas sensaciones sexuales.					
24.	Estoy segura de que yo recuerde usar un condón, incluso después de haber estado bebiendo.					
25.	Me siento confiado que recordaría utilizar un condón incluso si era alto.					
26.	Si mi pareja no quiere utilizar un condón durante cópula, yo podría convencerlo fácilmente que es necesario hacer lo.					
27.	Me siento confiado que podría utilizar un condón con éxito.					
28.	Siento que confidente podría parar para poner un condón en me o mi socio incluso en el calor de la pasión.					

29. El número de veces que las parejas tuvieron sexo en días pasados _____

30. El número de veces que las parejas utilizaron condón. _____

APPENDIX C

Demographic Information in English and Spanish

Demographic Information

1. How old are you? _____ years

2. Are you:

_____ Married (legally)

_____ Single (not legally married)

3. Income:

_____ 0 - \$ 20,000

_____ \$20,001 - \$40,000

_____ \$40,001 - \$50,000

_____ \$ > \$75,000

4. Language Spoken at Home:

_____ Spanish

_____ English

_____ Other

5. Religion:

_____ Catholic

_____ Baptist

_____ Other

Información Demográfica

1. ¿Cuántos años tienes? _____ años

2. ¿Es usted:

_____ Casada (Legalmente)

_____ Soltera (No casados legalmente)

3. Ingresos:

_____ 0 - \$ 20.000

_____ \$ 20.001 - \$ 40.000

_____ \$ 40.001 - \$ 50.000

_____ \$ > \$ 75.000

4. Idioma hablado en casa:

_____ Español

_____ Inglés

_____ Otro

5. Religión:

_____ Católico

_____ Bautista

_____ Otro

APPENDIX D

Informed Consent Forms in English and Spanish



Pioneering Nursing's Future:
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Nehls C. Stark College of Nursing
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TEXAS WOMAN'S UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH

Title: The Effect of a Promotora Guided Educational Intervention and Partner Presence in Improving Condom Use Self-Efficacy Amongst Partnered Latino Adults

Investigator: Shirley Levenson, RN, MSN.....

Advisor: Sandra Cesario, RNC, PhD.....

Explanation and Purpose of the Research

You are being asked to take part in a research study at Texas Woman's University (TWU) to determine if teaching Hispanic couples (heterosexual) by a Promotora (community caregiver) about the use of condoms to reduce sexually transmitted diseases (STDs) together instead of individually increases the use of condoms, therefore reducing STDs. The Promotora is a Hispanic registered nurse who knows about the threats to the health of your community and is interested in teaching you how to keep you from getting STDs and staying healthy.

Research Procedures

To take part in this study, you must be age 18 years or older, be in a long-term committed heterosexual partner identified as a boyfriend, spouse, or lover. You must have had at least one episode of unprotected vaginal or anal relations with this partner in the past 30 days and not reported any life-threatening abuse by this partner within the past 6 months. For this study, long-term relationship is defined as being involved with this partner for the past 6 months and intention to stay together for at least 1 year.

You will be one of 60 female participants in this six-week study, which will have two groups. These will be an Intervention Group and a Control Group. Participants will be asked to arrive as a couple. You will be assigned (by a drawing either a BLANK card or COUPLE card) to one of these groups. If you are assigned to the Intervention Group (couple), you and your partner will attend the hour long class together as described above. If you are assigned to the Control Group (individual) you will attend the hour long class alone. If the couple draws the BLANK card, then the male will be given the choice to leave the study area or he may choose to attend a 1-hour alternative education program provided by clinic staff on Hypertension. Your maximum time commitment is 2 hours not counting travel time.



participant's initials
Page 1 of 3

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Title: The Effect of a Promotora Guided Educational Intervention and Partner Presence in Improving Condom Use Self-Efficacy Amongst Partnered Latino Adults

On the day of the class you will be assigned a code and given 10 minutes to take a paper and pencil test that asks 30 questions about your condom use self-efficacy and condom use before class begins. Then Ms. Levenson will teach the hour long class in a clinic setting. You will be taught about STDs and how these infections are passed from human contact. You will also learn how to use a condom properly and how using condoms can help women from getting STDs. After the class you will be given a blank copy of the same test you took at the beginning of the class along with a coded, stamped pre-addressed envelope to take home. You will be asked to take the test again in six weeks and mail back to the researcher.

Not counting the travel time to the clinic, the amount of your time needed for this study is no more than two hours (reading, signing consent, test taking and one hour participation in class).

Potential Risks

Being in this study may cause you to become tired, bored, or embarrassed. To help avoid this, you are free to take breaks at any time. If you feel shy or embarrassed, you may leave the class. If you want to discuss a physical or emotional discomfort with a professional, the investigator will provide you with a referral list of names and phone numbers that you may call.

There is the possibility of the release of confidential information. However, every effort will be made to maintain the confidentiality of the study records by assigning numbers rather than names, to the collected data. The classes take place in a clinic setting. The data will be stored in a locked filing cabinet and only Shirley Levenson, RN, MSN, will have access to the filing cabinet. Data will be maintained until October 1, 2013.

After this time, they will be destroyed by shredding. The data from the study will be published in the investigator's dissertation as well as in other research publications. However, you will not be identified by name, initials, or any other means. Confidentiality will be protected to the extent that is allowed by law.

The researchers will try to prevent any problem that could happen because of this research. You should let the researchers know at once if there is a problem and they will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.



participant's initials
Page 2 of 3

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Title: The Effect of a Promotora Guided Educational Intervention and Partner Presence in
Improving Condom Self-Efficacy Amongst Partnered Latino Adults

Participation and Benefits

Your involvement in this research study is completely voluntary, and you may discontinue your participation in the study at any time without penalty. The only direct benefit of this study to you is that at the completion of the study a summary of the results will be mailed to you upon request.*

Questions Regarding the Study

You will be given a copy of this signed and dated consent form to keep. If you have any questions about the research study you should ask the researchers; their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research at 713

Signature of Participant

Date

Signature of Participant

Date

The above consent form was read, discussed, and signed in my presence. In my opinion, the person signing said consent form did so freely and with full knowledge of its contents.

Signature of Investigator

Date

*If you would like to receive a summary of the results of this study, please provide an address to which this summary should be sent.

Page 3 of 3



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TEXAS WOMAN'S UNIVERSITY CONSENTIMIENTO A PARTICIPAR EN LA INVESTIGACION

Título: El Efecto de una Promotora-Guiado Intervención Educativa y Socio Presencia de
Condomes en la Mejora de la Libre Asociado Eficacia Entre los Adultos Latinos

Investigador: Shirley Levenson, RN, MSN.....(s [redacted] t.net) [redacted]

Consejero: Sandra Cesario, RNC, PhD.....[redacted]

La explicación y el Propósito de la Investigación

Se le ha pedido tomar parte en un estudio de investigación en la Texas Woman's University (TWU) para determinar si la enseñanza hispana parejas (heterosexuales) por una Promotora (comunidad cuidador) sobre el uso de preservativos para reducir las enfermedades de transmisión sexual (ETS), así como lugar de individualmente aumenta el uso de preservativos, por lo tanto la reducción de las enfermedades de transmisión sexual. La Promotora es una enfermera registrada hispano que sabe acerca de las amenazas a la salud de su comunidad y está interesado en la enseñanza de cómo le impiden obtener las enfermedades de transmisión sexual y mantenerse saludable.

Investigue los Procedimientos

Para participar en este estudio, usted debe ser la edad de 18 años o más, estar en un cometido a largo plazo identificados como heterosexuales socio un novio, esposo o amante. Usted debe haber tenido al menos un episodio de relaciones vaginales o anales, relaciones con esta pareja en los últimos 30 días, y no informó de ningún riesgo para la vida por abuso de esta pareja en los últimos 6 meses. Para este estudio, la relación a largo plazo se define como estar involucrado con este socio de los últimos 6 meses y la intención de permanecer juntos por lo menos 1 año.

Usted será uno de 60 mujeres participantes en este estudio de seis semanas de duración, que tendrá dos grupos. Estos serán un grupo de intervención y un grupo control. Los participantes tendrán que llegar como un joven. Se le asignará (por un dibujo o una tarjeta o PAREJA EN BLANCO tarjeta) a uno de estos grupos. Si se asignan al Grupo de Intervención (pareja), usted y su pareja asistirá a la hora de clase juntos, como se ha descrito anteriormente. Si se asignan al Grupo de Control (individual) que asistirá a la hora de clase por sí sola. Si el joven señala a la tarjeta en blanco, luego la de los hombres se les dará la opción de abandonar el área de estudio o bien puede optar por asistir a una 1 hora programa de educación alternativa proporcionada por el personal de la clínica sobre la hipertensión arterial. Su compromiso de tiempo máximo es de 2 horas sin contar el tiempo de viaje.



Inicio del participante
Página 1 de 3

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**Título: El Efecto de una Promotora-Guiado Intervención Educativa y Socio Presencia de
Condomes en la Mejora de la Libre Asociado Eficacia Entre los Adultos Latinos.**

En el día de la clase se le asignará un código y de 10 minutos para tomar un lápiz y papel de prueba que solicita 30 preguntas sobre el uso de su auto-eficacia y el uso de condones antes de la clase comienza. A continuación, la Sra. Levenson va a enseñar a la hora de clase en una clínica. Se le enseñó acerca de las enfermedades de transmisión sexual y cómo estas infecciones se transmiten de contacto humano. Usted también aprenderá a utilizar correctamente un preservativo y cómo el uso de condones puede ayudar a las mujeres de recibir enfermedades de transmisión sexual. Después de la clase se le dará una copia en blanco de la misma prueba que tomó al comienzo de la clase junto con un sistema de codificación, sellado antes de la dotación dirigida a llevar a casa. Se le pedirá que tomar el examen otra vez en seis semanas y el correo de vuelta con el investigador.

Sin contar el tiempo de viaje a la clínica, la cantidad de su tiempo necesario para este estudio no es más de dos horas (la lectura, la firma de consentimiento, la prueba de una hora y teniendo participación en clase).

Potencial se Arriesga

Estar en este estudio pueden hacer que usted se convierta cansado, aburrido, o avergonzado. Para evitar esto, eres libre de hacer pausas en cualquier momento. Si usted se siente avergonzado o tímido, puede dejar la clase. Si desea examinar un malestar físico o emocional con un profesional, el investigador le proporcionará una lista de referencia de los nombres y números de teléfono que puede llamar.

Existe la posibilidad de la liberación de la información confidencial. Sin embargo, se hará todo lo posible para mantener la confidencialidad de los registros de estudio mediante la asignación de números en lugar de nombres, a los datos recogidos. Las clases tienen lugar en una clínica. Los datos serán almacenados en un armario bajo llave y sólo Shirley Levenson, RN, MSN, tendrá acceso a la presentación del gabinete. Datos se mantendrá hasta 1 de Octubre de 2013.

Después de este tiempo, serán destruidas por trituración. Los datos del estudio serán publicados en la tesis del investigador, así como en otras publicaciones de investigación. Sin embargo, usted no será identificado por su nombre, iniciales, o cualquier otro medio. Confidencialidad será protegida en la medida en que es permitido por la ley.

Inicials del participante:
Página 2 de 3



Think SUCCESS ★ Think TWU



Nelda C. Stark College of Nursing
Houston Campus
4700 Fawcett Road
Houston, TX 77050-4245
713-794-2100 Fax 713-794-2105

Pioneering Nursing's Future:
An Adventure in Excellence

Título: El Efecto de una Promotora-Guía Intervención Educativa y Socio Presencia de Condones en la Mejora de la Libre Asociado Eficacia Entre los Adultos Latinos.

Los investigadores tratan de evitar cualquier problema que podría ocurrir a causa de esta investigación. Usted debe dejar a los investigadores a la vez saber si hay un problema y que le ayudará. Sin embargo, TWU no proporciona servicios médicos o de asistencia financiera para las lesiones que podrían ocurrir debido a que están participando en esta investigación.

Participación y Beneficios

Su participación en este estudio de investigación es totalmente voluntaria, y usted podrá desistir de su participación en el estudio en cualquier momento sin penalización. El único beneficio directo de este estudio es que a usted en la realización del estudio de un resumen de los resultados serán enviados a usted a petición."

Las Preguntas con Respecto al Estudio

Se le dará una copia firmada de este formulario de consentimiento y de conservar. Si usted tiene alguna pregunta sobre el estudio de investigación debe preguntar a los investigadores, sus números de teléfono están en la parte superior de este formulario. Si usted tiene preguntas acerca de sus derechos como participante en esta investigación o la forma en que este estudio se ha llevado a cabo, en contacto con la Texas Woman's University Oficina de Investigación al

La firma de Participante

Fecha

La firma de Participante

Fecha

Lo escrito anterior fue leído, discutido y firmado en mi presencia. En mi opinión, la persona que firma dijo que la libre consentimiento y lo hizo con pleno conocimiento de su contenido.

La firma de Investigador

Fecha

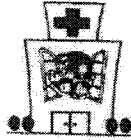
"Si usted quiere recibir un resumen de los resultados de este estudio, por favor le proporciona una dirección a donde este resumen debe ser enviado.

Página 3 de 3



Think SUCCESS ★ Think TWU

APPENDIX E
Agency Permission



Clinica de la Familia

atendemos el cuidado de su familia

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

Clinica de la Familia, Inc. _____

GRANTS TO: Shirley Levenson _____

a student enrolled in a program of nursing leading to a Master's/Doctoral degree at Texas Woman's University, the privilege of its facilities in order to study the following problem.

The Effect of a Promotora-Guided Educational Intervention and Partner Presence in Improving Condom Use Self-Efficacy Amongst Partnered Latino Adults

The conditions mutually agreed upon are as follows:

1. The agency (may/may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may/may not) be identified in the final report.
3. The agency (wants/does not want) a conference with the student when the report is completed.
4. The agency is willing/unwilling to allow the completed report to be circulated through interlibrary loan.
5. Other _____

*Fill out and sign three copies to be distributed as follows: Original—student; copy—agency; copy—TWC college of Nursing.

5962 Renwick Drive • Houston, Texas 77081 Tel (713) 777-9887 • Fax (713) 777-9926

APPENDIX F
IRB Approval Letter



Office of Research
6700 Fannin Street
Houston, TX 77030-2343
713-794-2480 Fax 713-794-2488

October 6, 2009

Ms. Shirley Levenson
College of Nursing - S. Cesarie Faculty Adv
6700 Fannin Street
Houston, TX 77030

Dear Ms. Levenson:

Re: *"The effect of a promotoria-guided educational intervention and partner presence in improving condom use self-efficacy amongst partnered Latino adults"*

Your application to the IRB has been reviewed and approved.

This approval lasts for one (1) year. The study may not continue after the approval period without additional IRB review and approval for continuation. It is your responsibility to assure that this study is not conducted beyond the expiration date.

Any changes in the study or informed consent procedure must receive review and approval prior to implementation unless the change is necessary for the safety of subjects. In addition, you must inform the IRB of adverse events encountered during the study or of any new and significant information that may impact a research participant's safety or willingness to continue in your study.

Remember to provide copies of the signed informed consent to the Office of Research, IHS 10110 when the study has been completed. Include a letter providing the name(s) of the researcher(s), the faculty advisor, and the title of the study. Graduation may be blocked unless consents are returned.

Sincerely,


Dr. John Radcliffe, Chair

Institutional Review Board - Houston

Curriculum Vitae

Shirley Ann Levenson

Home: [REDACTED], Sugar Land, Texas [REDACTED]
[REDACTED]

OBJECTIVE:

Family Nurse Practitioner Certified (American Nurses Credentialing Center)
ICU Critical Care Certification (Society of Critical Care Foundation)

ACADEMIC PREPARATION:

Ph.D. in Nursing (candidate), College of Nursing, Texas Woman's University,
Houston, 2009

2007 National Scholars Honor Society

Recipient of National Scholars Award of Achievement

Concentrations: Healthcare Disparities of Special Populations

Dissertation: The Effect of a Promotora-Guided Educational Intervention and
Partner Presence in Improving Condom Self-Efficacy Amongst Partnered Latino
Adults

Chair: Dr. Sandra K. Cesario

M.S. in Nursing, Houston Baptist University, Houston, Texas 2002

Concentrations: Family Nurse Practitioner

Advisor: Dr. Brenda Binder

B.S. in Nursing, University of Mary Hardin Baylor, Belton, Texas 1984

Registered Nurse

1984 Recipient of the Laura Cole Award, Nu Sigma Lambda President and Texas
Nursing Student Association President.

Vocational Nursing, Blinn College, Brenham, Texas 1978

Licensed Vocational Nurse

RESEARCH SKILLS:

- Expert utilization of SPSS statistical software
- Research Collaborator UT, VAMC PVAMU & TWU

September 2006-Present

Texas Woman's University Primary Investigator-Dissertation

The Effect of a Promotora-Guided Educational Intervention and Partner Presence in Improving Condom Self-Efficacy Amongst Partnered Latino Adults. Dr. Sandra K. Cesario, Dissertation Chair

- 1.
2. November 2006-Present
3. *Prairie View A&M University-Research Collaborator*
 - "Increasing Diversity in the Public Health Workforce" Proposal
 - Dr. Betty Adams, Primary Investigator
- 4.

September 2005-Present

Texas Woman's University-Research Collaborator

■ "Effects of Barometric Pressure on Incidence of Births in Tulsa Oklahoma 1985-1990"

■ Dr. Sandra Cesario, Primary Investigator

- 5.
6. January-August 2005
7. *University of Texas Health Science Center-Research Collaborator*
 - "Menopause Health Information, Choices and Behaviors"
 - Dr. Joan Englebretson, Primary Investigator
- 8.
9. September 2004
10. *Michael DeBakey VAMC Research Collaborator*
11. "Peripheral Artery Disease Study"
 - Dr. Pamela Willson, Primary Investigator

LANGUAGES:

- Fluent in English and Spanish

PROFESSIONAL EXPERIENCE:

University of Massachusetts Boston, 2006-present
FNP-Clinical Preceptor

Texas A&M University, Corpus Christi, 2006-present
FNP-Clinical Preceptor

Prairie View A&M University, 2006-2009
Graduate Faculty, College of Nursing, Houston, Texas
Didactic Classroom Faculty in the Family Nurse Practitioner Program:
Transcultural Nursing, Advanced Health Assessment, Role, Theory &
Ethics, Health Policy, Special Procedures.
FNP-Clinical Preceptor-2003-present

University of Rotterdam, The Netherlands, 2005-present
International FNP-Clinical Preceptor

Texas Woman's University, 2003-present
FNP-Clinical Preceptor

Family Nurse Practitioner, 2003-present
Chief Nursing Executive-Clinica de la Familia, Houston, Texas
Providing primary health care to large spanish speaking population in Southwest Houston neighborhoods.
Supervising Physicians: H.B. Spangler M.D
William Clarke M.D.

Family Nurse Practitioner, 2002-present
Ibn Sina Foundation
Community Medical Center, Houston, Texas
Providing primary health care to a Middle Eastern population in Southwest Houston.
Supervising Physician: D. Ajani M.D.

Family Nurse Practitioner, 2002-2003

Houston Medical and Dental Center, Houston, Texas

Providing primary health care to a large Pediatric and Family Practice Hispanic community in Northwest Houston.

Supervising Physician: F. Lombana M.D.

Instructor, Spring 2003-present

Faculty in Spanish Speaking Nurse Aide Course, Houston Community College, Houston, Texas.

CURRENT RESEARCH INTERESTS:

STD risk reducing behaviors in Hispanic/Latino women to reduce STD morbidity & unwanted pregnancy and Quantitative measurement of Healthcare disparities in the US.

POSTER/PAPER PRESENTATIONS:

April 2007-Panel Member CANDO (Consortium to Advance Nursing Diversity and Opportunity) Prairie View A&M University College of Nursing, Texas Woman's University College of Nursing, University of Texas Houston School of Nursing
18th International Nursing Research Congress, Sigma Theta Tau Vienna, Austria July 13, 2007

Sigma Theta Tau Baltimore, Maryland November 2007

PROFESSIONAL MEMBERSHIPS:

American Academy of Nurse Practitioners

Texas Nurse Practitioners

National Hispanic Nurses Association

Sigma Theta Tau International

Southern Nursing Research Society

Houston Area Nurse Practitioners

Society of Critical Care Foundations

Curriculum Vitae

Shirley Ann Levenson

Home: [REDACTED], Sugar Land, Texas [REDACTED]

Home: ([REDACTED]) Cell: [REDACTED]
[REDACTED]

OBJECTIVE:

Family Nurse Practitioner Certified (American Nurses Credentialing Center)
Critical Care Certification (Foundations of Critical Care Society) Nashville, Tennessee 2009

ACADEMIC PREPARATION:

Ph.D. in Nursing Science, College of Nursing, Texas Woman's University, Houston, 2010

2007 National Scholars Honor Society

Recipient of National Scholars Award of Achievement

National ICU Critical Care Certification (FCS) 2009

Concentrations: Healthcare Disparities of Special Populations

Dissertation: The Effect of a Promotora-Guided Educational Intervention and Partner

Presence in Improving Condom Self-Efficacy Amongst Partnered Latino Adults

Chair: Dr. Sandra K. Cesario

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Prairie View A&M University-Research Collaborator

- "Increasing Diversity in the Public Health Workforce" Proposal
- Dr. Betty Adams, Primary Investigator

September 2005-Present

Texas Woman's University-Research Collaborator

- "Effects of Barometric Pressure on Incidence of Births in Tulsa Oklahoma 1985-1990"
- Dr. Sandra Cesario, Primary Investigator

January-August 2005

University of Texas Health Science Center-Research Collaborator

- "Menopause Health Information, Choices and Behaviors"
- Dr. Joan Englebretson, Primary Investigator

September 2004

Michael DeBakey VAMC Research Collaborator

"Peripheral Artery Disease Study"

- Dr. Pamela Willson, Primary Investigator

LANGUAGES:

- Fluent in English and Spanish

PROFESSIONAL EXPERIENCE:

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FNP-Clinical Preceptor

Texas A&M University, Corpus Christi, 2006-present
FNP-Clinical Preceptor

Prairie View A&M University, 2006-present
Graduate Faculty, College of Nursing, Houston, Texas
Didactic Classroom Faculty in the Family Nurse Practitioner Program:
Transcultural Nursing, Advanced Health Assessment, Role, Theory & Ethics,
Health Policy, Special Procedures.
FNP-Clinical Preceptor-2003-present

University of Rotterdam, The Netherlands, 2005-present
International FNP-Clinical Preceptor

Texas Woman's University, 2003-present
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Family Nurse Practitioner, 2003-present
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National Hispanic Nurses Association
Sigma Theta Tau International
Southern Nursing Research Society
Houston Area Nurse Practitioners
Foundation of Critical Care Society

REFERENCES:

Available upon request