

# Hispanic Mothers' Normative Beliefs and Intentions about the Discussion of Sex-Related Topics with Their Adolescent Daughters

Dana M. Rodriguez  
Marquette University

---

## Recommended Citation

Rodriguez, Dana M., "Hispanic Mothers' Normative Beliefs and Intentions about the Discussion of Sex-Related Topics with Their Adolescent Daughters" (2014). *Dissertations (2009 -)*. Paper 419.  
[http://epublications.marquette.edu/dissertations\\_mu/419](http://epublications.marquette.edu/dissertations_mu/419)

HISPANIC MOTHERS' NORMATIVE BELIEFS AND INTENTIONS ABOUT THE DISCUSSION  
OF SEX-RELATED TOPICS WITH THEIR ADOLESCENT DAUGHTERS

By

Dana Rodriguez, MSN, RN, CPNP-BC

A Dissertation Submitted to the Faculty of the Graduate School,  
Marquette University,  
in Partial Fulfillment of the Requirements for  
the Degree of Doctor of Philosophy

Milwaukee, Wisconsin

December 2014

## ABSTRACT

### HISPANIC MOTHERS' NORMATIVE BELIEFS AND INTENTIONS ABOUT THE DISCUSSION OF SEX-RELATED TOPICS WITH THEIR ADOLESCENT DAUGHTERS

Dana M. Rodriguez, MSN, APNP-BC

Marquette University, 2014

Hispanic adolescent females continue to have rates of pregnancy and STIs, which exceed those of white non-Hispanic peers. When mothers engage in the discussion of sex-related topics (DSRTs) with their adolescent daughters, it has been shown to delay or decrease sexual intercourse. However, it has been found that Hispanic parents talk less with their daughters about sex-related topics (SRTs) when compared to other ethnic groups. Understanding why Hispanic mothers may or may not intend to engage in DSRTs is important in order to design culturally appropriate programs aimed at increasing their DSRTs.

A sequential mixed-methods predictive correlational design framed by The Theory of Planned Behavior and the Parent-Based Expansion of the Theory of Planned Behavior was used to determine the influence of normative beliefs and other factors on mothers' intentions to engage in the DSRTs. In addition tests of validity and reliability were conducted on a newly constructed instrument, the Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (RNBI.DSRT). One hundred nineteen Hispanic mothers of females in 6<sup>th</sup> through 8<sup>th</sup> grade were recruited from two Midwestern Catholic Middle Schools. The quantitative portion of the study included measures of mothers' normative beliefs, intentions, past experience, and past behavior using the RNBI.DSRT. The qualitative portion of the study consisted of two focus groups of mothers. Questions were asked about their experiences with the DSRTs.

Primary quantitative findings indicated that mothers' normative beliefs were predicted by familism and past behavior. Mothers' intention to engage in the DSRTs was predicted by past behavior and normative beliefs. The RNBI.DSRT demonstrated acceptable validity and reliability for this sample. Qualitative results indicated that while mothers intend to discuss SRTs, they face barriers including the uncustomary nature of the DSRTs in their culture which has led them to feel a lack of knowledge and confidence, and uncertainty about whether the DSRTs will protect their daughters or give them ideas. Based on past experiences, Hispanic mothers want to protect their daughters and have high hopes for their futures which motivates them to ask for help with the DSRTs. Taken together, the quantitative and qualitative data suggested that while normative beliefs predict mothers intentions, there are other factors that may have a greater influence on their intentions.

## ACKNOWLEDGEMENTS

Dana M. Rodriguez, MSN, APNP-BC

This dissertation is dedicated to my family. First, I am thankful for God and the gifts he has given me including strength, persistence, and determination. I would like to thank my husband, Zeus Rodriguez, for his love, commitment, and support throughout this process. Without his ongoing support, this journey would not have been possible. I would like to thank my children, Benjamin and Eva, for playing so nicely together when mommy had to do her homework. I thank them all for being patient and understanding. I am thankful to my parents (Richard Ciriacks and Gerri Litterski), stepparents (Diana Ciriacks and Brian Litterski), and sister in law (Alaina Rodriguez) for caring for and playing with Ben and Eva when I needed extra time to study. I am thankful for Alejandra Pulido who took care of many of my household responsibilities. I would like to thank my friend and study partner, Andrea Kellar, for navigating through statistics among other projects with me. Last but not least, I am thankful for Shoshi, our wiener dog who was always by my side while I studied. This dissertation is also dedicated to the Hispanic community for whom I care for very much.

I would like to thank my dissertation committee members, Dr. Robert Topp, Dr. Richard Fehring, Dr. Kristin Haglund, and Dr. Lisa Edwards for their guidance throughout the dissertation process. I am especially thankful to Dr. Fehring who was a mentor to me since the beginning of my doctoral studies. I met Dr. Fehring at a natural family planning conference where we discussed the possibility of me attending Marquette to help him with his research. The rest is history. Likewise, I would like to thank my committee chair, Dr. Robert Topp, for all of the support and feedback he has given me during the dissertation process. Dr. Topp provided timely feedback and was always available by phone even on the weekends. He helped me to stay focused and to keep moving forward. I would like to thank Dr. Haglund for her guidance and expertise related to adolescent health and their families as well as her expertise with qualitative methods. I would like to thank Dr. Edwards for her expertise and guidance related to the Hispanic community. I would like to thank Dr. Jessica Pruszynski who provided statistical guidance. I would also like to thank Dr. Ruth Ann Belknap who served as a qualitative research expert in addition to her experiences with the Hispanic community. I would like to thank Professor Javier Tapia who shared his anthropological expertise of the Hispanic community with me. I would like to thank Father Cliff Ermatinger, Jorge Vela, Tamara Olivas, Evelyn Jones, Susana Cortez, and Terrie Garcia who read through the Spanish translations of my instrument to be sure they made sense. I would also like to thank Sarah Thiry and Susana Crespo who served as my research assistants for this study. I would also like to thank Teresa Jerofke and Jennifer Ohlendorf who were available for me when I had questions about various aspects of the dissertation process.

I would like to thank Sigma Theta Tau International for providing me with funding for this study. I would like to give a huge thanks to St. Anthony School of Milwaukee who provided access to the participants who were recruited for this study. Thank you to Lirse Jones and Martha Tellez from St. Anthony School who helped with recruitment. I would also like to thank Notre Dame Middle School for allowing me to recruit participants from their school.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	i
LIST OF TABLES.....	vi
LIST OF FIGURES.....	vii
CHAPTER	
I. INTRODUCTION.....	1
Problem.....	1
Study Purpose.....	5
Rationale for the Study.....	5
Summary.....	7
II. REVIEW OF THE LITERATURE	
Introduction.....	8
Conceptual frameworks.....	8
Parent-Based Expansion of the Theory of Planned Behavior.....	9
Theory of Planned Behavior.....	9
Behavioral intention.....	9
Background factors.....	11
Acculturation.....	11
Familism.....	13
Normative beliefs.....	14
Relationships Between Constructs.....	16
Philosophical Underpinnings.....	17
Review of Related Literature.....	18
Parents as Influence.....	18
Mothers as Influence.....	19
Review of studies relating TPB and DSRTs.....	20

Studies using TPB.....	20
Studies involving parent-adolescent DSRTs.....	23
Intervention studies involving parent-adolescent DSRTs...25	
Qualitative Studies.....	31
Summary of the Gaps in the Literature.....	33
Research Questions and Hypothesis.....	35
Assumptions of the Study.....	35
Chapter Two Summary.....	36
<b>III. RESEARCH DESIGN AND METHODS</b>	
Introduction.....	37
Research Design.....	37
Sample and Setting.....	38
Instruments.....	41
Rodriguez Normative Belief Instrument.....	41
Instrument development.....	41
Demographic Questionnaire.....	42
Background Factors.....	43
Brief Acculturation Rating Scale for Mexican Americans-II.....	43
Pan-Hispanic Familism Scale.....	44
Pilot Study.....	45
Procedure.....	48
Provisions for the Protection of Human Rights.....	52
Data Management and Analysis.....	53
Management and Analysis of Focus Group Transcripts.....	55
Chapter Three Summary.....	56

#### IV. RESULTS

Introduction.....	57
Preliminary Screening of Data.....	57
Sample Characteristics.....	58
Quantitative Characteristics of the Sample.....	58
Results.....	62
Research Question One.....	62
Research Question Two.....	64
Research Question Three.....	65
Research Question Four.....	67
Research Question Five.....	74
Hypothesis One.....	74
Qualitative Findings.....	74
Conclusion of Qualitative Findings.....	94

#### V. DISCUSSION

Interpretation of Findings.....	95
Research Question One.....	95
Research Question Two.....	98
Research Question Three.....	101
Research Question Four.....	103
Research Question Five.....	104
Hypothesis One.....	105
Discussion Conclusion.....	105
Theoretical Considerations.....	106
Implications for Vulnerable Populations.....	107
Implications for Nursing Practice.....	109

Implications for Nursing Research.....	111
Implications for Nursing Education.....	112
Strengths and Limitations.....	112
Chapter Five Summary.....	114
Concluding Statement.....	115
BIBLIOGRAPHY.....	116
APPENDICES	
Appendix A: Study Forms and Instruments.....	127
Rodriguez Normative Belief Instrument (English).....	128
Rodriguez Normative Belief Instrument (Spanish).....	136
Demographic questionnaire (English).....	144
Demographic questionnaire (Spanish).....	147
Brief Acculturation Rating Scale for Mexican-Americans-II .....	149
Familism Scale .....	153
Pre-notice Letter.....	155
Focus Group Recruitment Request.....	156
Semi-Structured Interview Guide.....	158
Appendix B: Institutional Review Board.....	159



## LIST OF TABLES

1. Sample Characteristics: Quantitative Portion .....	59
2. Participant Demographics by School.....	61
3. Spearman's Rho Correlations Between Normative Beliefs and Background factors .....	63
4. Regression Coefficient Table for Predictors of Normative Beliefs.....	64
5. Spearman's Rho Correlation Matrix for Research Question 2.....	65
6. Regression Coefficient Table for Normative Beliefs Predicting Intentions.....	65
7. Spearman's Rho Correlations Between Intentions, Background factors and Normative.....	66
Beliefs	
8. Regression Coefficient Table for Predictors of Intention.....	67
9. RNBI.DSRT Cronbach's Alpha Reliability Estimates and Scale Descriptive Statistics.....	68
10. Rotated Component Matrix based on Exploratory Factor Analysis with Varimax.....	70
Rotation for the 11-item Normative Belief Subscale from the Rodriguez Normative Beliefs Instrument (RNBI.DSRT)	
11. Rotated Component Matrix Based on Exploratory Factor Analysis with Varimax.....	71
Rotation for the 11-item Intention Subscale from the RNBI.DSRT	
12. Rotated Component Matrix Based on Exploratory Factor Analysis Varimax.....	72
Rotation for the 11-item Past Behavior Subscale from the RNBI.DSRT	
13. Rotated component matrix based on Exploratory Factor Analysis with Varimax.....	73
Rotation for the 11-item Past Experience Subscale from the RNBI.DSRT	
14. Sample Characteristics: Qualitative Portion .....	75

## LIST OF FIGURES

1. Parent-based expansion of the theory of planned behavior.....125
2. Model of how research questions will test the theoretical model .....126

## CHAPTER ONE

### **Introduction**

People of Hispanic origin are the nation's largest ethnic or racial minority. According to the United States Census Bureau persons of Hispanic or Latino descent make up 16.7% of the population (United States Census Bureau, 2012). It is projected that by the year 2020, one in four adolescents will be Hispanic (Landale & Oropesa, 2007). The World Health Organization (2012) defines adolescents as individuals between the ages of 10 and 19 years. Due to the current and increasing population of Hispanic adolescents, it is becoming increasingly important for community service providers including health care providers to understand the lives of Hispanic adolescents and their families.

### **Problem**

Adolescent females experience many physical changes including puberty, menarche, and menstruation. These changes impact psychological development including body image, self-esteem and mood changes (Benjet & Hernandez-Guzman, 2001). Educating adolescent females these changes and about other sex-related topics (SRTs) (menstruation, sexual intercourse, oral sex, abstinence, pregnancy, sexually transmitted infections (STIs), emotional consequences of sex, religious beliefs about sex, cultural beliefs about sex, and/or beliefs about birth control) has been and continues to be debated regarding the appropriate content, timing, setting, and who should teach the material (Robert & Sonenstein, 2010). It is well established that Hispanic adolescent females have disproportionately high rates of teen pregnancy and STIs when compared with white non-Hispanic adolescent females (CDC, 2009; The National Campaign to Prevent Teen and Unintended Pregnancy, 2010). They also may experience negative emotional consequences of engaging in sexual activity such as feeling bad about themselves and feeling used (Brady & Halpern-Felsher, 2007).

The Center for Disease Control (CDC) estimates that half of all new STIs in the United States occur among young men and women ages 15-24 (CDC, 2012a; CDC, 2013a). STIs cost the American healthcare system almost \$16 billion each year. In addition to financial considerations, STIs can lead to potentially severe physical repercussions for the affected individuals such as infertility and cervical cancer (CDC, 2013a). In addition to STIs, teen pregnancy also has unfavorable effects on society. Despite the fact that teen birth rates have declined in the United States they still remain high, especially among Hispanic teens (CDC, 2012b; CDC, 2013b). Teen pregnancy and childbirth cost U.S. taxpayers nearly \$11 billion per year including Wisconsin taxpayers costs of least \$168 million per year. These figures include health care, foster care, and lost revenue because of lower educational attainment and income among teen mothers. This figure also includes the increased costs of incarceration of children of teen moms (National Campaign to Prevent Teen Pregnancy, 2011). Only about 50% of teen mothers earn their high school diploma by age 22 (Perper, Peterson, & Manlove, 2010). These effects can be decreased if appropriate interventions are designed and executed that reduce STIs and teen pregnancy. These interventions, while ultimately aimed at female adolescents' intentions and behaviors, may include interventions to increase parents' intentions and behaviors involving the DSRTs with their daughters. The parent behavior of DSRTs has a direct influence on adolescent beliefs, which are directly associated with their intentions to do something (in this case, to engage in sexual risk behaviors) and ultimately influence the adolescent behavior (Hutchinson & Wood, 2007).

While peers influence adolescent sexual behavior, media, professionals (teachers, health care professionals, religious leaders) (Sprecher, Harris, & Meyers, 2010) parents are among the most significant influences on adolescents' sex-related attitudes, intentions, and behaviors (Fantasia, 2011; Hutchinson & Wood, 2007). Even so, many teens that have had sexual intercourse have not discussed SRTs with their parents. Some reasons parents provide for not discussing SRTs with their adolescent children include language and cultural barriers between the

parents and their children (Guilamo-Ramos, et al., 2006a), the perception the child is too young (Wilson, Dalberth, Koo, & Gard, 2010), not knowing what to say, parent or child embarrassment (Guilamo-Ramos, et al., 2008; Wilson, Dalberth, Koo, & Gard, 2010). Guilamo-Ramos, Jaccard, Dittus, and Collins (2008) found that the more the mother perceived important people in her life approved of her talking about sex and the greater the number of parents she thought did so, the more frequent were the DSRTs with her children. Despite the fact that parents are known to influence their adolescents' intentions and decisions regarding sexual activity, studies have shown that Hispanic mothers rarely engage in DSRTs with their adolescent daughters (Gilliam, 2007; Hutchinson, 2002; Sprecher et al., 2008). Thus it is important to understand the background factors and the normative beliefs affecting the intention of Hispanic mothers regarding the discussion of SRTs with their adolescent daughters.

The importance of mothers engaging in DSRTs was demonstrated in several studies. For example, adolescent females whose mothers engaged in DSRTs with them were more likely to delay sexual activity (Fasula & Miller, 2006; McNeely et al., 2002; Sneed, 2008) and increase condom use (Hutchinson, Jemmott, Sweet Jemmott, Braverman, & Fong, 2003). Similarly, early adolescent African American females' intentions to abstain from early sexual behavior were influenced by their mother's DSRTs more than their fathers and peers (Doswell, et. al., 2003). While Hispanic adolescent females want to engage in DSRTs with their mothers, the mothers' cultural backgrounds often conflict with the sexual openness of the United States (Gilliam, 2007; Guilamo-Ramos et al., 2006a).

A theoretical framework frequently used to explain behavior is Ajzen's Theory of Planned Behavior (TPB) (Fishbein & Ajzen, 2010). TPB and an expanded variation, the Parent-Based Expansion of the Theory of Planned Behavior (PBETPB) were the guiding frameworks for the study and were used to explain mothers' intentions regarding the DSRTs with their adolescent females (Hutchinson & Wood, 2007). According to the PBETPB, parental behaviors are external influences on adolescent behaviors (Hutchinson & Wood, 2007). Behavioral beliefs, normative

beliefs and control beliefs influence behavioral intentions that in turn are the best predictors of actual behavior (Fishbein & Ajzen, 2010). These beliefs are influenced by background factors, which are factors that influence the beliefs people hold (Ajzen, 2005). The current study examined the influence of the background factors of familism, daughter's age, mother's education level, acculturation, mother's past experience with the DSRTs and mother's past behavior on intention to discuss SRTs with their adolescent daughters among Hispanic mothers. According to the TPB, normative beliefs are beliefs that an individual holds about performing a behavior, that important people in their life either approve or disapprove of, and that these important people perform or do not perform the behavior (Fishbein & Ajzen, 2010). Normative beliefs are important determinants of behavioral intention and engaging in a specific behavior (Ajzen, 2005).

Studies with varying samples of young adults have used TPB to predict various sexual behaviors (Cha, Doswell, Kim, Charron-Prochownik, & Patrick, 2007; Cha, Kim, & Patrick, 2008). Cha et al. (2007) described the self-reported sexual behavior of Korean college students using TPB and found premarital sexual attitude and referent group norms were significant predictors of intention of premarital sex for male and female students. Cha, Kim, and Patrick (2008) examined the efficacy of TPB to predict condom use among Korean college students. They found that all TPB components (condom attitude, condom efficacy, and peer norms to use condoms) significantly predicted intention of condom use for college men but the only predictors of condom use among women were condom attitude and condom efficacy.

The TPB was also used to examine intentions of mothers' to vaccinate their daughters with the human papilloma virus vaccine (HPV) (Askelson et al., 2010; Askelson et al., 2011). Askelson et al. (2010) used the TPB to predict mothers' intentions to vaccinate their daughters against HPV and found attitudes were the strongest predictor of mothers' intentions to vaccinate, but intentions were not high (Askelson et al., 2010). A subsequent study by Askelson et al. (2011), using TPB, examined mothers' intentions to use HPV vaccination as an opportunity to

talk about sex with their adolescent daughters. Mothers' intentions were driven by attitudes, subjective norms, and the age at which they intended to have their daughters vaccinated.

Two randomized controlled trials were conducted based on the theory of planned behavior (Villarruel, Cherry, Cabriaes, Ronis, & Zhou, 2008; Villarruel, Loveland-Cherry, & Ronis, 2010). Both studies tested a parent-adolescent based intervention to increase sexual risk communication among Mexican parents and their adolescent children. Villarruel et al. (2008) found the constructs of TPB (behavioral, normative, and control beliefs) to significantly mediate the effect of the intervention. Both studies were found to increase communication. Although these two studies utilized the TPB framework and focused on parent-interventions, neither study included the use of an instrument to measure Hispanic mothers' normative beliefs and intentions regarding the discussion of particular SRTs, nor did they identify specific normative referents that influence the mothers' normative beliefs. These are important components to include because specification of normative referents will aid in the development of culturally sensitive programs aimed to increase the DSRTs between mothers and daughters. The identification of particular SRTs will allow the researcher to understand which topics mothers intend and do not intend to discuss and again, will aid in program development.

### **Study Purpose**

The purpose of this study was to examine the influence of background factors and normative beliefs of Hispanic, Catholic mothers on their intention to engage in the discussion of sex-related topics (DSRTs) with their adolescent daughters. The secondary purpose of the study was to test the validity and reliability of the Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (RNBI.DSRT) and its subscales.

### **Rationale for the Study**

The current study is significant because when mothers engage in discussion of sex-related topics (DSRTs) with their adolescent daughters, it has been shown to delay or decrease sexual intercourse (Fasula & Miller, 2006). Hispanic parents talk less with their daughters about SRTs

when compared to other ethnic groups (Sprecher, Harris, & Meyers, 2008). The DSRTs in the current study refers to discussions about menstruation, sexual intercourse, oral sex, abstinence, pregnancy, STIs, emotional consequences of sex, religious beliefs about sex, cultural beliefs about sex, and/or beliefs about birth control. For the purposes of this study, Hispanic mothers of adolescent females in grades six through eight, attending a Catholic school, were sampled. Hispanic, Catholic mothers are a unique and understudied group. While they are important group to study, there may be tensions involved when approaching topics related to sex. First it may be difficult to gain access to the population. Second, it is important to respect their moral beliefs while sharing factual information with them.

A pilot study was completed that has established the feasibility of the study methods including psychometric properties of the newly constructed, RNBI.DSRT. The RNBI.DSRT was created and previously employed based on Ajzen's Theory of Planned Behavior (TPB) (Ajzen, 1991; Fishbein & Ajzen, 2010) and Parent-Based Expansion of the Theory of Planned Behavior (PBETPB) (Hutchinson & Wood, 2007). Following this examination of the psychometric properties of the RNBI.DSRT, select background factors were assessed to determine if they influence the mothers' normative beliefs and intentions. Predictors of mothers' normative beliefs and their intentions to engage in DSRTs with their adolescent daughters were examined. This study was the first step toward identifying relationships between Hispanic mothers' background factors, normative beliefs, and intentions regarding DSRTs with their adolescent daughters. Once these relationships are established then interventions can be developed to facilitate DSRTs, which may in turn reduce the disproportionately high rates of teen pregnancy and sexually transmitted infections (STIs) among Hispanic adolescent females.

A mixed methods approach for this study was chosen for two reasons. First, the quantitative portion of the study examined the influence of a variety of background factors and normative beliefs of Hispanic mothers on their intention to engage in the discussion of sex-related topics (DSRTs) with their adolescent daughters. It also established further validity and reliability



of the RNBI.DSRT and its subscales. Second, the use of qualitative methods allowed the study to explore if there was agreement between the constructs measured by the RNBI.DSRT and the themes from the focus groups. The qualitative methods also provided detailed descriptions and examples of the DSRTs (Rinaldi Carpenter, 2011). The use of both quantitative and qualitative methods provides a means of method triangulation, allowing for examination of different dimensions of Hispanic mothers' DSRTs with their adolescent daughters (Denzin, 1989). The result of a mixed methods approach is a more complete understanding of Hispanic mothers' DSRTs with their adolescent daughters (Rinaldi Carpenter, 2011).

### **Summary**

This chapter includes an overview of the scope and significance of adolescent sexual activity, sexually transmitted infections and teen pregnancy. The Theory of Planned Behavior has been used to explain the factors that influence the intentions of adolescents to engage in sexual behavior and has also been used to explain the influence parents have on the adolescent (Hutchinson & Wood, 2007). One major influence on an adolescent females' decision to engage in sexual activity is the DSRTs she has with her mother. Although there are other factors that influence adolescent females' decisions and subsequent behaviors related to sexual activity, this study will focus on the influence of the DSRTs by mothers. While DSRTs with one's mother is a predictive factor in delaying sexual intercourse (Sneed, 2008), DSRTs rarely occurs between Hispanic mothers and their daughters (Hutchinson, 2002; Sprecher et al., 2008). While most studies have tested the constructs of the TPB examining adolescent behaviors, few studies have tested the parental constructs in relation to their intentions to engage in DSRTs. The study examined the influence of background factors (familism, daughter's age, mother's education level, acculturation, mother's past experience DSRTs and past behavior) and normative beliefs of Hispanic mothers on their intention to engage in DSRTs with their adolescent daughters utilizing a mixed methods approach.

## CHAPTER TWO

### Review of the Literature

#### Introduction

This chapter will provide rationale based on a conceptual framework and empirical support to conduct the study. The first section of this chapter will present the conceptual framework for the study, the Theory of Planned Behavior (TPB) and the Parent-Based Expansion of the Theory of Planned Behavior (PBETPB). The constructs of the TPB and the PBETPB will be explained followed by a description of how these constructs are related to one another. Next, philosophical underpinnings that guide the study will be described. Then, the review of the related literature will explore the impact that the discussion of sex-related topics (DSRTs) by mothers has been shown to have on their daughters' sex-related behavior. This review will describe the relationships between background factors, and the theoretical concepts of normative beliefs, intention, and DSRTs behavior. This review will be followed by a summary of the gaps in the literature in the area this study will attempt to address. This chapter will also include a summary of a pilot study that evaluated the face validity and feasibility of the procedure of administering the Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (RNBI.DSRT). The pilot study findings will be presented including supporting rationale for the tool and methodology. Assumptions based upon the literature, conceptual framework and preliminary studies will then be presented. The chapter will conclude by restating the purpose and research questions of the study based on the support from the conceptual frameworks, literature and pilot study.

#### Conceptual Frameworks

As introduced in Chapter 1, this study was guided by the Theory of Planned Behavior (TPB) and the Parent-Based Expansion of the Theory of Planned Behavior (PBETPB). The

Parent-Based Expansion of the Theory of Planned Behavior provided a framework that supported the influence between parents and their children as it relates to the DSRTs.

### **Parent-Based Expansion of the Theory of Planned Behavior**

The PBETPB is derived from the TPB, which suggests that intention is the single best predictor of behavior (Fishbein & Ajzen, 2010). The PBETPB posits that parental behaviors are an important external influence on adolescents' behaviors (Figure 1) (Hutchinson & Wood, 2007). Parental behaviors are primarily determined by their intent to perform the behaviors. Intent to engage in a behavior directly precedes the corresponding behavior under volitional control (Armitage, Conner, & Norman, 1999). The finding by Guilamo-Ramos et al. (2008) that mothers of adolescents were reluctant to engage in DSRTs is consistent with the PBETPB (Hutchinson & Wood, 2007). These constructs interpret Guilamo's (2008) findings as Hispanic mother's reluctance to engage in DSRTs was the result of a lack of knowledge (control beliefs), feeling embarrassed (normative beliefs), and low self-efficacy (control beliefs). Guilamo, et al. (2008) also found that mothers were more likely to have discussed SRTs with their daughters if they thought they had the necessary knowledge (control beliefs), thought that it would help the child to think maturely (behavioral beliefs), and if they felt their talking with their child implied they are a responsible parent (normative beliefs). The combination of behavioral beliefs, normative beliefs and control beliefs lead to behavioral intention (Fishbein & Ajzen, 2010).

### **Theory of Planned Behavior**

**Behavioral Intention.** Behavioral intention is an indication of an individual's readiness or likeliness to perform a given behavior (Fishbein & Ajzen, 2010). For the purposes of this study the behavioral intention of the mother to engage in DSRTs with her adolescent daughter is being examined. Behavioral intention stems from a combination of attitude toward the behavior, normative beliefs, and perceived behavioral control. One is unlikely to perform a behavior unless he or she intends to do so (Fishbein & Ajzen, 2010; Guilamo-Ramos et al., 2008). When designing a study using TPB as a framework, the intention and behavior need to be consistent

between the action, context, and time elements because behavioral intentions can change over time. The greater duration between the behavioral intention and the behavior itself, the more likely that unforeseen events or circumstances will produce a change in intentions translating into a change in behavior (Fishbein & Ajzen, 2010). In other words, predicting DSRTs from the intention to engage in the DSRTs within three months is desirable when attempting to predict DSRTs from intention. This abbreviated duration between behavioral intention and behavior allows adequate time for the mother to engage in the behavior but not so much time where unforeseen events or circumstances are likely to change the behavioral intention. In this study, it was assumed that a mother's behavior of DSRTs is preceded by her intention to discuss SRTs with her adolescent daughter. Further, it was assumed that the mother's intention is influenced by her behavioral beliefs, normative beliefs, and control beliefs regarding DSRTs. The mothers' behavioral beliefs, normative beliefs, and control beliefs are influenced by background factors, which include demographic variables. Although intention is influenced by a combination of behavioral, normative and control beliefs, this study focused solely on normative beliefs in order to understand how individual normative referents and cumulative normative beliefs affect mothers' intentions to discuss SRTs. Normative beliefs are beliefs about how important others view the behavior; whether the important people in their life approve or disapprove of them performing the behavior (Fishbein & Ajzen, 2010). Normative beliefs are likely an important predictor in Hispanic culture because family expectations, or familism, are a major part of the Hispanic culture. In fact, family is considered the most influential factor in the lives of Hispanics (Coohey, 2001). Due to the fact that family is the most important influence in their lives, it is vital to understand the mothers' normative beliefs about whether important persons, such as family members, approve or disapprove of them engaging in DSRTs. Further, it is essential to understand the relationship between a mother's normative beliefs and her intentions in reference to DSRTs. The understanding of this relationship in addition to the identification of the

important persons who influence mother's normative beliefs most, will be a first step toward developing a focused intervention for mothers to increase DSRTs with their daughters.

**Background factors.** According to Ajzen, background factors include variables that may be related to or influence the beliefs people hold (behavioral beliefs, normative beliefs, and control beliefs) (Ajzen, 2005). In this study, background factors including familism, daughter's age, mother's education level, acculturation, mothers' past experience with DSRTs and past behavior were hypothesized to influence normative beliefs and in turn, the intentions of Hispanic mothers. Mothers' past experience includes whether the mother's mother engaged in the discussion of SRTs with them when they were their daughter's age. Assessment of mothers' past behavior includes questions regarding whether she has discussed SRTs with her daughter in the past three months. The demographic variable of daughter's age was also included as a background factor and a potential influence on normative beliefs regarding DSRTs. Daughter's age has been shown to inform mother's intention to DSRTs with their daughters in the context of having been given the human papilloma virus vaccine (Askelson, Campo, & Smith, 2012). A previous study by Gallegos et al., (2007) demonstrated that parents with higher education levels scored higher in HIV knowledge and general communication. The identification of background factors serves to deepen our understanding of normative beliefs and how normative beliefs influence intention and behavior. Thus, this study examined the influence of background factors on normative beliefs in order to better understand how these concepts influence intention (Ajzen, 2005).

**Acculturation.** Acculturation, a background factor, is the social process involving changes in cultural patterns after two cultures come into repeated or prolonged contact with each other (Valentine & Mosley, 2000). It is a combination of psychological, behavioral and attitudinal changes that occur during this social process (Cabassa, 2003). Acculturation is an abstract concept that has been quantified by assessing language use, food, media use, preferences (attitudes), and cultural behaviors (Celenk & Van de Vijver, 2011). The sample included a

majority mothers who speak Spanish as a primary language and were born outside of the United States. Although acculturation is complex and difficult to quantify (Schwartz, Unger, Zamboanga, & Szapocznik, 2010), it must be taken into account when studying Hispanic groups, specifically immigrant groups, in order to understand social processes and the influence of acculturation on their behaviors (Wallace, Pomery, Latimer, Martinez, & Salovey, 2009). Acculturation and its relationship with parent-adolescent communication about SRTs was examined among of Filipino-American families and found that acculturation may be inversely associated with parent-adolescent communication and in turn adolescent sexual health. Filipino-American adolescents who were more acculturated (greater disagreement with Asian values) were less likely to be involved in parent-adolescent communication, due to relationship strains (Chung, et al, 2007). Wallace et al. (2010) reviewed acculturation measures and their utility in studies promoting Hispanic health and concluded that aspects of Hispanic cultural lifestyle, such as health beliefs, affect health behaviors and thus must be included in studies of health behavior in this group. A review of studies that investigated the relationship between health and acculturation found mixed results. Overall, acculturation had a negative effect on health behaviors (substance abuse, diet, birth outcomes) but had a positive effect on health care use and self-perceptions of health (Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005). Tseng and Fuligni (2000) found that adolescents and parents who communicate in the native language (Spanish) have the highest levels of discussion and cohesion. Thus, language preferences were measured by the Brief ARSMA-II. The purpose was to find out if acculturation, including language preferences, influences mothers' intentions to engage in DSRTs either positively or negatively.

The Brief ARSMA-II and the orthogonal perspective classifies the respondents into four different possible acculturation typologies including Traditionals, Low Biculturals (or Marginalized), High Biculturals, or Assimilated. The orthogonal perspective reflects that there is a number of ways in which acculturation can take place and that acculturation is a highly variable

process (Berry, 1980; Sam & Berry, 2006). A person may adopt mainstream cultural artifacts independent of the maintenance of those of the heritage culture (Bauman, 2005). According to Berry (1980) one form of acculturation is biculturalism (or integration) when values, customs, and behavior of both cultures are maintained; marginalization is when neither the dominant culture nor the native culture is comfortable; and traditional includes those who reject the dominant culture and maintain the culture of origin values, behaviors, and customs. It is important to highlight here that assimilation is one form of acculturation, as there is often confusion about assimilation and acculturation. Assimilation is when the culture of origin is replaced by dominant culture values. In the current study assimilation is a possible acculturation typology and refers to the degree to which the Hispanic mothers identify with White mainstream culture. Although the four acculturation typologies take place to varying degrees, for the purposes of the current study, participants will be categorized as Traditionals, Low Biculturals (or Marginalized), High Biculturals, or Assimilated.

**Familism.** According to Cooney (2001), familism is the cultural concept characterized by the high value placed on family and the interconnectedness of relationships within the family, including extended family. For many people of Hispanic culture, familism is believed to be the most important factor influencing their lives (Cooney, 2001). Attitudinal familism involves the feelings and beliefs concerning family (Villarreal, Blozis, & Widaman, 2005). This is in contrast to behavioral familism, which tends to be less stable when measured due to inability to perform certain behaviors such as frequently visit family members due to not living close to them (Rueschenberg & Buriel, 1989). Structural familism refers to the number of people considered to be in the family living in close proximity (Wallerstein & Smith, 1992). While attitudinal familism and behavioral familism are the most commonly studied dimensions of familism (Villarreal et al., 2005), the study focused on attitudinal familism. Attitudinal familism was chosen because it is the most stable of the three familism dimensions. Behavioral familism tends

to be less stable due to difficulty acting on some behavioral aspects such as frequency of visitation with family members. This is often the case when families do not live in close proximity to one another (Rueschenberg & Buriel, 1989; Sabogal, Marin, Otero-Sabogal, & Marin, 1987). Thus, the study explored the relationships between mothers' attitudinal familism and mothers' normative beliefs and intentions related to the discussion of SRTs.

One way in which familism is manifested is through "householding". Some anthropological authors have described the phenomenon "householding" as referring to household members that pool their income, assign tasks, and make decisions (Wallerstein & Smith, 1992; Landale & Orpresa, 2007). Further, U.S. Mexican households often operate in relationship to a larger cluster of other households of family members characterized by cooperation, exchange, and assistance (Tapia, 1995). In other words, people of Hispanic culture often have large networks of extended family members that live in close proximity to one another (Zoucha & Purnell, 2003). Mexican American women find social support in female family and friends (Eggenberger, Grassley, & Restrepo, 2006; Martinez-Schallmoser, Telleen, & MacMullen, 2003; Padilla & Villalobos, 2007). Comadres (godmothers), in particular, are family or individuals acting as kin that provide social support such as help with childcare, household assistance, and general peer support for healthy behaviors (Lopez, 1999). They form close bonds with the family and take on some of the responsibilities of raising the children (Lopez, 1999; Kana'iaupuni, Donato, Thompson-Colon, & Stainback, 2005). The Hispanic cultural concept of familism promotes these close support networks of family. The closeness of extended family relationships warrants an investigation of how attitudinal familism and the influence of individual family members (as normative referents) may impact mothers' intentions to engage in the DSRTs.

**Normative beliefs.** Normative beliefs are beliefs an individual holds that important people in their life, normative referents, approve or disapprove of them performing the behavior



(Fishbein & Ajzen, 2010). Normative beliefs also include beliefs that the important people perform or do not perform the behavior themselves. According to TPB, normative referents may include friends, parents, spouse, co-workers, and depending upon the behavior, physicians or others (Fishbein & Ajzen, 2010). In this study, normative referents included the subject's (Hispanic mother) mother, father, sister and close female friends, husband or daughter's father, doctor or health care provider, priest or religious advisor, and daughter's godmother (Comadre or "co-mother"). An example of normative beliefs is the perception that important people in the Hispanic mothers' life such as family members or close friends, believe that DSRTs with their daughters is beneficial versus harmful. The variability in a mother's intention to engage in DSRTs is in part explained by her normative beliefs about engaging in the behavior. In other words her intention partially depends on what she believes important others think about her engaging in DSRTs. A study performed by Askelson, et al. (2011) using TPB as the framework found that mothers who reported they had important persons in their lives supporting communication were more likely to intend to communicate about sex-related topics, which illustrates the importance studying normative beliefs. Mothers' DSRTs with their daughters is dependent upon their intention to do so which in turn is hypothesized to depend upon the mother's normative beliefs about engaging in this behavior. A study that aimed to understand why some mothers engage in DSRTs with their adolescents less often than others, revealed that the more mothers perceived important others approving of them DSRTs (normative beliefs), the more frequently they engaged in DSRTs (Guilamo-Ramos et al., 2008). Villarruel et al., (2008) found that when parents believed that the adolescent and family members (normative beliefs) approved of DSRTs, the increased normative beliefs significantly mediated the effect of an intervention aimed to increase DSRTs. Thus, normative beliefs were measured to understand what influence select important persons have on Hispanic mothers' intentions to discuss SRTs with their adolescent daughters.

### **Relationships Between Constructs**

According to the PBETPB, the maternal behavior of DSRTs with their adolescent daughters is preceded by their intentions to engage in DSRTs with their adolescent daughter. Their intentions are, in part, determined by their normative beliefs regarding this behavior, which are influenced by background factors. When mothers have positive, normative beliefs about DSRTs with their adolescent children the PBETPB hypothesizes they will have a higher intent to engage in this behavior and are more likely to actually engage in this behavior (Hutchinson & Wood, 2007). In the development of PBETPB, Hutchinson and Wood (2007) studied the adolescent constructs of the theory and concluded that further development of the parent constructs is needed providing excellent rationale for this study and the development of the Rodriguez Normative Belief Instrument that will measure these parental constructs. Thus, this study will provide a better understanding of the parental constructs of the PBETPB; specifically how Hispanic mothers' intentions to engage in DSRTs are effected by their normative beliefs and background factors. Once normative beliefs for DSRTs, background factors, and their relationships have been identified, appropriately targeted evidence-based interventions can be developed to facilitate DSRTs between Hispanic mothers and their daughters. The results of this study provide a first step toward developing targeted interventions to enhance mothers' normative beliefs and in turn enhance the mother's intention to engage in DSRTs with their adolescent daughters.

The TPB and PBETPB support the research questions, which seek to identify background factors that are significantly associated with normative beliefs regarding DSRTs. The conceptual frameworks also support the research question that aims to explore if Hispanic mothers' normative beliefs regarding DSRTs are significantly associated with their intention to engage in DSRTs. The theories explain that background factors influence normative beliefs, which in turn influence intention. Thus, the current study will assess whether the theoretically hypothesized relationship is accurate for Hispanic mothers' background factors, normative beliefs, and

intentions about DSRTs. The psychometric properties of an instrument that was developed to assess normative beliefs and intention related to DSRTs among Hispanic mothers will also be assessed. See Figure 2 for a diagram of study variables and their proposed relationships to one another.

### **Philosophical Underpinnings**

The following section will discuss the philosophical underpinnings of the study, which serve to provide rationale for the study design, methods, and assumptions. Thus, this section will discuss the scientific philosophy of post-positivism, which guides this study and will briefly discuss constructivism, which undergirds the qualitative portion of the study. Logical positivism, or positivism, pervaded philosophical science thinking in the 20<sup>th</sup> century. Positivism states observation as the primary verification of all knowledge (Whittemore, 1999), viewing different people's interpretations of events as unscientific (Allmark, 2003). Positivism raised conflicts with those committed to the humanistic underpinnings of nursing and led to postpositivism thinking (Playle, 1995). Postpositivism assumes that reality exists but cannot be fully attained or verified because reality is viewed by a subjective receiver (Guba and Lincoln, 1994). Postpositivism welcomes insider viewpoints to aid in determining the purposes that people attribute to their actions (Racher & Robinson, 2002). Thus knowledge may be gathered through quantitative and qualitative research methods that complement each other and move closer to the truth, hence the mixed method approach of the current study. The study was guided by postpositivism and includes an element of constructivism particularly related to the focus group portion of the study.

Constructivism describes human experience as unique to individuals in their own social worlds (Guba, 1990). Constructivism guides narrative inquiry in that it acknowledges that multiple realities exist that are dependent upon context and multiple interpretations can be made (Appleton & King, 2002). The outcomes of the qualitative portion of the study were created by an interaction between the researcher and the participants by accessing their multiple views of

reality (Guba, 1990). By approaching the study through the lens of constructivism, the researcher will gain insight into the individual contexts of Hispanic mothers in order to understand their reasons for having or not having engaged in the DSRTs with their adolescent daughters.

### **Review of the Related Literature**

The following review of the literature will describe how parents influence their adolescents' sexual behavior. Next, the studies based on the Theory of Planned Behavior and the DSRTs will be reviewed. Intervention studies that evaluate parent-interventions aimed to increase DSRTs will then be analyzed. This description of quantitative studies will be followed by a description of the findings of qualitative studies involving parent-adolescent DSRTs. This section will conclude by reviewing the limitations of these previous studies that provide justification for the current study.

#### **Parents as Influence**

There are many factors that influence an adolescent's sexual behavior including social norms and social context (Fantasia, 2011), parents, family, peers, and media (Charmaraman & McKamey, 2011; Fantasia, 2011; Sprecher et al., 2008). Karofsky, Zeng, and Kosorok (2001) performed a 10-year longitudinal study of adolescents in the primary care setting and found that those adolescents who perceived that they had a better level of general communication with their parents were less likely to have sexual intercourse. While parents believe it is important to engage in DSRTs, a limited number of parents report doing so (Wilson et al., 2010). In general, Hispanic parents engage in less DSRTs with their adolescents than any other ethnic group (Sprecher et al., 2008). Previous investigators have reported that Hispanic adolescent females are at high risk for pregnancy and STIs and that Hispanic mothers do not engage in DSRTs with their adolescent daughters compared with other ethnic groups (Hutchinson, 2002; Sprecher et al., 2008). This lack of DSRTs between Hispanic parents and their adolescent daughters has been correlated with the high rates of adolescent pregnancy and STIs in this group (Sprecher et al., 2008).

Female adolescents often initiate sexual activity because they are curious and they report they should be engaging in sexual activity given their age and what they know from their peers (Fantasia, 2011). Despite the influence of peers, parents can influence the decisions of their adolescent children regarding their involvement in sexual activity by engaging them in DSRTs (Fasula & Miller, 2006). When parents communicate their expectations regarding sexual abstinence to their adolescent children, their adolescent children appear to delay sexual initiation (Sneed, 2008). Further, parent-child the DSRTs including sexual intercourse is a protective factor for preventing HIV in adolescents (Benavides, Bonazzo, & Torres, 2006; Hutchinson & Wood, 2007). Commendador (2010) reviewed 35 research studies and 15 journal articles and concluded that increased parental communication is associated with decreased adolescent sexual activity and increased contraceptive use. Thus, it appears that parent-adolescent DSRTs delays sexual intercourse and increases contraceptive use.

### **Mothers as Influence**

Previous research has demonstrated that when mothers engage in DSRTs with their adolescent children it results in their adolescents delaying sexual activity (Fasula & Miller, 2006; Sneed, 2008). Mothers' satisfaction with her relationship with her daughter; mother's strong disapproval of her daughter having sex; and frequency of communication with the parents of her daughter's friends were also associated with a later sexual debut of their adolescent daughter (McNeely et al., 2002). Hutchinson (2002) examined DSRTs between parents and daughters examining differences among racial/ethnic groups and found that Hispanic ethnicity was associated with less DSRTs by both mothers and fathers with their adolescent children. Overall, the adolescent females were more likely to engage in DSRTs with their mothers than their fathers. Further, when mother-daughter DSRTs took place prior to the adolescent daughter engaging in sexual activity, it delayed the daughter engaging in sexual intercourse and increased the likelihood of condom use (Hutchinson, 2002). Another study examined the role of mother-daughter DSRTs prospectively and focused on the female adolescents' sexual activity related to

the type of the communication they received from their mothers. The findings were similar to Hutchinson (2002), in that higher levels of mother-daughter communication were associated with fewer instances of sexual intercourse and fewer instances of intercourse without a condom (Hutchinson et al., 2003). While mother-daughter DSRTs does not frequently take place within Hispanic families, when it does, it appears to be inversely related to sexual intercourse and promotes condom use when sexual activity does occur.

### **Review of studies relating TPB and DSRTs**

Due to the limited number of studies focused on the TPB relationships related to DSRTs by mothers with their adolescent daughters, this section will first focus on a review of TPB in general then as it relates to DSRTs. At the end of this section of the review, a summary of findings from the studies will be discussed, establishing the need for this study.

**Studies using TPB.** A study to predict mothers' intentions to vaccinate their 9 to 15 year old daughters against HPV was conducted (Askelson et al., 2010) using TPB as a framework. Two hundred seventeen predominantly White mothers living in the Midwest completed the survey conducted by mail. Linear regression was used to estimate the influence of the constructs (attitudes, perceived behavioral control and normative beliefs) of the TPB on mothers' intentions to vaccinate their daughters including the influence of risk perceptions, experience and mothers' perception of the vaccine's impact on sexual activity and found the overall model to be significant;  $F(11, 173) = 31.17, p < .001$ . The model was a good fit for the data accounting for 66% of the variance of mothers' intentions. Attitudes ( $\beta = .61, p < .001$ ) and normative beliefs ( $\beta = .16, p < .05$ ) were significant predictors of the mothers' intentions to vaccinate. Mothers' perceptions of risk, influence of maternal STI experience, and concerns about the vaccine encouraging sexual activity did not predict mothers' intentions to vaccinate.

Askelson et al. (2011) conducted a subsequent study using TPB and the same survey responses (N=217) to examine what influences mothers' intentions to use the HPV vaccination as an opportunity to talk about sex with their adolescent daughters. Fifty-three percent of the

mothers reported they would likely talk with their daughters about sex in the context of the HPV vaccine. Normative beliefs were measured on a 7-point Likert scale (higher scores indicating a more favorable response) by asking mothers how much they agreed with a series of three statements regarding what important people in their lives think about them talking about sex when she is vaccinated. Factor analysis was conducted for the three normative belief items using varimax rotation. The three normative belief items had adequate factor loadings ( $> .66$ ), indicating there is a high correlation between the items. Linear regression model was significant,  $R^2 = .37$ , ( $F(6, 104) = 11.32, p < .001$ ), indicating the model explains 37 percent of the variance in mothers' intention to engage in the DSRTs at the time of HPV vaccine. Mothers' normative beliefs about what important others thought of engaging in DSRTs at the time of vaccination against HPV ( $\beta = .33, p < .001$ ) significantly influenced mothers' intention to talk about SRTs. Mothers were more likely to intend to communicate when important persons in their lives supported communication. In other words, they were more likely to intend to engage in DSRTs when they had increased normative beliefs about what important others thought of engaging in DSRTs at the time of vaccination against HPV. Mothers who perceived their daughters to be at greater risk for HPV were not more likely to talk to their daughters about sex. The authors recommend future studies examine whom the important people are in their lives in order to define messages and possible channels for encouraging mothers to talk in order to decrease sexual activity and ultimately decrease STIs and teen pregnancy. One limitation of the study is the method they used to measure normative beliefs and intention. While they did use a 7-point Likert scale as recommended by Ajzen, they only assessed three normative belief items and one intention item. They referred to sex generally as "sex" instead of having a separate item for each sexual topic. It is likely that mothers intend to discuss a number of SRTs but may avoid other SRTs. Thus, an instrument that has individual items for each sexual topic would allow for a clearer understanding of what the mothers intend to discuss. Likewise, the identification of individual normative referents in a normative belief instrument would allow for a more thorough

understanding of mothers' normative beliefs. Another limitation is that it was a sample of predominantly Caucasian families, most of who have health insurance. The lack of diversity of the sample limits its generalizability to other populations and warrants similar studies with more vulnerable populations such as in this study (Askelson et al., 2011). Thus, the two aforementioned studies demonstrate that normative beliefs predicted mothers' intentions. The study examined if normative beliefs predict Hispanic mothers' intention to engage in the DSRTs.

Subsequently, Askelson et al. (2012) conducted a third study looking at mother-daughter DSRTs however they used parenting style as the guiding framework instead of TPB in order to identify parenting style as a factor that potentially influences the topics and timing of DSRTs. They examined the influence of authoritative parenting style and mothers' perception of daughters' sexual risk. Parenting style is a framework describing the way parents discipline, relate to, and perceive their children. They also sought to explore at what age a mother intends to discuss a variety of SRTs with their daughters. The survey, which was a part of a larger study on reproductive health issues for girls, included items about communication with their daughters regarding 11 SRTs. While parents are an influence on their children, parenting style is considered a background factor within the TPB. The same random sample (mothers of girls ages 9 to 15 years old) was used as in the aforementioned studies by Askelson (2010; 2011) however in this analysis 283 surveys were used for the analysis. Although there were 306 completed surveys, 42 mothers sent back refusals and there were six undeliverable addresses. Mothers were also excluded if they did not live with their daughters at least half of the time or if their daughters were outside of the 9 to 15 year old range. The SRTs in this study included sexual intercourse, menstruation, dating/relationships, sexual orientation, menstruation, STDs, HIV/AIDS, HPV, alcohol, contraceptives, condoms, and abstinence. Multivariate linear regression was used for the analysis and indicated that mothers who reported being more authoritative communicated about these topics with their daughters at an earlier age than mothers who were less authoritative. Furthermore, authoritative parenting communication style was predictive of all topics except,



condoms, HPV, and sexual orientation. There was no evidence to support that the perception of risk would influence the number of SRTs discussed. Likewise, there was no evidence that mothers who perceived their daughters were at greater sexual risk (either currently sexually active or would be sexually active before she is 18 years old) would communicate at an earlier age than those who did not perceive sexual risk. Increasing age of the daughter (a background factor) was a significant predictor for the age of communication for all of the SRTs meaning that mothers decide when to discuss each topic based on their daughter's age and increasing age is associated with the discussion of a greater number of SRTs. This study also provided support that the background factor of parenting style does influence the behavior of DSRTs by mothers. The study identified the daughter's age as a background factor to determine if daughter's age influences mother's intentions to engage in DSRTs with their daughters.

**Studies involving parent-adolescent DSRTs.** There have been several studies with the objective to increase DSRTs among Hispanic parents and their adolescent children. However, there are limited studies on the topic specific to Hispanic mothers and their adolescent daughters. Further, there are few studies that explore the TPB concepts from the perspective of the mothers. Most of the studies that have been completed, explore outcomes related to the adolescents or daughters, rather than the mothers.

The importance of mother-daughter DSRTs from the adolescent perspective was demonstrated when Doswell et al. (2003) performed a study of African American adolescent's intention to engage in sexual behavior based on the Theory of Reasoned Action. The Theory Reasoned Action was a precursor to the Theory of Planned Behavior (Cha et al., 2007). Of the sources of the normative beliefs evaluated (mother, father, and peers), the adolescents' normative beliefs concerning their mothers was the most influential in predicting the adolescent's intent to abstain from intercourse. Thus, the intentions of early adolescent African American girls to abstain from early sexual intercourse are most influenced by their mothers, rather than peers and fathers (Doswell, 2003).

Hutchinson et al. (2003) examined the relationship between mother-daughter DSRTs and sexual risk behaviors, among a sample of 219 sexually experienced African-American and Hispanic female adolescents living in the inner city of Philadelphia, PA. Greater levels of DSRTs between the mother and daughter at baseline were associated with fewer episodes of sexual intercourse and fewer days of unprotected intercourse by the daughter at the 3-month follow-up. Mediation effects were evaluated using variables derived from the TPB (adolescent sexual attitudes, perceptions of maternal approval/disapproval, and self-efficacy toward the sexual behavior) to elucidate how mother-daughter DSRTs affects adolescent sexual behavior. Mother-daughter DSRTs was a significant predictor of condom use self-efficacy, when controlling for age of the adolescent. Also, mother-daughter DSRTs and condom self-efficacy were significantly associated with fewer days of unprotected intercourse at the 3-month follow-up. This study provides support that mothers who engage in DSRTs can influence their daughters' sexual behavior, reducing their sexual risk. One limitation of the study is its quantitative nature does not allow for the understanding the richness of the parent-child DSRTs processes. It also lacks variables related to what influences the mothers to engage or not engage in the DSRTs. This study supports the current study by demonstrating the strong link between mother-daughter DSRTs and the daughter's sexual activity. The findings are consistent with the Parent-Based Expansion of the Theory of Planned Behavior (PBETPB), which posits that parents influence the intention and behavior of adolescents. The study focused on the parent portion of the PBETPB and explored the impact of background factors and normative beliefs of Hispanic mothers' and their intention to engage in the DSRTs with their adolescent daughter.

Cha et al. (2007) used the TPB as a framework for a cross-sectional, correlational study to explain the intention to engage in premarital sex amongst Korean college students. Significant predictors of intention of premarital sex for female students include only premarital sexual attitude ( $\beta = .52, p < 0.01$ ) and referent group norms (assessing whether important persons in the adolescents' lives would approve of sexual behavior) ( $\beta = .42, p < 0.01$ ). Subsequently, Cha,

Kim & Patrick (2008) used TPB to study predictors of intention to practice safer sex among Korean college students and found that for young women it was only predicted by condom attitude and condom efficacy and not peer norms of condom use. Interestingly, higher condom efficacy was significantly predicted by quality of parent-adolescent communication for young men, but not women. While the aforementioned studies utilize the TPB, they focus on college students and adolescents as the sample and do not include parents. Since mothers are known to influence adolescents' sexual behavior, it is important to include the mothers' perspectives in order to understand what influences mothers to engage in the DSRTs.

**Intervention studies involving parent-adolescent DSRTs.** The following studies focus on parents as the sample related to DSRTs. Research focusing on parents includes various attempts to provide parents with the resources they need as the primary educators of their children involving DSRTs. Different interventions have been developed for parents including media interventions, computer-based interventions, and physician office based interventions. The following studies demonstrate the effectiveness of interventions aimed to increase DSRTs among a variety of different samples involving parents alone or parent adolescent-dyads.

One program that was found to be effective in teaching African American parents of preadolescents, sexual communication and HIV-prevention skills is the Parents Matter! Program (Miller et al., 2011). There were three intervention arms to the study (enhanced, brief, and control). The enhanced program involved a series of 5 sessions, lasting 2.5 hours each (treatment group) and focused on raising parents' awareness of adolescent sexual behavior; teaching them about how they can help their preadolescents avoid sexual risk behavior; teaching them parent skills known to reduce sexual risk behavior; and focused on efforts to increase parents' communication about SRTs with their adolescents. There was also a single abbreviated version of the treatment group which covered the same topics but in a single session, was primarily lecture, and did not allow time to practice the skills. In addition there was a control intervention, which focused on general health topics including how parents can help their adolescents establish

habits that reduce their risk of obesity, diabetes, cardiovascular disease and hypertension. Parents in the treatment group had increased perceptions of child readiness to learn about sex (16% vs. 29%;  $p < .001$ ) and a greater proportion of parent-child dyads reported consistent responses with one another, on topics including HIV/AIDS (15%, 95% CI = 8-21%;  $p < .001$ ), abstinence (13%, 95% CI = 7-20%;  $p < .001$ ), and condoms (15%, 95% CI = 9-22%;  $p < .001$ ) with increased communication in treatment group ( $p < 0.01$ ) (Miller et al., 2011). This study provides evidence that parent-based interventions aimed to increase parent-adolescent DSRTs can be effective and result in decreased sexual risk behaviors among adolescents whose parents receive the intervention.

Another intervention focused on parents increasing parent-adolescent communication also significantly influenced communication. A randomized controlled trial aimed to increase parent-child communication about waiting to initiate sexual activity, was conducted to evaluate the effects of media messages targeting parents on sexual beliefs of 404, predominantly White, adolescents (Palen et al., 2011). The intervention was a campaign consisting of television and radio public service announcements (PSAs) as well as print and outdoor advertising, a website and outreach centers. The PSAs showed adolescents asking their parents to talk to them about sex, early and often. Parents were recruited and those in the treatment group listened to a 60-second television PSA, a 60-second radio PSA, and two print PSAs. Thus, the intervention aimed to increase normative beliefs of the parents so they would be more likely to engage in DSRTs. The parents were surveyed prior to the intervention and a follow-up survey 4 weeks later. Measures also included the adolescents completing an online questionnaire concerning their beliefs about the benefits of abstinence and the consequences of sexual activity. Logistic regression was used to examine the impact of the parental exposure of PSA messages on three adolescent outcomes: Beliefs about abstinence as the best way to prevent health risks, beliefs about teen sex being psychologically harmful and beliefs about teen sex being physically harmful. Children of parents in the intervention group were significantly more likely to believe that teen

sexual activity is psychologically harmful to teens (OR = 1.63, 95% CI = 1.02, 2.63), when compared with children of control group parents. Parent exposure to the media intervention strengthened the adolescents' beliefs that adolescent sexual activity is physically harmful among adolescents who had at least one sexually active friend (OR = 1.84, 95% CI = 1.22, 2.78).

Although the study measured adolescent variables, it is apparent that the intervention influenced the parents to DSRTs. Limitations of the study included a lack of ethnic and socioeconomic diversity of the sample resulting in findings that may not be generalized to persons of different ethnic and socioeconomic groups. The study sampled mothers who are Hispanic and are of a low socioeconomic status in order to understand what factors influence their intention to engage in the DSRTs with their adolescent daughters.

Guilamo-Ramos et al. (2011) evaluated the efficacy of a parent-based intervention to prevent sexual risk behavior among Hispanic and African American adolescents. The intervention was delivered to mother-adolescent dyads in the waiting room of the physician's office while waiting for their adolescent to complete an annual physical exam. Both mothers and adolescents completed a brief baseline survey and then were assigned to parent-based intervention or a standard care control group. While their adolescents were with the physician, mothers assigned to the intervention group met with a social work interventionist for 30 minutes and then were given a packet of reference materials and family activities to use with her adolescent. After the physical exam, the adolescent went to the waiting room and the physician met with the mother and gave verbal endorsement of the intervention. Intervention group mothers received two booster calls, 1 month and 5 months post-intervention. The call involved a check-in to see if the mother reviewed the materials, implemented any of the activities, and to see if the mother had any questions. The intervention served to increase behavioral beliefs and control beliefs by giving mothers the tools they need to communicate with their adolescents and normative beliefs by making it known to the mothers that the adolescent's physician approves of the communication. Outcomes measured at baseline and 9-month follow-up included self-report

by the adolescent whether he or she ever engaged in vaginal intercourse, the frequency of sexual intercourse and the frequency of oral sex. The intervention group had statistically significant reduced rates of transitioning to sexual activity (going from never having had sexual intercourse to engaging in first intercourse) ( $p < .05$ ) and frequency of sexual intercourse ( $p < .05$ ) when comparing baseline assessment and 9-month follow-up. This demonstrated the parent-based intervention was an effective way of reducing sexual risk among Hispanic and African American adolescents. While the study was effective, the setting of a physician office does not capture those who do not go to the doctor. Also, mothers who take their children for annual physical exams may be more concerned with their child's health care needs including their awareness of their adolescent's sexual risk. The study sampled mothers of students at a school, which will include a more homogenous sample of Hispanic mothers.

Villarruel et al. (2008; 2010) conducted two randomized controlled trials to test a parent-adolescent based interventions to increase sexual risk communication among Mexican parents and their adolescent children. These studies were based upon the Theory of Planned Behavior. The first study tested an intervention, "*Cuidate!*" (*Take care of yourself!*) that aimed to increase parent-adolescent DSRTs among Mexican parents, living in Mexico (Villarruel et al., 2008). The intervention was a 6-hour program for parents and adolescents who were separated into a parent group and adolescent group when they arrived. They were randomized to either the HIV risk reduction condition or the health promotion control condition. The intervention took place over two consecutive Saturdays. The HIV risk reduction group for parents focused on parent-adolescent DSRTs and parent-adolescent communication in general. The health promotion control intervention provided participants with information regarding general health problems such as heart disease, cancer, and diabetes. This group stressed the important role parents play in promoting positive health behaviors. Primary measures for the study included general parent-adolescent communication, parent-adolescent sexual risk communication, and comfort with communication, measured on 5-point Likert scales. The TPB constructs of behavioral beliefs,

control beliefs, and normative beliefs related to DSRTs were measured as moderator variables. Parents (N = 791 (660 women, 131 men)) of adolescents ages 14-17 years, were measured at pretest, posttest, and 6 and 12 month follow-ups. Most of the families were in the medium income level and had a high school education or higher. Parents in the intervention group reported more general communication ( $p < .005$ ), more sexual risk communication ( $p > .001$ ) and more comfort with communication ( $p < .001$ ) than parents assigned to the health promotion control intervention. The constructs of TPB including behavioral ( $p < .001$ ), normative ( $p < .001$ ), and control beliefs ( $p < .001$ ) significantly mediated the effect of the intervention on all communication outcomes. Normative beliefs measured include adolescent approval, family approval, church approval regarding communication with adolescents about abstinence and sexual intercourse, and church approval regarding communication with adolescents about condom use. No other specific SRTs were included in the analysis. The study provides support that parents, family, and adolescents approve of DSRTs. Normative beliefs were assessed by several individual items on a questionnaire but there was not a normative belief instrument to assess overall normative beliefs. Further the items did not include individual members of the family but rather a reference to family in general. Another limitation of the study is that the investigators sampled a majority of the parents were from two parent homes, limiting the generalizability. Further, the number of sex-related topics included in the study was limited. Given the cultural concept of familism within the Hispanic culture, the study focused on the normative beliefs of Hispanic mothers and what the influence is on their intent to engage in the DSRTs. The study also examined mothers' intentions to discuss 11 different SRTs.

The second of the randomized controlled trials conducted by Villarruel et al. (2010) tested the efficacy of a computer-based version of “*Cuidate!*” (*Take care of yourself!*) as an intervention for Hispanic parents which was guided by the Ecodevelopmental Theory and the TPB. The Ecodevelopmental Theory posits that family is an ideal system for influencing adolescent risk and protective behaviors as it proposes family as the most fundamental system

influencing human development. Just as in the previous study (Villarruel et al., 2008), the program aimed to increase parent-adolescent DSRTs among Hispanic parents and adolescents and was tested in a randomized-controlled trial. Parents in the intervention group received a 2-session intervention and reported greater general communication ( $p < .005$ ), more sexual communication ( $p < .001$ ), and more comfort with communication ( $p < .001$ ) than parents who were assigned to the wait-list control intervention. While the previous studies were effective in increasing DSRTs between parents and adolescents, none of the studies explored including extended family or other normative referents in the interventions. Further, the interventions were time consuming. The study included analysis of the influence of normative referents on Hispanic mothers' intentions to engage in DSRTs. This may lead to a more focused intervention including mothers' most influential normative referents.

The review of the literature provides support for the PBETPB relationships related to mother's intention to engage in DSRTs (Askelson et al., 2011), the actual behavior of engaging in DSRTs (Miller et al., 2011; Palen et al., 2011; Villarruel et al., 2008; Villarruel et al., 2010), and how the DSRTs impacts the actual behavior of adolescents (Hutchinson, 2002; Hutchinson et al., 2003; Guilamo-Ramos et al., 2011). Normative beliefs have been reported to significantly mediate interventions aimed to increase DSRTs (Villarruel et al., 2008). Previous intervention studies involving Hispanic parents have been effective in increasing parent-adolescent DSRTs (Guilamo-Ramos et al., 2011; Villarruel et al., (2008; Villarruel et al., 2010). However, the studies are lacking a sound instrument to measure Hispanic mothers normative beliefs, intentions, and background factors that may influence their intention to engage in DSRTs. Due to the nature of the Hispanic culture and familism, social norms or normative beliefs may enhance the effectiveness of future interventions. While Hispanic mothers want to communicate about SRTs it is hypothesized that this communication does not occur because of acculturation, familism, and social norms specific to this group. Thus, the study measured mothers' normative beliefs,



intentions, and background factors regarding the DSRTs, utilizing the newly developed RNBI.DSRT.

### **Qualitative Studies**

Various qualitative studies have explored the topic of parent-adolescent DSRTs. These studies have facilitated the understanding of parents' interpretations of the DSRTs and the contexts surrounding the topic as well as adolescents' perceptions of the DSRTs by parents. Guilamo-Ramos et al. (2006a) explored the content and process of mother-adolescent DSRTs by conducting 18 focus groups with 63 Hispanic mother-adolescent pairs in New York City, with mothers and daughters assigned to separate focus groups. Overall, the adolescents wanted to engage in DSRTs with their mothers but most did not out of fear their mothers would think they are sexually active and as a result would be punished. According to Hispanic mothers, they discussed waiting to have sex and the consequences of sexual activity but were not able to discuss fact-based topics such as sexual intercourse and birth control (control beliefs). The authors attributed these findings to the mothers having been raised in a culture not supportive of open dialogue about sex (normative beliefs), while recognizing the sexual risks the adolescents face. Mothers explained that sex was not discussed within their own families when they were growing up which made DSRTs more difficult (normative beliefs). The mothers found it helpful to include other members of the family in their discussions, thus supporting the need to study familism, normative beliefs and individual normative referents that influence Hispanic mothers' intentions to engage in DSRTs.

Wilson et al. (2010) performed a qualitative study to gain parents' perspectives in talking to preteenage children about sex and to understand their attitudes and experiences surrounding the topic. Focus groups were conducted with 131 mothers and fathers of children aged 10-12, with separate focus groups for mothers, fathers, and for black, white, and Hispanic parents. Content analysis was used to identify themes. These investigators reported that while parents believed it was important to talk with their adolescents, they perceived their children as too young and did

not know how to talk about the subject. Hispanic parents emphasized the fact that their parents never talked to them about sex so that made it difficult to know how to talk (control beliefs) to their own children about this topic. Some Hispanic parents said that aspects of acculturation such as language (children speaking more English and parents more Spanish) and cultural barriers (American culture's emphasis on children's individuality) between parents and children might make communication difficult (control beliefs). This finding supports the need to study acculturation as a background factor to understand how cultural dynamics influence Hispanic mothers' intentions to engage in DSRTs.

Gilliam (2007) conducted seven focus groups with 40 Hispanic females, ages 18 to 26, to understand the role of parents and partners that may contribute to teen pregnancy susceptibility or resistance. These Hispanic females reported that open communication about sexuality and contraception rarely occurs in their families. Their mothers spoke about broad themes prevalent in their culture regarding sexuality and pregnancy outside of marriage. The daughters perceived their mothers (normative beliefs) as unable and unwilling to engage in DSRTs.

Fantasia (2011) conducted a qualitative study examining the influences of social norms and context (their perception what is expected of them regarding sexual activity and relationships) on sexual decision-making among adolescent women. In addition to discussing the influence of peers (normative beliefs) and perceived social norms (normative beliefs), all of the participants identified their parents as their preferred information source but described DSRTs as "difficult" and most participants said that their parents did not engage in DSRTs during their youth. These findings support for the current study because adolescent females identified their parents as their preferred source of information but DSRTs between them was lacking. These studies (Gilliam, 2007; Guilamo-Ramos et al., 2006a) support the need to understand why Hispanic mothers do or do not engage in DSRTs. The overwhelming theme from the qualitative studies of Hispanic parents is that their parents did not engage in the DSRTs so they do not know how to do it with their own children. The fact that their parents did not engage in DSRTs with

them may lead them to have lower normative beliefs related to the DSRTs. Overall the qualitative studies appear to indicate the importance of mother's past experience with her mother and normative beliefs in the context of the DSRTs between Hispanic mothers and daughters.

### **Summary of the Gaps in the Literature**

To summarize, these previous studies demonstrate that there is a need to understand how Hispanic mothers' normative beliefs and background factors influence their intentions to engage in the DSRTs with their adolescent daughters. However, while parents have been identified as influencing adolescents, the dynamics unique to Hispanic mothers' intentions to engage in DSRTs is unclear. Further, it is unclear which normative referents have the greatest influence mothers' intention DSRTs most. This is important in order to tailor culturally appropriate interventions among Hispanic groups, aimed to increase DSRTs. Also the studies identified did not employ valid and reliable normative belief instrument. While one study measured normative beliefs using a limited number of items (Villarruel et al., 2008), future projects in this area may benefit from an instrument that identifies specific persons as normative referents. The identification of specific normative referents included in a normative beliefs instrument will allow for a summative and individual item analysis. Given that Hispanic families often live in close proximity with one another, the identification of specific normative referents will be helpful in designing interventions integrate extended family members and important others into the intervention.

While there is some evidence that mothers' normative beliefs mediate DSRTs (Villarruel et al., 2008), the evidence is preliminary and inconclusive with no sound instrument to operationalize the variables. None of these previous studies have taken place at a school, utilizing the mothers of the female adolescents as the sample. Given the strong family and cultural values in the Hispanic community, it appears prudent to develop a better understanding of the normative beliefs influences on the intentions' of Hispanic mothers. Familism, high regard for the family, is the cornerstone of Hispanic culture (Coohey, 2001). As Hispanic mothers' native culture meets

the American culture, acculturation takes place to varying degrees, and may impact Hispanic mothers' intention to engage in the DSRTs. Important people in their lives may approve or disapprove of the behavior of DSRTs. Thus it is important to understand the nuances of normative beliefs and the influence of this concept on intention and behavior related to DSRTs.

Due to paucity of research utilizing the TPB framework examining Hispanic mothers DSRTs with their adolescent daughters, further study was required to understand what influences this population's intention to engage in this behavior. There were no instruments available based on TPB to measure intention of mothers regarding DSRTs, past experience with DSRT, past DSRT behavior, nor are there instruments to measure Hispanic mothers' normative beliefs including reference to specific family members on DSRTs. This study was needed to identify TPB constructs that predict DSRT intention and behavior among Hispanic mothers. To date, no previous quantitative study has examined the predictive influence of acculturation, familism, and normative beliefs using established instruments among Hispanic mothers of adolescent daughters. The primary purpose of this study was to examine the influence of background factors and normative beliefs of Hispanic, Catholic mothers on their intention to engage in the discussion of sex-related topics (DSRTs) with their adolescent daughters. The secondary purpose of this study was to test the validity and reliability of the subscales of the RNBI.DSRT. The qualitative portion of the study served as method triangulation. The combination of both quantitative and qualitative methods provided a more complete understanding of Hispanic mothers' DSRTs with their adolescent daughters. The results from the quantitative portion will inform researchers and clinicians regarding the relationships between background factors, normative beliefs, and intentions regarding DSRTs in order to identify which normative referents can be included in an intervention aimed to increase DSRTs. The results from the qualitative portion of the study offers detailed descriptions of Hispanic mothers' DSRTs with their adolescent daughters.

### **Review and summary of research questions and hypotheses**

The primary purpose of this study is to examine the influence of background factors and normative beliefs of Hispanic, Catholic mothers on their intention to engage in the discussion of sex-related topics (DSRTs) with their adolescent daughters. The secondary purpose of the study is to test the validity and reliability of the subscales of the RNBI.DSRT. To address the primary purpose of the study and the following research questions were explored:

**Research Question 1:** How do Hispanic mothers' background factors (mother's education level, daughter's age, past behavior, past experience, acculturation, familism) influence their normative beliefs regarding the DSRTs?

**Research Question 2:** How do Hispanic mothers' scores on the normative beliefs subscale influence their scores on the intentions subscale?

**Research Question 3:** How do Hispanic mothers' background factors (daughter's age, past behavior, past experience, familism) and normative beliefs influence their intentions regarding the DSRTs?

The secondary purpose was achieved by addressing the following research questions:

**Research Question 4:** What is the internal consistency (reliability) of the RNBI.DSRT and the RNBI.DSRT subscales?

**Research Question 5:** What evidence for convergent validity does the RNBI.DSRT demonstrate?

**Hypothesis 1.** Mothers' scores on the intention subscale are directly correlated with their scores on the normative belief subscale.

#### **Assumptions of the study**

The assumptions of the study are based upon use of the TPB as the conceptual framework (1-3; Fishbein & Ajzen, 2010), and those established from working with human subjects (4-5).

- 1.) Normative beliefs is a predictor of intention among this sample.
- 2.) Actual behavior is predicted by behavioral intentions.

- 3.) Women who participate in this study represent all Hispanic women in the community.
- 4.) Mother's responses in the focus groups were honest.
- 5.) Mothers were able to reflect on their intentions regarding DSRTs with their adolescent daughters and honestly communicate the influences on her intentions with the investigator.

### **Chapter Two summary**

This chapter presented an overview of the conceptual frameworks, the Theory of Planned Behavior and the Parent-Based Expansion of the Theory of Planned Behavior, used to guide the study. An overview of the philosophical underpinnings of the study, post-positivism and constructivism, was also presented. Parent-adolescent DSRTs has been shown to decrease adolescent sexual risk (Hutchinson et al., 2003; Guilamo-Ramos et al., 2011). Several studies support the TPB relationships related to parent-adolescent DSRTs (Askelson et al., 2011; Askelson et al., 2012; Villarruel et al., 2008; Villarruel et al., 2010). However, there is limited information regarding the influences that predict Hispanic mothers' intentions to engage in the DSRTs. Due to the gaps revealed through the literature review, further study was needed to investigate the PBETPB relationships related to Hispanic mothers and their intention to engage in DSRTs with their adolescent daughters. Also, it was necessary to study the use of the RNBI.DSRT to measure Hispanic mothers' intentions and normative beliefs as they relate to the DSRTs with their adolescent daughters. Feasibility of the methods of data collection and face validity was supported by the pilot study. The combination of the quantitative portion of the study with qualitative data that emerged from the focus group offers a more complete understanding of Hispanic mothers' DSRTs with their adolescent daughters (Rinaldi Carpenter, 2011).

## CHAPTER THREE

### Research Design and Methods

#### Introduction

This chapter will describe the methodology used to address the primary and secondary purposes of the study. The initial section of this chapter will describe the study design and the methods used to obtain the sample. This section will be followed by a description of the instruments used for the quantitative portion of the study. Then the procedure for conducting the focus groups will be presented in order to obtain the qualitative data. Throughout the chapter, rationale will be provided for components of the study based on preliminary studies. Measures taken to protect human subjects will be described. Finally data management and analysis will be presented.

#### Research Design

The study utilized a sequential mixed-methods predictive correlational design examining the influence of background factors and normative beliefs of Hispanic mothers on their intention to engage in the discussion of sex-related topics (DSRTs) with their adolescent daughters. The study also tested the validity and reliability of the subscales of the Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (RNBI.DSRT). Data were collected both quantitatively and qualitatively in order to support the validity of the responses. The quantitative data were collected first in order to test the selected concepts of the Theory of Planned Behavior (TPB). The focus groups involved a detailed exploration of a subset of the participants from the quantitative portion of the study. The focus groups allowed the participants' language and voices about the topic to be heard and to help explain the quantitative results in more depth (Creswell, 2009; Munhall, 2012). Paper and pen instruments were administered in the language of the participant's choice, English or Spanish. These instruments were printed in Arial font in order to increase legibility (Dillman, Smyth, & Christian, 2009). Focus groups to

collect the qualitative data were conducted in Spanish to accommodate the majority of participants who have Spanish as a native language. Previous research has indicated people feel most comfortable engaging in focus groups in their native language (Twinn, 1998).

A mixed-methods design allowed for an in-depth understanding of the relationships between Hispanic mothers' background factors, normative beliefs, and intentions regarding DSRTs with their adolescent daughters. The quantitative portion of the study allowed for objectively testing the selected constructs of the TPB including background factors, normative beliefs and intentions (Hulley, Cummings, Browner, Grady, and Newman, 2007). Objectively testing the constructs was done through the use of statistical analyses to test the given theory (TPB) and to examine the associations among variables (Hulley et al., 2007). In addition, the qualitative portion, allowed the researcher to gain an understanding of the Hispanic mothers related to the DSRTs, by allowing them share their thoughts and experiences in the context of a focus group (Munhall, 2012). The qualitative data were collected by recording the dialogue of the participants during focus group participation. The recorded focus groups were transcribed verbatim by a transcription company. The researcher then interpreted the data through directed content analysis, which resulted in themes of responses. The results from the focus groups were used to further understand the quantitative analyses (Creswell & Plano Clark, 2007). Thus, the study used both quantitative and qualitative methods to examine influence of Hispanic mothers' background factors and normative beliefs on their intentions to engage in the DRSTs with their adolescent daughters.

### **Sample and Setting**

A convenience sample of Hispanic mothers of 6<sup>th</sup> to 8<sup>th</sup> grade girls was recruited from two Catholic middle schools in the Midwest. A convenience sample was appropriate because the sample sufficiently represented the target population and thus was necessary in order to address the purpose (Hulley et al., 2007). G\*Power (Faul, Erdfelder, Lang, & Buchner, 2010) was used to calculate the sample size for a linear regression model with a medium effect size of 0.15 and 8



predictors (Cohen, 1988). Familism, past behavior, past experience, and age of the daughter were included as potential predictors of Hispanic mothers normative beliefs. “Normative beliefs” was the RNBI.DSRT construct used to predict intention. Acculturation and education level were background factors that served as descriptor variables due to the demographic homogeneity of the sample. With a significance level of 0.05 and 80% power, 109 participants were needed for the analysis. A sample size of 119 was collected to account for 10% incompleteness rate. A convenience sample of 119 Hispanic mothers of adolescent females grades 6 through 8 from two Midwestern Catholic Middle Schools was enrolled from a pool of approximately 300 identified at two middle schools.

The setting of this study is unique because it takes place at two Catholic schools that have enrollments of 99% Hispanic students. Both schools are located in the inner city and serve a majority of students who are at or below the Federally designated poverty level. The schools are located within two miles of one another. St. Anthony School has 67 sixth grade girls, 64 seventh grade girls, and 52 eighth grade girls for a total of 183 potential subjects. Ninety-nine percent of the students at this school are part of the School Choice program, which means they receive a voucher from the state to utilize for the private school. Similarly, 99% percent of the students at St. Anthony School take part in the Federal Free and Reduced Lunch Program. The School Choice Program and the Free and Reduced lunch program are both indicators of the low socioeconomic status of the schools. The second middle school Notre Dame Middle School (grades 5<sup>th</sup> – 8<sup>th</sup>) is an all girls Catholic Middle School and has 117 students in grades 6 through 8. Ninety-four percent of the students participate in the School Choice program and 90% participate in the Free and Reduced Lunch Program. Also the schools have not had sexual education programs for their students aside from addressing puberty/body changes and healthy relationships. Both schools boast the most important aspect of their school culture is faith.

Inclusion criteria for the study was as follows: Mothers or primary female caretakers (e.g. aunt, step mother, grandmother), were included in the study if they identified themselves as

Hispanic, if they speak Spanish or English, and if they have a daughter in grades 6<sup>th</sup> through 8<sup>th</sup> at one of the two schools. Primary female caretakers (legal guardians) were included if they live with the adolescent daughter are the primary caretaker of the child. For example, if the girl lives with her aunt and the aunt is the legal guardian, the aunt may be included in the study. The investigator chose mothers of sixth through eighth grade females because the literature supports beginning sexual education during these grades (Guilamo-Ramos et al., 2009; Wyckoff et al., 2007). Further, sixth to eighth grade is generally prior to initiation of sexual intercourse, as only 6% of teens have had sex before age 15 (Finer & Philbin, 2013). The study examined the unique relationship between daughters and mothers because daughters want their mothers to discuss SRTs with them but the discussions often do not take place (Collins Fantasia, 2011; Hutchinson, 2002; Sprecher et al., 2008).

Some difficulties that have been cited in recruiting Hispanic individuals in research include: individuals mistrust of research, concerns regarding confidentiality, and individuals may lack time for participation (Chung et al., 2007). Additional barriers include lack of transportation, interference with work and family responsibilities, subject burden as a results of participation in a clinical study, and financial costs (U.S. Department of Health and Human Services, 2002). While some of the cited barriers refer more to experience with clinical trials, these barriers were addressed in the current study. In order to avoid some of the difficulties in recruitment, verbal and written confidentiality was ensured to the participants. The research was conducted at the school where the participants' children attend and thus are at the school regularly. Further, the investigator is a nurse at one of the schools and thus has ties to the community. The researcher's ties to the community have allowed access to the schools and have eased the process of approval by school administrators. The pilot study was conducted at St. Anthony School who welcomed the investigator to complete the study there as well.

## Instruments

### **Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (RNBI.DSRT)**

**Instrument development.** There was no instrument available to measure normative beliefs of Hispanic mothers related to the DSRTs with their adolescent daughters. Thus, the investigator developed a new instrument to measure mothers' normative beliefs, intentions, past behaviors, and past experiences related to DSRTs. The Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (RNBI.DSRT) is comprised of four subscales including mothers' normative beliefs regarding DSRTs, intentions regarding DSRTs, past behaviors regarding DSRTs, and past experiences regarding DSRTs. The pilot study internal consistencies for the two 7-point Likert subscales, normative beliefs and intentions, were 0.13 and 0.68, respectively. Internal consistencies for the two yes/no subscales were as follows: past behavior subscale (items 22-32) alpha was .92; and past experience subscale alpha of .93. However, the sample was small (n=20). See Appendix A for English and Spanish versions of RNBI.DSRT.

The 11-item RNBI.DSRT normative belief subscale (items 1-11) includes a series of statements concerning what the participants believe important people in their lives would think of them engaging in DSRTs with their daughter. The first version of the normative belief subscale (items 1-10) included important people in their lives as the mother's mother, the mother's father, health care provider, and priest. After the pilot focus group was conducted it was evident an additional normative referent needed to be added, and daughter's godmother (comadre). An 11<sup>th</sup> normative belief item was added to the normative belief subscale. The sex-related topics (SRTs) included in the instrument include sexual intercourse, oral sex, not having sex, pregnancy, sexual diseases, HIV, emotional consequences of sex, religious and cultural beliefs about sex, and beliefs about birth control. The subject responds to each item on a 7-point Likert scale with 1 as

*strongly disagree* and 7 as *strongly agree*. The item responses are then summed to result in a normative beliefs score ranging from 11-77.

The 11-item RNBI.DSRT intention subscale (items 12-22) queries mothers' intentions to discuss the various SRTs within the next three months with their adolescent daughter. Responses to the 11-item intention subscale are also made on 7-point Likert scale with 1 as disagree and 7 as agree and were summed with scores ranging from 11-77.

The 11-item RNBI.DSRT past behavior subscale (items 23-33) asks the respondent to indicate if they have previously engaged (yes or no) in a discussion with their adolescent daughter about a variety of SRTs. The responses (1=yes, 2=no) to items in the subscale were summed to arrive at a past behavior score ranging from 11-22, with higher score indicating lower behavior scores.

The 11-item RNBI.DSRT past experience subscale (items 34-44) asks the respondent to indicate if their mother (or women who raised them) discussed with them (yes or no) when they were adolescents, a variety of SRTs. The responses (1=yes, 2=no) to items in the subscale were summed to arrive at a past experience score ranging from 11-22, with higher score indicating lower presence of past experience of their mothers discussing SRTs.

### **Demographic Questionnaire**

Background factors from the TPB include demographic variables. Demographic information was collected using a demographic questionnaire that requested the respondent to disclose her age, her relationship to the child (biological mother, step mother, grandma, aunt), the number of children in the household and their ages, marital status, if the father of the daughter lives in the home, education level, religion, church attendance, place of birth, ethnic background and generation status (See Appendix A). Generation status refers to how many generations the participant and her family has been in the United States. First generation means the participant was born outside of the U.S. and came to the U.S.; second generation means participant was born inside the U.S. with at least one parent born outside of the U.S.; third generation or more means

the participant was born in the U.S. and both parents were born in the U.S.

### **Background factors**

In addition to demographic variables, other background factors that were collected include past behavior, and past experience, acculturation and familism. Past behavior and past experience were quantified as subscales of the RNBI.DSRT, as described above. The descriptions of the tools to gather information about acculturation and familism will be presented here.

### **Brief Acculturation Rating Scale for Mexican Americans-II (ARSMA-II)**

Acculturation is the social process when two cultures come into repeated or prolonged contact with one another, involving changes in cultural patterns (Valentine & Mosley, 2000). Acculturation is a combination of psychological, behavioral and attitudinal changes that occur during this social process (Cabassa, 2003). Acculturation was measured by the 12-item Brief Acculturation Rating Scale for Mexican Americans-II (ARSMA-II; (Bauman, 2005) (See Appendix A). It is derived originally from ARSMA (Cuellar, Harris, & Jasso, 1980). Despite it being the most popular measure to assess acculturation (Cuellar, Arnold, & Maldonado, 1995), it was refined to ARSMA-II, to reflect growing interest in multidimensional measures of acculturation. The most recent version by Cuellar is the Brief ARSMA-II (Bauman, 2005). The shortened version was chosen to avoid participant fatigue that may take place with the use of longer instruments. The 12-item Brief ARSMA-II consists of two sub-scales, the 6-item Mexican Oriented Scale (MOS) and the 6-item Anglo Oriented Scale (AOS) with items rated on a 5-point Likert scale ranging from 1 (not at all) to 5 (almost always). The instrument assesses language preferences, media preferences, and social interactions. Previously reported internal consistency (Cronbach's alpha) of the MOS ranging from .75 to .93 and for the AOS ranging from .69 to .75 among middle school and elementary school students of various ethnic identities (Bauman, 2005). The Brief ARSMA-II may be scored from a linear (unidimensional) or bidimensional (orthogonal) perspective (Bauman, 2005). For the purposes of the current study, the orthogonal

scoring method was used. The MOS scale is scored by adding items (1, 3, 6, 7, 8, & 11), obtaining the sum, and dividing the sum by six, which provides the mean of the MOS scale. The AOS scale is scored by adding (2, 4, 5, 9, 10, & 12), obtaining the sum, and dividing the sum by six, which provides the mean of the AOS scale. In order to score for orthogonal acculturation categories, cut points are used to identify four typologies: High Biculturals, Marginals (Low Biculturals), Traditionals, and Assimilated types. The cut points are as follows: Traditionals (MOS  $\geq$  3.59, AOS  $\leq$  3.24); Low Biculturals (Marginalized) (MOS  $<$  3.59, AOS  $<$  3.7); High Biculturals (MOS  $>$  3.59, AOS  $>$  3.7); Assimilated (MOS  $\leq$  2.44, AOS greater than or equal to 4.11). Those who do not fall into any of the categories are considered unclassified (Bauman, 2005).

#### **Pan-Hispanic Familism Scale (PHFS)**

Familism is the cultural concept used to describe the high value Hispanic individuals place on their family and family relationships (Coohey, 2001). Attitudinal familism was measured by a 5-item familism scale with higher scores indicating a greater commitment to one's family (1 = *strongly disagree* to 5 = *strongly agree*). Possible scores range from 5 to 25. Sample items include: "I am very proud of my family," and "My family members and I share similar values and beliefs." This instrument was found to have an internal consistency of .82 when tested with a sample of 762 men and women between the ages of 18 and 65 years (Villarreal et al., 2005; Pan-Hispanic Familism Scale) (See Appendix A). A one-factor confirmatory factor analysis using robust maximum likelihood (RML) estimation demonstrated scale validity. All estimates factor loadings were large relative to their standard errors ( $p < .001$ ). The factor structure holds across three countries of origin (United States, Mexico, and Latin America) and two languages (Spanish and English) (Villarreal et al., 2005). Additional studies found adequate internal consistency with varying samples: a study of 186 Mexican American college men found the internal consistency to be .95 (Ojeda, Navarro, & Morales, 2011); a study of 36 Hispanic immigrants found the internal consistency to be .85 (Santiago-Rivera et al., 2011).

### Pilot Study

The review of the literature indicated that no established instrument currently exists to measure normative beliefs and intentions relevant to DSRTs among Hispanic mother. Also, previously employed methods to measure normative beliefs did not account for specific normative referents that might be the important people in the mothers' life. Beyond normative beliefs, there is also no established instrument to measure Hispanic mothers' intentions regarding the DSRTs with their adolescent daughter. As a result, the 44-item Rodriguez Normative Beliefs Instrument Regarding the Discussion of Sex-Related Topics (RNBI.DSRT) was developed by the investigator to address this need for a comprehensive instrument to evaluate normative beliefs, intentions and other influences on the DSRTs by Hispanic mothers with their adolescent daughters. The purpose of this preliminary study was to determine content and the face validity of the RNBI.DSRT and to establish feasibility of the methodology being proposed in the current study.

The 44-item RNBI.DSRT was developed by the investigator, based on recommendations for instrument development using the Theory of Planned Behavior (Francis et al., 2004). The RNBI.DSRT consists of four subscales (normative beliefs, intention, past behavior, and past experience). The normative beliefs and intention subscales consist of 7-point Likert responses (*1-strongly disagree, 7-strongly agree*). The past behavior and past experience subscales consist of yes/no responses. The instrument was created based on recommendations by Ajzen (2012). (See Appendix A for the English and Spanish versions of RNBI.DSRT.) The initial version of the RNBI.DSRT was reviewed by three doctorally prepared nurses for content and face validity. Suggestions were aggregated and the appropriate revisions were made. Then the RNBI.DSRT was then reviewed by two nurses who provided suggestions in modifying the instrument to a sixth grade reading level. The RNBI.DSRT was then translated to Spanish by a native Spanish speaker and subsequently reviewed by a bilingual Doctoral Student in nursing. The instrument was then back translated from Spanish to English to ensure accuracy of the initial

translation.

Face validity of the instrument was established by administering the RNBI.DSRT instrument at middle school parent teacher conferences to the Hispanic mothers of girls in grades 6-8. There were approximately 160 mothers of 6<sup>th</sup> – 8<sup>th</sup> grade girls who were expected to attend the mandatory parent-teacher conferences over a two-day period. Research assistants were seated at a table near the entrance of the school building. As the mothers entered and exited parent teacher conferences, they were asked to complete the questionnaire. The mothers stood or sat near the research table with a clipboard, answering each question. When completed, the questionnaires were reviewed by the research assistant for completeness and deposited into a survey box. The last page of the questionnaire asked mothers to include their contact information if they were willing to participate in a focus group regarding the questionnaire. The participants were given a \$10 gift card for completing the questionnaires.

The investigator reviewed the completed questionnaires and contacted the mothers who volunteered to participate in a focus group. A focus group of four Hispanic mothers was conducted to determine if the questions made sense to the participants. This goal was achieved by handing out blank questionnaires, allowing time for review, and then asking the mothers what they thought of the questions. Important feasibility information emerged that supports the methods of the current study. Overall, mothers understood how to complete the instrument and were willing to complete it. They thought the questions made sense and that the topic of DSRTs is important.

After reviewing the focus group audiotapes and field notes taken during the focus group sessions it was determined that changes needed to be made to the sampling methods. Of the potential 160 mothers of adolescent females who were to come to parent teacher conferences, 30 mothers who were approached by the research assistants, 20 mothers completed the survey, a 67% response rate. Of the 20 who completed the survey, eight agreed to participate in the upcoming focus group and of the eight, six said it would work with their schedule and four



mothers actually attended the focus group. The mothers from the focus groups thought the venue of parent-teacher conferences was not ideal because they had other children with them and felt they did not have adequate time to complete the instrument. They said they would prefer to be able to bring the completed consent, demographic information and instruments to the office. They also thought “comadre” should be added as a normative referent. As a result, the investigator determined the current study would sample mothers by sending home announcements with the female students of the middle school and requesting the mothers to come to the school during a scheduled meeting time.

Reliability of the RNBI.DSRT was evaluated by calculating Cronbach’s alpha for all four of the subscales. Internal consistency for the normative belief scale (items 1-10) was 0.13; the intention scale (items 11-21) alpha was 0.68; the past behavior subscale (items 22-32) alpha was .92; and the past experience subscale had an alpha of .93. While there is some preliminary evidence of adequate internal consistency, the sample size was small (n=20). Due to the small sample size and violations of normality, confirmatory validity was evaluated by performing a Wilcoxon-Mann-Whitney test to compare the normative beliefs of mothers who discussed sex-related topics with their daughter in the past with those that had not. Each of the 11 behavior items, statements about whether mom has discussed different sexual topics, was evaluated separately by a Wilcoxon-Mann-Whitney test. The analysis indicated a trend in the hypothesized direction, that mothers who had higher normative beliefs answered affirmatively, indicating those with higher normative beliefs, have discussed SRTs in the past.

This pilot study supported the feasibility of the proposed approach to gathering data and supports the face validity and content validity of the RNBI.DSRT. The pilot study further demonstrated that the mothers would complete the questionnaire, that they were able to understand the questions, and that they would attend the focus group. Finally the pilot study provided initial support for the content validity of the RNBI.DSRT because mothers who discussed SRTs in the past exhibited higher normative beliefs. Due to the small sample size it

was clear that there was a need to test the instrument with a larger sample. Thus, the current study allowed for a more accurate appraisal of the newly developed RNBI.DSRT.

### **Procedure**

Data collection occurred from October 2013 through December 2013. Subjects were recruited from two Catholic Middle Schools in Southeastern Wisconsin. Written permission was obtained from school administrators (Appendix B). A pre-notice letter (Appendix A) was sent home with all female students in each middle school one week prior to data collection announcing the study and asking mothers to come to the school to complete the questionnaire during the designated before or after school timeframes. The letter was sent home during the second week of September 2013 and the data collection took place the third week of September 2013. This timeframe was a few weeks after school begins, thus allowing children and families to get settled with their new routines, prior to the start of the study. A verbal announcement was made to the students the day prior to data collection by the principal encouraging the students to remind their mothers about the study.

Data collection began in October 2013 at each of the schools. Mothers were invited to come to school 20-30 minutes prior to the start of school or over a four-hour period after school, on a date agreed upon by school administrators to engage in the study. During this time they had the opportunity to complete the consent form and the quantitative instruments. A second date was offered a week later for mothers who were unable to attend the first date. During the scheduled data collection sessions, a research assistant (RA) who has been trained and approved by the Institutional Review Board (IRB) at Marquette University assisted the primary investigator in answering any questions the mothers have during the consent process. The quantitative instruments were completed at St Anthony's School in the school library, which is adjacent to the entryway and office. The questionnaires were completed in a conference room at Notre Dame Middle School, which is adjacent to the school office. Eligibility for the study was determined by the investigator or the RA asking the participants three screening questions: Are you Hispanic?;

Are you the mother or primary caretaker of a 6<sup>th</sup> to 8<sup>th</sup> grade girl? They were also asked if they wanted to complete the questionnaire on their own or if they wanted the RA to read it to them. If they met the screening criteria, they were consented and then completed the questionnaire packet.

After this initial recruitment effort elicited only 40 mothers, an addendum was added to the IRB proposal that modified the recruitment by having secretaries at St. Anthony School to call mothers utilizing an IRB approved script to schedule appointments for the mothers to come and complete the data collection instruments. The script included the assurance that their participation was completely voluntary and would no way impact their daughter's academic success. The RA or PI was present during the appointments in order to answer questions. An additional 79 mothers were recruited in this manner. A final item on the data collection questionnaire asked the participants if they would like to participate in a discussion group about the topics that were on the questionnaire. They were asked what days of the weeks and times worked best for them. Mothers who responded positively to this question were then called according to their availability until 10 mothers were recruited for each focus group. They were given a reminder call the day before the focus group. Of the ten participants recruited for each of two focus groups, seven participants attended the first focus group and ten participants attended the second focus group. The investigator conducted focus groups to allow participants' language and voices about the topic to be heard and to help explain the quantitative results in more depth. It is recommended to have 4-20 participants in a focus group but in order to make the groups more manageable, 10 mothers were recruited for each focus group (McLafferty, 2004). Three mothers did not come to the first focus group as they said they would and thus the first focus group had only seven mothers.

Mothers who completed the questionnaire received a \$10 gift card. The RA or PI administered incentives after reviewing the questionnaire for completion. The questionnaire and consent took approximately 20 minutes to complete based on the pilot study completion time.

After the forms were completed, they were deposited into a locked survey box.

The informed consent was written in plain language (both English and Spanish) assuring the mothers that participation in the study is completely confidential and voluntary and that they may withdraw from the study at any time. They were also told that their involvement in the study will not influence their child's education at the school. The separate focus group consent form alerted the mothers that the dialogue would be recorded. This focus group consent also included a disclosure stating that if the focus group reveals anything such as abuse of a child of a participant, the research team is obligated to report it to The Bureau of Milwaukee Child Welfare.

Participants completed the pen and paper instruments: demographic questionnaire, RNBI.DSRT, Brief ARSMA-II, and PHFS in the school library. The final page of the instrument packet requests the subject to indicate their willingness to participate in a focus group (Appendix A). If participant was interested, she noted her name, phone number, and availability on the final page of the packet. After data collection, the investigator reviewed the quantitative data responses of the participants who would like to participate in a focus group. Subjects who were willing to participate were divided into two focus groups based upon their availability. Ten mothers were recruited for each focus group to account for an anticipated number of mothers who might commit to the focus group and then not attend the session. The anticipated number of participants who will not attend is due to the experience with the pilot study where eight mothers agreed to participate in the focus group and four attended. The focus groups took place in December 2013 in a private conference room at the one of the schools at a time convenient for the sample to attend. Refreshments and childcare was provided to mothers at the school while they were in the focus group.

Confidentiality of discussion focus group participants was maintained by starting the group sessions by telling the participants that the information is confidential and will only be used for research purposes and available to only members of the research team. No personal identifiers were included in the findings of the study. The focus group members completed the same demographic questionnaire as used in the quantitative portion of the study in order to

describe the focus group sample. The focus group sessions were audio recorded. Focus groups were conducted in Spanish to accommodate the sample. The primary investigator speaks Spanish and the second research assistant who led the focus group is a nurse who is fluent in Spanish. The primary investigator trained the second research assistant and provided a semi-structured interview guide for the research assistant to use when facilitating the focus group (See Appendix A). The guide included a script delineating what should be said prior to the start of the focus groups. The primary investigator took notes and was present to be sure all key questions are addressed.

Prior to beginning the focus group, participants completed a consent form specific to the focus group participation. They also completed the same demographic questionnaire as the quantitative portion in order to describe the focus group sample. The research team used a semi-structured interview guide for the focus groups. Both focus groups began by the group facilitator explaining the purpose of the study and defining SRTs. In order to reduce conflict, the research assistant then explained the focus group rules including respect for others' opinions, not talking over one another, allowing everyone to have a turn, and then everyone was reminded to maintain confidentiality. In addition to audio recording, while the Spanish fluent research assistant facilitates the focus group, the investigator will keep field notes, which will allow her to record observations made during the focus groups, which may contribute to data analysis. The focus group questions addressed the mothers' experiences in talking with their daughters about SRTs and reasons for the mother having discussed or not having discussed SRTs with her daughter. Specific information was elicited as to which topics they are intending to discuss and which they do not and why. Also, they were asked which individuals in their life influence them to discuss or not to engage in the DSRTs with their daughters. Finally they were asked if there are any sex-related topics they discuss that are not listed. Participants were compensated with a \$15 gift card for the completion of their respective focus group.

Each focus group, which lasted 60-90 minutes, was audio recorded. A professional multilingual transcription company transcribed the Spanish focus group audio recordings, verbatim. The bilingual investigator and a bilingual doctorally prepared nurse used the directed content analysis approach to analyze the focus group transcripts (Hsieh & Shannon, 2005). Themes were validated by the data first being analyzed independently by the investigator and the doctorally prepared nurse and then these individuals collaborated until themes were agreed upon. Audio recordings and transcripts are kept in a locked file cabinet in a locked research office.

### **Provisions for the Protection of Human Rights**

The investigator obtained Institutional Review Board (IRB) approval prior to the initiation of the study (Appendix B). This approval ensures that all ethical and professional standards for the safety of human subjects. The IRB submission included the study protocol, consent forms and instruments in English and Spanish, counseling resources, and letters of support. There were separate consent forms for the quantitative (paper and pencil questionnaires) and qualitative (focus group data) portion of the study (See Appendix B). This study posed minimal risk to participants because the study is not anticipated to cause harm or discomfort to the participants. The data are kept in a locked fireproof safe so as not to incur a breach of confidentiality. Participants were assured of their confidentiality during the consent process. They were told they could withdraw from the study at any time. A possible benefit of the study to the participants was that the focus groups may have provided them a safe environment to describe their experiences and thus provide catharsis for the participant (Holloway & Freshwater, 2007). Conversely, it is possible that while participants told their stories, the process of storytelling could elicit strong emotions (Holloway & Freshwater, 2007). Appropriate resources such as contact numbers for counselors were available. See Appendix A for counseling resources. There are several counseling options within the vicinity of both schools, 16<sup>th</sup> Street Community Health Center and Renew Counseling. There is also a helpline in Spanish that people may call if they need someone to talk with.

### **Data Management and Analysis**

The quantitative data were entered into IBM SPSS statistical software, version 21 (IBM SPSS, 2013). Prior to analyses, the data were cleaned, assessed for normality, and transformed as necessary. If missing data were identified, data entries were compared to the raw data. Missing data were analyzed to determine if it is missing completely at random or if it is related to other variables across cases. Case mean substitution, using the participant's subscale mean, was used for missing values on the RNBI.DSRT if less than 30% of the subscales items are missing (Polit, 2010). Descriptive statistics were calculated (means and standard deviations) for the following variables: age, number of children, RNBI.DSRT subscale scores, and PHFS scores. Frequencies were calculated for the Brief ARSMA-II, marital status, education, country of origin, religion, and church attendance. Data analysis is presented for respective research questions and hypothesis.

**Research Question 1: How do Hispanic mothers' background factors (mother's education level, daughter's age, past behavior, past experience, acculturation, familism) influence their normative beliefs regarding the DSRTs?**

Research question 1 was analyzed by conducting Spearman correlations for select background factors (age of mother, past behavior, past experience, familism) and the normative beliefs subscale. Following identification of significant correlations, a regression equation was constructed using the stepwise approach with normative beliefs as the dependent variable and significant correlate background factors (past behavior, past experience, familism) as the predictors. These equations identified the degree to which select background factors predict the mothers' normative beliefs regarding the DSRTs.

**Research Question 2: How do Hispanic mothers' scores on the normative beliefs subscale influence their scores on the intentions subscale?**

Research question 2 was analyzed by conducting Spearman correlations for the normative beliefs and intention subscales. There was a significant correlation between intention

and normative beliefs and thus, a regression equation was constructed using intention as the dependent variable and the normative belief subscale of the RNBI.DSRT, as the predictor. This equation identified the degree to which normative beliefs of DSRTs predict intention to engage in DSRTs.

**Research Question 3: How do Hispanic mothers' background factors (daughter's age, past behavior, past experience, familism) and normative beliefs influence their intentions regarding the DSRTs?**

Research question 3 was analyzed by conducting Pearson correlations for background factors (age of daughter, familism, past behavior, past experience), normative beliefs and the intention subscale. Past behavior, past experience, and normative beliefs significantly correlated with intention and were entered as predictors into a stepwise regression equation that identified the degree to which intention is predicted by background factors and normative beliefs.

**Research Question 4: What is the internal consistency (reliability) of the RNBI.DSRT and the RNBI.DSRT subscales?**

Research question 4 assessed the reliability of the entire RNBI.DSRT and each of the four RNBI.DSRT subscales by assessing the internal consistency. This was done by computing Cronbach's coefficient alpha for the RNBI.DSRT as a whole and for each of the four RNBI.DSRT subscales (normative beliefs, intention, past experience, and past behavior) (Pallant, 2007). Subscales with an alpha greater than .70 are considered adequate and is considered evidence that the items measure an underlying construct (Nunnally, 1978).

**Research Question 5: What evidence for convergent validity does the RNBI.DSRT demonstrate?**

Research question 5 was addressed using the hypothesis testing approach with the quantitative data (Waltz, Strickland, & Lenz, 2010). It was hypothesized that mothers' scores on the normative beliefs subscale would be directly correlated with their scores on the intention subscale. Using Spearman correlation coefficient, if mothers' scores on the normative beliefs



subscale are directly correlated with their scores on the intention subscale then there is preliminary evidence of construct validity. The college's biostatistician was available for consultation throughout the analysis process of the quantitative data. In the event of convergent/divergent findings, the analysis was informed by qualitative methods.

### **Management and Analysis of Focus Group Transcripts**

The primary purpose of the study was also addressed by conducting two focus groups with mothers who completed the questionnaires. The focus group transcripts were the qualitative data that was analyzed in order to provide additional insight regarding Hispanic mothers and their intention to engage in the discussion of sex-related topics (DSRTs) with their adolescent daughters. In order to ensure rigor of the content analysis process, credibility was established (Lincoln & Guba, 1985) as the investigator prepares and the doctorally prepared nurse discuss coding procedures (Weber, 1990). Interrater reliability was established by the two independent reviewers discussing the themes until they agreed. Also, experts in qualitative research and who are familiar with the Theory of Planned Behavior, who serve on the investigator's dissertation committee provided consultation during coding process and were available for consultation. As recommended by Creswell (2009), data analysis of the focus group transcripts began by the research team independently reading through all of the data in order to get a general sense of the information. During this process, the research team took notes in the margins and recorded general thoughts. Next, the research team began by coding the transcripts which involved taking text data, segmenting them into codes, and labeling the codes with a term. The transcripts were coded using a combination of predetermined and emerging codes. The predetermined codes included the constructs of the TPB (background factors, normative beliefs, control beliefs, behavioral beliefs, intention, behavior). Additional codes were developed for the themes that did not fit into any of the TPB constructs. A preliminary codebook was prepared with TPB constructs and evolved based on information learned during the data analysis (Creswell, 2009). Presentation of findings includes the themes followed by a rich description of the social reality

created by the themes including diverse quotations (Zhang & Wildemuth, 2009). The focus groups findings aid in the discussion of the quantitative findings and assist in giving direction for future studies.

### **Chapter Three summary**

This chapter has described the study methodology including the design, a description of the sample, procedures for data collection, data management, and data analysis. A mixed-methods predictive correlational design was used to examine Hispanic mother's background factors and normative beliefs to predict intentions, about DRST with their adolescent daughters. The background factors that were studied included past behavior, past experience, acculturation, familism, and demographic variables (daughter's age and mother's education level). Intention to engage in the DRST was measured by a subscale of the Rodriguez Normative Belief Instrument. Two focus groups were conducted consisting of 7-10 mothers each. Human subjects provisions were described. The quantitative data were entered into the statistical software analysis program and used in the descriptive and predictive analyses to address the research questions. Psychometric analyses were performed for all four subscales of the RNBI.DSRT (intention, normative beliefs, past experience, past behavior). The qualitative data were transcribed and analyzed by two nurses who discerned themes independently and then together until a consensus was reached.

## CHAPTER FOUR

### Results

#### Introduction

Chapter Four includes a description of the preliminary data screening process, a description of sample characteristics, descriptive statistics for study measures, and results of data analysis to address research questions one through five. Following these sections analysis to address the hypothesis is presented. Following analyses of the quantitative data, the results of the qualitative data analysis are presented to address the hypotheses.

#### Preliminary Screening of Data.

Prior to completing quantitative data analyses to address the study research questions and hypothesis, the data set was examined for missing data and potential outliers. Data entry errors were located by running frequencies and assessing items that contained responses that were not a part of the item scale. Outliers were identified as responses beyond two standard deviation differences from the group mean. Outliers were checked against original surveys and were corrected to be consistent with the actual survey response. Individual missing data points were substituted by the sample means for those items. Two participants did not complete three of the Brief ARSMA-II items (4, 9, 12). One normative belief item and two past experience items were missing one response each. Due to the low percent of missing data, means were substituted for the missing data (Bannon, 2013).

Main study variables were examined for outliers and normality. Box plots were reviewed and outliers were addressed. Familism subscale had an extreme outlier identified by the box plot and the value was winsorized made equal to the next lowest score for the Familism subscale) (Tabachnick & Fidel, 2007). All of the subscale variables (Normative Beliefs, Intention, Past Behavior, and Past Experience) were negatively skewed and kurtotic. The Shapiro-Wilk test was run for the subscales (normative beliefs, intention, past behavior, and past experience) to check

for normality after eliminating outliers. For each subscale the Shapiro-Wilk value was significant at  $p < .001$ , indicating violations of normality. Skewness of normative belief subscale was  $-.82$  and kurtosis was  $.67$ ; Skewness of intention subscale was  $-1.37$  and kurtosis was  $2.56$ ; Skewness of past behavior was  $-.20$  and kurtosis was  $-.88$ ; Skewness of past experience was  $-1.94$  and kurtosis was  $3.24$ .

Square root, square, and log transformations were conducted for the Normative Beliefs, Intention, Past Behavior, and Past Experience subscales. The only variable that exhibited a normality following transformation by squared transformation was Normative Beliefs. The Shapiro-Wilk test was run to check for normality and the value of the transformed normative belief scale was not significant at Shapiro-Wilk  $.98$ ,  $p < .10$ . The decision was made to utilize the transformed normative beliefs scale for the remainder of the analysis. Although the remaining subscales were still skewed and kurtotic after attempts to transform the data, the statistics utilized were considered robust enough to accommodate for these violations of the parametric test (Montgomery, Peck, & Vining, 2012).

## **Quantitative Results**

### **Sample Characteristics**

Sample characteristics are listed below in Table 1. Participants were 119 Hispanic mothers of 6<sup>th</sup>-8<sup>th</sup> grade adolescent girls from two inner city Catholic school in Milwaukee. All of the participants self-identified as Hispanic and as the primary caretaker of a 6<sup>th</sup> to 8<sup>th</sup> grade girl enrolled in one of the two schools. One hundred ten participants were recruited from St. Anthony School (92.4%) and 9 were recruited from Notre Dame Middle School (7.6%). There were only 9 participants from Notre Dame Middle School compared to 110 from St. Anthony School. To determine whether to include the NDMS mothers, confidence intervals were calculated for the mother's age. See Table 2. The mean value for age among the ND sample were found to be within the 95% CI of the St Anthony sample. All of the St. Anthony and Notre Dame mothers

self-identified as Hispanic. Since these two groups were both mothers of middle schools girls from Catholic schools they were included in the total sample consisting of 119 participants.

Table 1

*Sample Characteristics: Quantitative Portion (N=119)*

<b>Patient Characteristics</b>	<b>N</b>	<b>%</b>	<b>Mean</b>	<b>Range</b>
<b>Relationship to adolescent girl</b>				
Biological mother	117	98.4		
Grandmother	1	0.8		
Other	1	0.8		
Age			37.1+5.2	28-50
<b>Highest Completed Level of Education</b>				
<High school	79	66.5		
High School	21	17.6		
Some College (or technical school)	12	10.1		
College Graduate	4	3.4		
Graduate Degree	1	0.8		
Missing	2	1.6		
<b>School</b>				
St Anthony's	110	92.4		
Notre Dame	9	7.6		
<b>Survey Language</b>				
Spanish	108	90.8		
English	11	9.2		
<b>Ethnic Group</b>				
Mexican	108	90.8		
Puerto Rican	2	1.7		
Honduran	1	0.8		
Costa Rican	1	0.8		

Other	7	5.9
Born outside of the U.S. y/n		
Yes	91	76.5
No	26	21.8
Missing	2	1.7
Marital Status		
Married	86	72.3
Single	23	19.3
Divorced	9	7.6
Missing	1	0.8
Acculturation		
Traditionals	80	67.2
Low Biculturals	13	10.9
High Biculturals	12	10.1
Assimilated	2	1.7
Not Classified	12	10.1
Church Attendance		
> once/week	11	9.2
Once/week	36	30.3
1-3 times/month	38	31.9
Less than once/month	23	19.3
Never	9	7.6
Missing	2	1.7
Catholic y/n		
Yes	116	97.5
No	2	1.7
Missing	1	0.8

---

Table 2

*Participant Demographics by School*

School	N	Mean	SD	CI
Age				36.15 - 38.04
St. Anthony	110	37.05	5.27	
Notre Dame	9	37.67	4.74	

Participants ranged in age from 28-50 ( $x = 37.1$ ,  $SD = 5.2$ ). Participants' daughters' average age was 12 years ( $x = 12.1$ ,  $SD = 1.5$ ). One hundred eight participants identified as Mexican (90.8%), 1.7% identified as Puerto Rican, and one participant identified as Honduran and one as Costa Rican. The rest of the participants identified as "other" ( $n=7$ ). In terms country of birth, 77.8% reported they were born outside of the United States.

The sample was highly Hispanic oriented and relatively homogenous based on language preference and acculturation. One hundred eight participants (90.8%) chose to complete the questionnaire in Spanish while 11 (9.2%) completed it in English. In reference to acculturation, as defined by the Brief ARSMA-II, the majority ( $n=80$ , 67.2%) of the participants were traditional (immersed in their native culture), 13 participants were classified as low biculturals (10.9%), 12 participants were high biculturals (10.1%), 2 were assimilated (when culture of origin is replaced by dominant culture values) (1.7%) and 12 participants were not able to be classified based on the parameters of the acculturation scale (Brief ARSMA-II).

72.9% of the sample said they are currently married, 19.5% were single, and 7.6% divorced. Seventy two percent stated the father of the middle school daughter is living in the home, 27.1% of the fathers are not living in the home.

A majority of the participants (97.5%) identified as Catholic. When asked about how often they attended church, 9.4% stated they attend more than once/week, 30.8% attend church once/week, 32.5% reported attending 1-3 times/month, 72.6% of the sample stated they attend church at least once/month, 19.7% attend church less than once/month and 7.7% state they never attend church.

When asked the highest level of education they attained, 31.4% of the sample responded primary school (through 6<sup>th</sup> grade), 36.4% said they completed secondary school (through 9<sup>th</sup> grade), 17.8% completed preparatory school (high school), 10.2% completed some college or technical school, 3.4% graduated from college and one person completed a master's or doctorate. The following is a presentation of the findings for each research question and hypothesis.

**Research Question 1: How do Hispanic mothers' background factors (mother's education level, daughter's age, past behavior, past experience, acculturation, familism) influence their normative beliefs regarding the DSRTs?**

Research question 1 was analyzed by conducting Spearman's Rho correlations for select background factors (age of daughter, past behavior, past experience, familism) and the normative beliefs subscale. Due to the homogeneity of the sample, mother's education level and acculturation were unable to be utilized in analysis. They are categorical variables and there was not enough difference between groups. Spearman's Rho correlation was chosen due to violations of normality despite attempts to transform the data.

There was a significant negative correlation between past behavior and normative beliefs ( $r = -.26, p < .05$ ). Past behavior refers to whether the mothers had discussed SRTs with their daughters in the past. As participants' past behavior scores decrease, normative beliefs increase. Lower behavior scores indicate that the behavior has taken place. In other words, mothers who have engaged in the behavior of discussing SRTs to a greater extent, report greater normative beliefs regarding the DSRTs. There was a significant negative correlation ( $r = -.26, p < .05$ ) between past experience scores and normative belief scores. Lower past experience scores



indicate that they have had more experience (responses to each item was 1=yes, 2=no) regarding the DSRTs with their own mother. In other words, participants' whose mothers have discussed SRTs to a greater extent have greater normative beliefs regarding the DSRTs. There was a significant positive correlation between familism and normative beliefs ( $r = .35, p < .001$ ). Age of the middle school daughter was not significantly correlated with normative beliefs. See Table 3 below. ( $r = .07, p = .47$ ).

Table 3

*Spearman's Rho Correlations between Normative Beliefs and Background factors (N=119)*

	Past Behavior	Past Experience	Age of daughter	Familism
Normative Beliefs	-.26*	-.26*	.05	.35**

\*\*  $p < .001$

\*  $p < .05$

Following identification of significant correlations, a stepwise multiple regression analysis was conducted to evaluate the degree to which normative beliefs are predicted by past behavior, past experience, and familism. Stepwise regression was selected due to the exploratory nature of the study (Polit, 2010). The first model indicates that familism is a significant predictor of normative beliefs,  $F(1, 117) = 14.20, p < .001$ . The first model (familism) accounts for 10.8% of the variance in normative beliefs,  $R^2 = .11$ . The final model (familism and past behavior) accounts for an additional 3.2% of the variance in normative beliefs,  $R^2 = .14, F(2, 116) = 9.47, p < .001$ . The final model indicates that approximately 14% of the variance of normative beliefs can be accounted for by the linear combination of familism and past behavior. Past experience did not enter into the equation ( $t = -1.34, p = .18$ ). See Table 4 for the regression coefficient table for predictors of normative beliefs. The regression equation for predicting mothers' normative beliefs was:

$$\text{Normative Beliefs} = 2011.20 + \text{familism} (122.35) - \text{past behavior} (58.76)$$

Table 4

*Regression Coefficient Table for Predictors of Normative Beliefs*

		<i>b</i>	<i>SE b</i>	$\beta$
Step 1	Constant	946.64	774.54	
	Familism	126.06	33.45	.33***
Step 2	Constant	2011.20	918.90	
	Familism	122.35	33.03	.32***
	Past Behavior	-58.76	28.21	-.18*

Note.  $R^2 = .11$  for Step 1;  $\Delta R^2 = .03$  for Step 2. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

As is evident by reviewing the demographic information related to acculturation and mother's education, a majority of the sample finished less than a high school education and a majority of the sample is in the traditional category for acculturation. Thus, the sample was too homogeneous to analyze any categorical differences. It was determined that it would not be appropriate to collapse themes for the variables and thus were used a descriptor variables.

**Research Question 2: How do Hispanic mothers' scores on the normative beliefs subscale influence their scores on the intentions subscale?**

Research question 2 was analyzed by conducting Spearman's Rho correlations for the normative beliefs and intention subscales. See Table 5. Due to their significant correlation ( $r = .42$ ), a regression equation was constructed using intention as the dependent variable and the normative belief subscale of the RNBI.DSRT, as the predictor. These equations identified the

degree to which normative beliefs of DSRTs predict intention to engage in DSRTs. Simple linear regression was used to assess the ability of normative belief scores to predict intention to engage in DSRTs. The total variance of intention in the sample explained by normative beliefs was 15.8%,  $F(1, 117) = 21.95, p < .001$ . See Table 6.

Table 5

*Spearman's Rho Correlation Matrix for Normative Beliefs and Intention*

	Normative Beliefs
Intention	.42**

\*\*  $p < .001$

Table 6

*Regression Coefficient Table for Normative Beliefs Predicting Intention*

	<i>b</i>	<i>SE b</i>	$\beta$
Constant	54.61	2.60	
Normative Beliefs	.003	.001	.40***

Note.  $R^2 = .16$  \*\*\*  $p < .001$

$$\text{Intention} = 54.61 + .003 (\text{normative beliefs})$$

**Research Question 3: How do Hispanic mothers' background factors (daughter's age, past behavior, past experience, familism) and normative beliefs influence their intentions regarding the DSRTs?**

Research question 3 was addressed by conducting Spearman's Rho correlations between the background factors (age of daughter, past behavior, past experience, familism), normative beliefs and the intention subscale. After examining the variables on a scatterplot, it was determined that a linear relationship was the most appropriate model for the analysis.

There was a significant negative correlation between intention to engage in DSRTs and both past behavior ( $r = -.47, p < .001$ ) and past experience ( $r = -.24, p < .05$ ). Lower past behavior scores indicated that the sample engaged in more of the behavior of discussing SRTs with their daughters. Mothers who have engaged in the behavior of discussing SRTs to a greater extent have higher intentions regarding engaging in DSRTs. Lower past experience scores indicate that they have had more experience regarding engaging in DSRTs with their own mother. Participants' whose mothers have discussed SRTs to a greater extent have greater intentions to discuss SRTs with their own daughters. There was a significant positive correlation ( $r = .42, p < .001$ ) between intentions and normative beliefs. Daughter's age ( $r = .04, p = .66$ ) and familism ( $r = .16, p = .09$ ) were not significantly correlated with intentions. See Table 7 below.

Table 7

*Spearman's Rho Correlations Between Intentions, Background Factors and Normative Beliefs (N=119)*

	Age of daughter	Familism	Past Behavior	Past Experience	Normative Beliefs
Intentions to engage in DSRTs	.04	.16	-.47**	-.24*	.42**

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

The subscales past behavior, past experience and normative beliefs were significantly correlated with intentions. Thus, a stepwise regression analysis was conducted to evaluate the degree to which intention can be predicted by past behavior, past experience and normative beliefs. Past behavior, past experience, and normative beliefs were entered using the stepwise approach into the regression equation. The linear combination of past behavior and normative beliefs was significantly related to intentions,  $F(2, 116) = 27.23, p < .001$ . The first model (past behavior) accounted for 22% of the variance in intention. The final model  $R^2$  was .32, indicating that approximately 32% of the variance of intention can be accounted for by the linear

combination of past behavior and normative beliefs. Therefore, by adding normative beliefs, an extra 10% of the variance in mothers' intention is accounted for. Past experience did not enter into the equation ( $t = -.31, p = .76$ ). See Table 8. The regression equation for predicting mothers' intentions was:

$$\text{Intention} = 74.14 + \text{past behavior} (-1.03) + \text{normative beliefs} (.002)$$

Table 8

*Regression Coefficient Table for Predictors of Intention*

		<i>b</i>	<i>SE b</i>	$\beta$
Step 1	Constant	86.09	3.48	
	Past Behavior	-1.19	.21	-.48***
Step 2	Constant	74.14	4.40	
	Past Behavior	-1.03	.20	-.41***
	Normative Beliefs	.002	.001	.32***

Note.  $R^2 = .22$  for Step 1; change  $R^2 = .10$  for Step 2 ( $ps < .001$ ). \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

The secondary purpose was addressed by answering the following research questions:

**Research Question 4: What is the internal consistency (reliability) of the RNBI.DSRT and the RNBI.DSRT subscales?**

Research question 4 assessed the reliability of the RNBI.DSRT and each of the four RNBI.DSRT subscales by assessing the internal consistency. This was done by computing Cronbach's coefficient alpha for the RNBI.DSRT as a whole and for each of the four RNBI.DSRT subscales (normative beliefs, intention, past experience, and past behavior) (Pallant,

2007). Subscales with an alpha greater than .70 are considered to exhibit adequate internal consistency and measure an underlying construct (Nunnally, 1978). The entire RNBI.DSRT and each of the four subscales had a Cronbach's alpha reliability of  $\geq .70$ . See Table 9 for Cronbach's alpha reliability estimates along with scale descriptive statistics.

Table 9

*RNBI.DSRT Cronbach's Alpha Reliability Estimates and Scale Descriptive Statistics (N=119)*

Measure	No. of Items	Range	Mean (SD)	$\alpha$
Normative Beliefs	11	33-77	61.29 (9.37)	.85
Intentions	11	34-77	66.33 (8.32)	.88
Past Behavior	11	11-22	16.66 (3.31)	.89
Past Experience	11	11-22	20.31(2.56)	.88
Entire RNBI.DSRT	44		164.6(13.64)	.82

Exploratory factor analysis with a varimax rotation was performed on each of the subscale independently. Prior to initiating the factory analysis, preliminary analyses were undertaken to assess the factorability of the RNBI.DSRT. The KMO index of sampling adequacy was .776 and Bartlett's test of sphericity was statistically significant ( $p < .001$ ) (Polit, 2010). Thus, the data were amenable to factor analysis. The factor analysis results demonstrated four factors, which were consistent with the four subscales. This analysis exhibited construct validity because the each subscale item loaded on its respective, single factor.

Although the rationale for four factors was driven by the theoretical underpinnings of the instrument development, the factor analysis findings support this decision. According to Polit (2010) there are a number of tests that can be done to determine the number of factors. First, by examining the proportion of variance accounted for by a factor it was determined that there are four factors that account for more than 5% of the total variance in the data matrix which is

consistent with the four subscale factors. Next, when examining factors based on the Kaiser-Guttman rule (Eigenvalue  $> 1$ ) there are 11 factors (Polit, 2010). Finally, based on the scree-test, it appears that a break in the slope occurs between factors four and five suggesting again that four factors should be retained. Thus, a majority of the findings point to four factors.

In examining the rotated component matrix, factor one included the items that identified past experience, factor two consisted of items that defined past behaviors, items that loaded high for factor three was the normative beliefs, and factor four items appeared to be intentions. With the exception of a few items, most of the items loaded on one unique component again reinforcing a four-factor instrument. See Table 10-13 for the rotated component matrix for each subscale.

Table 10

*Rotated Component Matrix Based on Exploratory Factor Analysis with Varimax Rotation for the 11-item Normative Belief Subscale from the RNBI.DSRT (N=119)*

	Component			
	1	2	3	4
Normative Belief 1	-.044	-.001	.445	.098
Normative Belief 2	-.009	-.094	.573	-.005
Normative Belief 3	-.013	.084	.545	.010
Normative Belief 4	-.075	.159	.737	.023
Normative Belief 5	-.143	-.161	.650	.013
Normative Belief 6	-.203	-.106	.592	.197
Normative Belief 7	-.047	.109	.793	.062
Normative Belief 8	.037	.018	.623	.092
Normative Belief 9	-.040	-.276	.576	.171
Normative Belief 10	-.080	-.133	.578	.162
Normative Belief 11	-.024	-.028	.697	.115



Table 11

*Rotated Component Matrix Based on Exploratory Factor Analysis with Varimax Rotation for the 11-item Intention Subscale from RNBI.DSRT (N=119)*

	Component			
	1	2	3	4
Intentions 1	-.086	-.028	.567	.239
Intentions 2	.056	-.075	.399	.351
Intentions 3	-.032	-.198	.332	.498
Intentions 4	.123	-.392	.131	.394
Intentions 5	-.027	-.090	.280	.617
Intentions 6	.017	-.148	.143	.791
Intentions 7	-.007	-.183	.154	.808
Intentions 8	-.094	-.290	.043	.763
Intentions 9	-.099	-.156	.172	.794
Intentions 10	-.068	-.176	.156	.724
Intentions 11	-.092	-.143	.032	.690

Table 12

*Rotated Component Matrix Based on Exploratory Factor Analysis with Varimax Rotation for the 11-item Past Behavior Subscale from RNBI.DSRT (N=119)*

	Component			
	1	2	3	4
Past Behavior 1	.056	.432	-.011	-.053
Past Behavior 2	-.010	.089	.046	-.064
Past Behavior 3	.094	.817	-.098	-.147
Past Behavior 4	-.027	.611	.094	.042
Past Behavior 5	.161	.701	-.095	-.168
Past Behavior 6	.156	.562	-.229	-.186
Past Behavior 7	.132	.765	-.075	-.090
Past Behavior 8	.077	.724	.068	-.192
Past Behavior 9	.289	.658	-.111	-.228
Past Behavior 10	.244	.701	-.105	-.245
Past Behavior 11	.120	.777	-.022	-.192

Table 13

*Rotated Component Matrix Based on Exploratory Factor Analysis with Varimax Rotation for the 11-item Past Experience Subscale from the RNBI.DSRT (N=119)*

	Component			
	1	2	3	4
Past Experience 1	.719	-.016	-.085	.083
Past Experience 2	.526	.010	-.180	.023
Past Experience 3	.769	.110	-.009	.158
Past Experience 4	.492	.141	.058	-.022
Past Experience 5	.694	.211	.003	-.256
Past Experience 6	.758	.143	.056	-.209
Past Experience 7	.578	.149	-.145	.183
Past Experience 8	.689	.086	-.081	-.040
Past Experience 9	.710	.053	-.129	-.191
Past Experience 10	.696	.027	-.092	-.189
Past Experience 11	.773	.094	-.004	.031

**Research Question 5: What evidence for convergent validity does the RNBI.DSRT demonstrate?**

Research question 5 was addressed using the hypothesis testing approach with the quantitative data (Waltz, Strickland, & Lenz, 2010). According to the Theory of Planned Behavior it is hypothesized that mothers' scores on the normative beliefs subscale will be directly correlated with their scores on the intention subscale. Using Spearman's Rho correlation coefficients, since mothers' scores on the normative beliefs subscale are directly correlated with their scores on the intention subscale, there is preliminary evidence of the construct validity of the RNBI.DSRT. Likewise, the background factors of past behavior and past experience and familism correlated with normative beliefs, again, lending to the convergent validity of the RNBI.DSRT scale.

**Hypothesis 1.) Mothers' scores on the intention subscale are directly correlated with their scores on the normative belief subscale.**

As indicated in the analysis for research question 2, there is a moderate positive significant correlation between mothers' scores on the intention subscale and their scores on the normative belief subscale, .42,  $p < .001$ . As mothers' normative beliefs increase, their intention to engage in the discussion of sex-related topics also increases.

### **Qualitative Findings**

#### **Sample Characteristics**

Sample characteristics of the two focus group participants are listed below in Table 14. Seven participants were in the first focus group and ten were in the second. All participants of the quantitative portion of the study who volunteered to participate in a discussion group and were recruited based on their availability. The sample characteristics of the two groups will be combined in the explanation. All of the women were biological mothers of a middle school girl. Focus group participants' ages ranged from 30-47 ( $x = 36.2$ ,  $SD = 5.0$ ). Participants' daughters'

average age was 12 years ( $x = 11.9$ ,  $SD = 1.0$ ). Sixteen of the focus group participants identified as Mexican (94.1%) and one participant did not answer the question.

82.4% of the sample employed for the qualitative analysis said they were currently married ( $n=14$ ), with 17.6% claiming to be single ( $n=3$ ). Ninety four percent identified as Catholic, one participant did not answer the question. When asked about how often they attend church, 64.7% of the sample stated they attend church at least once/month ( $n=11$ ) while 29.4% ( $n=5$ ) say they attend church less than once/month. One participant did not answer the question (5.9%).

When asked the highest level of education attained, 41.2% ( $n=7$ ) responded primary school (through 6<sup>th</sup> grade), 41.2% ( $n=7$ ) said they completed secondary school (through 9<sup>th</sup> grade), 11.8% ( $n=2$ ) completed some college or technical school, and one graduated from college and one person completed a master's or doctorate.

Table 14

*Sample Characteristics: Qualitative Portion (N=17)*

<b>Patient Characteristics</b>	<b>N</b>	<b>%</b>	<b>Mean</b>	<b>Range</b>
<b>Relationship to adolescent girl</b>				
Biological mother	17	100.0		
<b>Which Focus Group 1 or 2</b>				
Focus Group 1	7			
Focus Group 2	10			
Age			36.2+4.96	30-47
<b>Highest Completed Level of Education</b>				
<High school	14	82.4		
High School	0			
Some College (or technical school)	2	11.8		

Graduate Degree	1	5.9
Ethnic Group		
Mexican	16	94.1
Other	1	5.9
Born outside of the U.S. y/n		
Yes	7	77.8
No	7	22.2
Marital Status		
Married	14	82.4
Single	3	17.6
Church Attendance		
> once/week	3	17.6
Once/week	5	29.4
1-3 times/month	3	17.6
Less than once/month	5	29.4
Missing	1	5.9
Catholic y/n		
Yes	16	94.1
No	0	0
Missing	1	5.9

---

The qualitative portion of the study was descriptive. As described by Sandelowski (2000; 2010) qualitative descriptive studies serve to describe phenomena through a summary of events in everyday terms of the events. The purpose of the qualitative portion of the study was to provide a more complete understanding and description (Rinaldi Carpenter, 2011) of Hispanic mothers' DSRTs with their adolescent daughters. It also served to triangulate the data from the quantitative

portion of the study with the qualitative portion (Denzin, 1989). In order to analyze the focus group transcripts, first a preliminary codebook was developed based on the constructs of the Theory of Planned Behavior (TPB). The initial codes were the same constructs that were measured in the quantitative portion of the study (past behavior, past experience, past behavior, intention, normative beliefs) in addition to TPB codes that were not included in the quantitative portion of the study (behavioral beliefs and control beliefs). The bilingual PI and a bilingual doctorally prepared nurse, who is an expert in qualitative methods, read through the Spanish transcripts and coded the transcripts independently. Data were analyzed as recommended by Creswell (2009). The first pass through the data involved reading to get a general sense of the information and to reflect on the overall meaning. Notes were written in the margins, which included words or phrases such as, “consequences--STIs” and “wants better for kids”. Codes were reviewed and if applicable, they were organized under the TPB pre-determined codes. If a code that emerged that was not consistent with the TPB pre-determined codes, then it was assigned a code of its own. Once the PI and the doctorally prepared nurse coded independently, they discussed their codes and based on the discussions the codes were revised. A common understanding of the interpretation of the codes was developed through the discussion. The codes were then used to generate themes. Themes were identified and followed by discussion excerpts. The use of triangulation of methods and intercoder agreement aided in ensuring the internal validity of the qualitative methods.

Six themes emerged from the focus group discussions: (1) Participants’ mothers did not discuss SRTs with them, (2) Participants are influenced by past experience, (3) Belief that the DSRTs will impact their daughter positively but also fearful (4) Participants have discussed some SRTs with their daughters but not all topics (5) Participants want the support of others but would like to discuss SRTs whether they have their support or not (6) participants want to discuss SRTs with their daughters but they do not believe they have the skills or knowledge necessary to do so and they want help. The qualitative data addressed research question 3: *How do Hispanic*

*mothers' background factors (daughter's age, past behavior, past experience, familism) and normative beliefs influence their intentions regarding the DSRTs?* Throughout the focus groups, participants' conversations included discussions of their daughters' age, past behavior, past experience, and references to family in addition to other topics and how these factors impact their intentions to engage in the DSRTs. Excerpts, or exemplars, from the discussion groups are presented to exemplify the themes first in English, then in Spanish.

### **1. Participants' mothers did not discuss SRTs with them**

Past experience (a background factor) in the context of quantitative portion of this study refers to whether or not the participants' mothers discussed SRTs with the participants when they were their daughters' age. The first theme, *'participants' mothers did not discuss SRTs with them'* became apparent because most of the participants in the focus groups made reference to the fact that their mother or parents never discussed any SRTs with them, including menstruation. The lack of DSRTs by their mothers left them feeling confused. Some commented that their culture (Mexico) is much different from that of the United States. One woman remarked:

**English:** "My mother never talked to me about menstruation, nor about sex or-or anything.

Absolutely nothing. Well, my culture is very different from the one here. For us, the Mexican, our parents are... back in those times they were somewhat more strict about talking to us about those issues. In my case, my mother never talked to me about that. I, myself, the day I got my period, I burst into tears."

**Spanish:** "*Mi madre nunca me habló ni de la menstruación, ni del sexo ni de-de nada.*

*Absolutamente nada. Bueno, mi cultura es muy diferente a la que hay aquí. Para nosotros, los mejicanos, nuestros padres son... en aquella época más atrás eran como más estrictos para hablarnos de ciertos temas. En mi caso, mi madre nunca me habló de eso. Yo, el día que me llegó mi menstruación, yo me puse a llorar."*



Another participant agreed that her mother did not discuss SRTs. She elaborated by saying that her mom protected them but never talked about SRTs. The participant perceived the DSRTs as a means of protection and asserted that her mother was protective but she did not discuss SRTs.

**English:** “Ah, I was listening to what these ladies were saying and it is the same that... My parents, also, never, never talked to us about anything. About sex, never; about menstruation, also. My mother was always looking after us making sure no one got close. I mean, in that regard, we always came first. She always protected us, but she never talked about anything.”

**Spanish:** “Este, yo estaba escuchando lo que estaban diciendo ellas y es igual que... Mis papás, también, nunca, nunca nos hablaron de nada. De sexo, jamás; de la menstruación, también. Siempre mi mamá estuvo al pendiente de nosotros cuidándonos, que nadie se nos acercara. O sea, en ese aspecto siempre nosotros primero. Siempre nos protegía, pero nunca no habló de nada.”

Many women commented how the topic of sex was kept quiet in their culture. One mother gave the example that even as a married woman, she still feels uncomfortable around her parents when situations involving sex arise:

**English:** “Um, sex was taboo and it is still taboo. Still nowadays, um, I'm married, I have already been married for 12 years, and my parents might be watching a movie with me when an erotic scene comes up, I feel ashamed because they are there. So I'm kind of looking to see at what time it ends or [LAUGHS] trying to change it. Because I feel bad.

**Spanish:** “Um, el sexo era un tabú y sigue siendo un tabú. Todavía en estas épocas, um, todavía estoy casada, tengo ya los 12 años de casada, y pueden estar mis papás viendo una película conmigo donde pasan una escena erótica, y yo me siento avergonzada de que ellos están ahí. Y estoy como que volteando a ver a qué hora se termina o [LAUGHS] tratar de cambiarles. Porque uno se siente mal.”

The participants recognize the value of the DSRTs but have no related experience with their own mothers. The fact that the topic of sex is generally kept quiet in their culture demonstrates the

difficulty the participants face as they attempt to discuss SRTs.

## **2. Participants are influenced by past experience including misinformation and sexual abuse**

In addition to their experience with the lack of DSRTs with their own mothers, the participants also commented on other past experiences that influence them to discuss SRTs with their own daughters. Additional past experiences the participants talked about included experiences with sexual abuse and having misinformation about SRTs. Overall, the past experiences made them want to discuss SRTs with their daughters. One participant commented that her experience with sexual abuse in her family influences her to discuss SRTs with her daughter. She was brought to tears as she explained how she does not want her daughter to experience what she experienced:

**English:** “My mother, because she spoke out [about being sexually abused], because... for that reason, they don't want us, because she didn't keep quiet, because she said it. Being it her father in law. So, those are experiences I don't want happening to... my daughter. And.. I'm always asking her, 'honey, this, honey, that'. And I talk to her about many things. Up to a certain limit because of her age... “

**Spanish:** “*Mi madre, por haber hablado (sobre el abuso sexual), por e-... por ese motivo, a nosotros no nos quieren, porque ella no se quedó callada, porque ella lo dijo. Siendo su suegro. Entonces, son experiencias que yo no quiero que a mi hija... sucedan. Y... yo siempre estoy con ella preguntándole, 'hija, esto, hija, lo otro'. Y le hablo de muchas cosas. Hasta un cierto límite por la edad que ella tiene...*”

Some participants discussed how they do not want their daughters to experience having the misinformation about SRTs like they did growing up. Because no one talked to them about sex, the information they had about sex was not accurate. For example one mother stated:

**English:** “It might be because since that stage of adolescence I was in Mexico. So it was always, 'Virginity -- If you don't bleed the day you get married, he's not going to marry you'. .... Actually, sometimes I didn't even wanted to go on bicycles because sometimes the bicycle was too high

and you know they have this bar here..... And before they used to say, 'If you fall and you get hit there and...'. And instead of telling me, 'it's dangerous'; they told me, 'If you fall there and you break that thing there, you won't get married, they will not want to marry you.'"

**Spanish:** *"O sería porque como yo ese, ese etapa de mi adolescencia yo la pasé en México. Entonces siempre era, 'La virginidad. Si no sangras el día que te cases, no se va a casar contigo'.... Yo hasta a veces a las bicicletas no me quería subir porque a veces la bicicleta estaba muy alta y sabes que tienen la barra aquí.... Y antes decían, 'Si te caes y te pegas ahí y...'. Y en vez de decirme, 'es peligroso'; me decían, 'Si te caes ahí y se te rompe eso ahí, no te vas a casar, no se van a querer casar contigo'."*

Another mother added that since she did not know about SRTs, she had a misconception about how a woman could become pregnant.

**English:** "Or, 'Just by him holding your hand you are not a virgin already'. Yes, you already lost your virginity, you're going to get pregnant. [LAUGHS]"

**Spanish:** *"O, 'Con que te agarren la mano ya no eres virgen'. Sí, ya a perdiste la virginidad, vas a quedar embarazada. [LAUGHS]"*

While a variety of emotions surfaced in the discussion of past experience, the participants asserted that it would have been better to had they been informed.

### **3. Participants believe that the DSRTs will impact their daughter positively but are also fearful**

Behavioral beliefs, according to the TPB, are beliefs about the effect of their discussing SRTs will have. Participants of the focus groups had behavioral beliefs about the effects of discussing SRTs. While some mothers believe the DSRTs could protect their daughters, other mothers were unsure of the effect of discussing SRTs. When asked what their reasons were for discussing or not discussing SRTs, they said they thought was important to DSRTs to protect their daughters but they were also concerned it might give their daughters ideas or that their daughters are too young. The following examples highlight the conundrum these women experience – wanting

daughters to have information yet fearful of consequences of giving information in “wrong way” or that information will lead to unwanted sexual activity. One mother stated:

**English:** “Because I think that when you approach issues like that, instead of educating them you're giving them ideas.”

**Spanish:** “*Porque yo pienso que cuando uno toca temas así, en lugar de instruirlas uno les da ideas.*”

Likewise, a mother agreed by saying:

**English:** “I said, and kids are kids and they like investigating, experimenting, and I said, 'no, what am I going to talk to them about those issues for?', they are going to say, 'let's see, what's this?, what's that?'. I mean, you are going to open their minds to it more.”

**Spanish:** “*Dije, y los niños son niños y les gusta investigar, experimentar, y dije, ‘no, mejor para qué les habla uno de temas tan así’, ellos van a decir, ‘a ver, ¿qué es eso?, ¿qué es lo otro?. O sea, uno les va a abrir más la mente para...*”

In contrast, one mother said she discusses SRTs with her daughters because she thinks it will prevent her daughter from making the same mistakes she made. Several mothers thought discussing SRTs may prevent the potential consequences of sex including sexually transmitted diseases or pregnancy. One mother said how she believes the DSRTs would benefit her daughter by preventing teen pregnancy. She said she would give her daughter a means of prevention (the pill) because she believes she will be sexually active and she does not want her to get pregnant like she did. She also shares the sentiment that many of the mothers have for their daughters – hope for the future.

**English:** “Because they will want to do it, they will want to do it. They are not going to wait until they are-... until they are married. Because I didn't wait, do you understand? I, at 16 years of age, already had my first sexual experience, and nowadays at 11, 12 years of age, they are already getting pregnant, So, I don't want that to happen. I'm seeing that my daughter, my daughters, have a future that's very, and not, eh, that they have a very promising future, that they

are very intelligent. And I don't want their lives cut short like I had mine. I don't regret what I did, because it's the best thing that ever happened to me. But if I could reverse time, I would have done things differently, So, my mother and my sister were in shock with that, do you understand? You're telling them that, you're giving them the green light to go and have sexual relations with everybody'. And I said, it's not like that. The thing is that at that moment is when you say, 'Look, dear daughter, I'm giving you prevention [the option to be on the pill], but this doesn't mean you are going to go everywhere'."

**Spanish:** *“Porque lo van a hacer, lo van a hacer. No se van a esperar a que ter-... a que estén casadas. Porque yo no me esperé, ¿entiendes? Yo, a los 16 años, yo ya tenía mi primera relación, y ahorita a los 11, 12 años, ya están saliendo embarazadas. Entonces, yo no quiero que eso pase. Yo veo que mi hija, mis hijas, tienen un futuro muy, y no, eh, que tienen un futuro muy aprovechador, que son bien inteligentes. Y yo no quiero que se trunquen su vida como yo me la trunqué. No me arrepiento de lo que hice, porque es lo mejor que me ha pasado. Pero si pudiera echar el tiempo para atrás, hubiera hecho las cosas de otra forma, ¿entiendes? Entonces, mi mamá y mi hermana estaban infartadas con eso, Porque, Les estás diciendo que, dándole la carta verde para que vayan a tener relaciones con todo mundo'. Y yo les, es que no es así. Es que ya en ese momento es cuando tú dices, 'Mira, mijita, te estoy dando la prevención, pero no quiere decir que te vas a ir de will a por todos lados'.”*

Similarly, a mother was motivated to DSRTs because she does not want her daughter to become pregnant like she did. She went on to say that she lacked information and maybe things would be different if she had accurate information. She commented:

**English:** “I became a mother that-that got pregnant before getting married and, thank God, my husband acted responsibly and all...But, maybe, had I had the right information... Because before it was like all my girl friends, 'Did you do it already? Did you do it?'. It was more like a competition, not like a, um, that we truly knew what we were doing. It was more like, 'Like, she

did it, well I will too'. Or, 'nothing happened to her, why would I... why...'. Do you understand? You never really knew what it was, what it really is, the meaning of what it is.”

**Spanish:** “*Yo fui una madre que-que quedé embarazada antes de casarme y, gracias a Dios, mi esposo respondió y todo....Pero, a la mejor, si hubiera tenido la información correcta... Porque antes era de que todas mis amigas, '¿Ya lo hicistes, ya lo hicistes?'. Y era más como una competencia, más que una, um, que en verdad sabíamos lo que estábamos haciendo. Era como que, 'Osea, ella lo hizo, pues yo también'. O, 'ella no pasó nada, por qué yo-... por qué...'. ¿Entiendes? Nunca supistes en realidad lo que era, lo que en realidad es, el significado de lo que es.*”

Some mothers raised the concern of sexually transmitted infections and pregnancy as reasons for discussing SRTs with their daughters. One remarked:

**English:** “Many diseases are coming, there are many things that-that-that are happening a-among teenage girls, that you don't want for your kids.”

**Spanish:** “*Vienen muchas enfermedades, son muchas cosas que-que-que pasan e-entre las adolescentes, que uno no lo quiere para sus hijos.*”

Another participant added:

**English:** “Yes, the diseases... that's why there are so many young girls 13, 14-year olds... And pregnancy too.”

**Spanish:** “*Sí, las enfermedades.... por eso es de que hay tantas jovencitas de 13, 14 años... Y el embarazo igual*”

The participants agreed that children are different and alluded to the fact that some girls are more advanced than others. Two women discussed the fact that children of the same age may be very different regarding their level of interest in or awareness of SRTs.

**Mother 1**

**English:** “Some kids are more aware than others. Even though they might be of the same age, there are some kids that are not that interested in that. And there are other kids that, because, curiosity is killing them.”

**Spanish:** “*Algunos niños están más despiertos que otros niños. Aunque tengan la misma edad, hay unos niños que no se interesan tanto en eso. Y hay otros niños que, por, la curiosidad los mata.*”

#### **Mother 2**

**English:** “Yes, like my niece. My niece and her are of the same, the same age and she's like that, she says she's got a boyfriend. And today she broke up with him and tomorrow she has another one. And-and from this school. And, 'And that one?'. And-and, 'I already have another boyfriend'. And whatever. And mine does not even want to brush her hair. She doesn't care how her pants look.”

**Spanish:** “*Sí, como mi sobrina. Mi sobrina y ella son de la misma, de la misma edad y ella anda así, dice que ella tiene un novio. Y hoy ya terminó con él y mañana ya tiene otro. Y-y de esta escuela. Y, '¿Y ese?'. Y-y, 'Yo ya tengo otro novio'. Y que no sé qué. Y la mía no se quiere ni peinar. No le importa cómo se miran los pantalones.*”

Although a majority of the mothers agreed the DSRTs with their daughters is important and necessary, some participants fear the discussions might lead to more risky behaviors rather than protect them.

#### **4. Participants have discussed some SRTs but not all topics**

Past behavior (a background factor) as measured by the RNBI.DSRT past behavior subscale is whether the participants have discussed SRTs in general and specific SRTs (menstruation, sexual intercourse, oral sex, not having sex, pregnancy, sexual diseases, HIV, how having sex may affect her emotions, religious beliefs about sex, cultural beliefs about sex, beliefs about birth control) in the past three months. Some of the participants said that they have discussed select SRTs and SRTs in general and continue to do so. For example:

**English:** “So, since she was very young I have been explaining many things to her, in fact I have another 8-year-old girl and the same with her, she already knows what's going to happen to her [about menstruation]...”

**Spanish:** “Entonces yo desde muy pequeña con ella le he ido explicando muchas cosas, de hecho tengo una otra niña de 8 años y también igual, ella ya va con eso de qué le va a pasar...”

Another mother commented about her efforts to keep open dialogue with her daughters to avoid making the same mistake of not discussing SRTs that parents made in the past:

**English:** But actually, um, with my daughter I'm trying to... well, with my two daughters, I have two. I'm trying that it 's not a taboo. It's something very normal, it's something we're all going to experience. It's something that needs to be seen for what it is. An act, an act that it's done, if it's done for, for the right act, you don't have to be ashamed about it. And, unfortunately, that's what's happening now. Right now... like before, as parents, they didn't say anything, it was taboo and-and waiting to see what would happen, and that's when things happened.

**Spanish:** Pero en realidad, um, con mi hija yo estoy tratando de... bueno, con mis dos hijas, tengo dos. Estoy tratando de que no es un tabú. Es algo muy normal, es algo que todas vamos a experimentar. Y es algo que tiene que verse como lo que es. Un acto, un acto que se hace, si se hace por el, por el acto correcto, no tiene por qué avergonzarte. Y, desgraciadamente, eso es lo que pasa ahorita. Ahorita... como antes, como padres, no decían nada, era un tabú y-y esperar a ver qué es lo que pasaba, y era cuando pasaban las cosas.

Several of the women echoed the same sentiment about the age of their daughters being too young to hear specific information. One mother tried to be open with her daughter about SRTs but when a dialogue was initiated by her daughter, the mother did not engage in open dialogue because she thought her daughter was too young. She gave generic answers about sex as gender rather than sexual intercourse or related topics.



**English:** So yesterday she tells me, 'what are you going tomorrow to the school for?' and I tell her, 'it's just that I filled a questionnaire and they asked me whether I had talked to you, —I tell her—, regarding the... regarding sex'; and she says, 'you have talked to me plenty'; and I say, 'yes, I know', I tell her, 'but these are subjects a little more advances, more advanced', I tell her, 'that I think are not right for your age yet', I tell her, 'because you're 12 years old', and she tells me, 'but I already know about sex..., about masculine'; because she before asked what sex was and I tell her, female sex and male sex for the man and that's what I told her, but because they were hearing the word sex a lot.

**Spanish:** *Entonces ayer ella me dice, '¿a qué vas mañana a la escuela?' y le digo, 'es que yo llené un cuestionario y me preguntaban que si yo he hablado contigo, -le digo-, relacionado a lo de... lo del sexo'; y dice, 'tú me has platicado mucho'; y le digo, 'sí yo sé', le digo, 'pero son temas un poquito más adelantados ya, más avanzados' le digo, 'que yo pienso que todavía no son para tu edad', le digo, 'porque tienes 12 años', y me dice, 'pero yo ya sé del sexo de..., dice de masculino'; porque antes decía qué era el sexo y le digo, sexo femenino y sexo masculino el hombre y le decía yo así, pero porque oían mucho ellas esa palabra del sexo.*

While some of the focus group participants said they could talk about generalities related to SRTs, there were particular topics women did not feel comfortable with such as oral sex. One mother said she talked to her daughter about SRTs in the context of religion and respect but when it comes to topics such as oral sex, she does not know how to approach the topic.

**English:** "I did tell her, something. 'Look at this'. You have to-to respect your own body because, well, they teach us at church, right? Your body is the body of-of Jesus. You, eh, we are God's sons and daughters and, and he made us, and everything, and you have to respect your body because, if you don't respect your body, you're not respecting God. And, aha, and she says, 'Oh, yes, mommy, yes —she says—, yes'. And she's fine like that. But there are things that could be, like she says, oral sex, and other things like, ¿How do I...?"

**Spanish:** “Algo sí le digo, algo. 'Mira esto'. Tú debes de-de respetar tu cuerpo porque, pues, nos enseñan en la iglesia, ¿no? Tu cuerpo es el cuerpo de-de Jesús. Tú, eh, somos el hijo de Dios y, y él nos hizo, y todo, y tienes que respetar tu cuerpo porque, si no respetas tu cuerpo, no estás respetando a Dios. Y, ajá, y ella dice, 'Oh, sí, mami, sí —dice—, sí'. Y se queda así.. Pero hay cosas como puede ser, como dice ella, el sexo oral, otras cosas como, ¿Cómo le...”

A particular way of approaching the discussion of SRTs that was not included on the questionnaire was education and their hopes for the future as a reason to avoid sex. The participants made several references to wanting better for their daughters and stressing the importance of education. For example:

**English:** “I say. 'And cute boys —I tell her—, one day you're going to see one at El Rey (supermarket), another day you're going to see another one at the mini super, another day you're going to see another one at school', I tell her. 'Cute boys are everywhere', daughter. Now you have to focus on school. So, but yes, I don't want her to see it with fear or disgust. That's why I would prefer it was a professional.”

**Spanish:** “Le digo, 'Y niños guapos —le digo—, un día vas a ver uno en El Rey (supermercado), otro día vas a ver otro en el mini súper, otro día vas a ver otro en la escuela', le digo. 'Niños guapos hay donde quiera', hija. Ahorita te debes de enfocar en la escuela. So, pero sí, no quiero que le agarre miedo, asco. Por eso preferiría que fuera un profesional.”

Another participant agreed that she focused her discussions on hopes for the future. She commented:

**English:** “Well, I want you to have a career and be somebody in life and not working like we do... 'First comes education and later everything else', I tell them.”

**Spanish:** “Pues yo quiero que ustedes tengan una carrera y sean alguien en la vida y no trabajando como nosotros.... 'Primero va el estudio y después viene lo demás', les digo yo.”

Most of the participants have discussed general aspects of the DSRTs. While they are at different comfort levels with various topics, the majority (greater than half) of participants thought their

daughters were too young for specific information. They preferred to convey general messages by instilling values like religion, respect, and education.

### **5. Participants want the support of others but would like to discuss SRTs whether they have their support or not**

The normative beliefs subscale of the RNBI.DSRT measured whether particular important others in the participants' lives would approve of them discussing SRTs with their daughters. Important others on the subscale included: "most people who are important to me", "most people like me", friends, mother, father, sister and close female friends, daughter's father, doctor or health care provider, priest or religious advisor, and daughter's godmother (comadre). Focus group participants did not give much regard to what others thought of their discussing SRTs. One reference to normative beliefs was made in regard to her daughter receiving the vaccine for human papilloma virus, which could be considered a sexual topic but was not one of the sexual topics listed on the questionnaire. The mother took into consideration what the doctor said, did not care what others (friends) thought, and based her decision on what she felt would protect her daughter. The mother stated:

**English:** "I have a pediatrician for my daughter; and he, right there, they also talk to her about infections, um, and all that. And it was in fact the doctor himself who recommended it. Because it was there when it-, she asked me the question. 'And why are they giving me that-that vaccine?'. One that it's ca-... Human Papilloma.... Well, they tell me, 'Are you crazy? Why did you give her that?'. I said, I'd rather protect her right now."

**Spanish:** "*Yo tengo el pediatra de la niña; y él, ahí mismo, ellos también le platican sobre las infecciones, um, y todo eso. Y fue de hecho el mismo doctor que me recomendó. Porque ahí fue cuando lo-, ella me hizo la pregunta. '¿Y para qué me van a poner esa-esa vacuna?'. Una que se lla-... papiloma humano.... Que muchas me dicen, '¿Tú estás loca? ¿Por qué le pusiste eso?'. Dije, prefiero protegerla yo desde ahorita.*"

While the participants did make several references to their peers' parenting practices, the references made were not specifically related to SRTs but more about general parenting practices and parental monitoring. Overall, mothers expressed concern that not all parents monitor their children and thus they did not want their children to spend time with them. They contrasted Mexican culture to that of the United States stating that sex was forbidden until marriage but that is not the case in the United States. Some participants felt that if they closely monitor and take care of their own children it will protect them. However, they see it as a problem other parents do not parent the same way. One participant commented:

**English:** "Here that we have seen.... that we come from there [Mexico], here kids don't want to respect mothers anymore. From there we already knew that, we didn't, it was almost-almost, well, it was forbidden doing it until reaching a certain age and everything until you had a husband... Not here... That's the problem, that's why we as mothers are here, to take care of our daughters but these people that didn't come here today are the ones who are not taking care of their daughters."

**Spanish:** "Aquí lo que hemos visto.... aquí lo niños ya no quieren respetar a las mamás. De allá nosotros traíamos el que, no nos casi-casi era, bueno era prohibido hacerlo hasta cierta edad y todo hasta que tengas esposo... Aquí no... Ahí es el problema, por eso es que nosotras como madres estamos aquí, pa' cuidar a nuestras hijas pero esas personas que no vinieron hoy aquí son las que no cuidan a sus hijas."

Mothers also talked about activities such as sleepovers and how they do not allow their children to sleep at other people's houses. One participant stated:

**English:** "That's another problem. Like, 'Let's have a sleep-, oh, sleepover with the girl friends'. Ah-ah. My daughter has never spent the night at anybody's home. Nobody's, nobody's."

**Spanish:** "Ese es otro tema.. De que, 'Vamos a hacer el sleep-o-sleep-over con las amiguitas'. Ah-ah. Mi hija, nunca ha ido a dormir a ninguna casa. De nadie, de nadie."

While another mother stated she allowed her daughter to have a sleep over at her own house, she stated that she does not agree with other's parenting practices. She described her experience:

**English:** “Imagine. One day my daughter came to me on a Friday. Can I have a sleep-over, Mom? They had to do a science project. I said, 'Oh, yes. How many are coming?' 'Um, about two will come'. OK, six came over that Friday. And how many parents told me, 'here, I'm leaving my daughter with you'? No one... called me.

Actually, I took them myself to-to their homes and one of them stayed until Sunday because her parents went to Chicago. No, moreover... My husband was very angry and he said to our girl, 'It's the last time', he said. 'Because what kind of parents are those — they don't know who you live with...', I don't know. As you see, there are bad things everywhere.”

**Spanish:** “*Imagínate. Un día me llegó mi niña, me llegó un viernes. ¿puedo hacer un-un sleep-over, mamá?*’ *Tenían que hacer un proyecto de ciencias. Le dije, 'Oh, sí. ¿Cuántas van a venir?'* 'Um, van a venir como dos'. *OK, me llegaron seis ese viernes. ¿Y cuántos papás me dijeron, 'aquí te dejo a mi hija?'*’. *Ninguno... me habló.*

*Es más, yo misma las fui a dejar a sus casas y una, la fui a llevar hasta el domingo a su casa porque sus papá se fueron a Chicago. No, más... Mi esposo estaba súper enojado y le dijo a la niña, 'Es la última vez', dijo. '¿Por que qué clase de papás son esos — que no saben con quién vives....', no sé. Ya ves que hay cosas malas donde sea.”*

The discussions revealed that while they would like all parents to have the same parenting practices and share the same beliefs, they do what they feel is best for their children regardless of what other parents are doing. Their parenting practices serve as a means of protecting their children.

## **6. Participants want to discuss SRTs with their daughters but feel they need help**

Control beliefs, from the TPB, are beliefs individuals hold about whether they believe they have the means necessary to discuss SRTs with their daughters. When asked what their reasons were for having discussed or not having discussed SRTs with their daughters, almost all of the

participants in the discussion groups reiterated the point that they want to discuss SRTs with their daughters but they do not know how. They did not feel they had the information they needed nor did they know how or when to approach the topics. They also felt afraid and embarrassed and were concerned they would confuse their daughters. Not only did they say they do not know how to engage in the DSRTs but the focus group discussions provided evidence for their claims. One mother commented:

**English:** “So, truthfully, I'd rather, um, I don't know how to approach it. Actually, I don't know how to approach it. I don't know how to tell her.”

**Spanish:** “*Entonces, yo la verdad, yo prefería, um, no sé cómo tratarlo. En realidad, no sé cómo tratarlo. No sé cómo decírselo.*”

When commenting about why she has not discussed SRTs with her daughter a participant stated:

**English:** “Fear, I mean, shame. Fear, shame, worry. Well, I talked to her she said to me, 'Why did you go to school?'. 'They want me to talk to you about subjects, important subjects that you need to know about being a woman'... When I said I was coming here.”

**Spanish:** “*Miedo, este, vergüenza. Miedo, vergüenza, preocupación. Este, yo hablé con ella me dice ella, '¿Porqué, fuiste a la escuela?'. 'Quieren que hable contigo de temas, temas importantes que tú debes de saber sobre la mujer'.... Cuando dijo que iba a venir aquí.*”

Another participant added:

**English:** “That is the truth.. I don't know how to do it without confusing them.”

**Spanish:** “*La verdad es esa... no sé cómo hacerlo sin confundirlas.*”

Another mother agreed and stated:

**English:** “It's very difficult for me telling her or explaining to her and at about what age. Like she says, to avoid confusing her, so she doesn't get to thinking other things that are not right.”

**Spanish:** “*A mí también se me hace muy difícil cómo decirle o cómo explicarle y a qué edad más o menos. Como dice, para no confundirla, para que ella no piense otras cosas que no están bien.*”

A participant summed up the sentiment of the group by stating:

**English:** “We don't feel confident enough to tell her, how it's done, what sex is. We don't know how to arrive at the right thing.”

**Spanish:** “*Nosotros no tenemos confianza en decirle, cómo se hace, que es lo que es el sexo. No sabemos cómo llegar lo correcto.*”

Most of the participants asked for help because they did not know what to say or how to say it. They attributed their lack of knowledge and ability in part to their lack of personal experiences with someone talking to them about sex when they were teens. They said they would appreciate professional help in order to know how to discuss SRTs. One noted:

**English:** I had asked the young woman over there that if she could teach the two of us a class. So, that would explain it, knowing her to have this, um ... I do not want to confuse her (my daughter). I prefer it would be a professional because I did not want to confuse her. I do not know what I should do, I do not know how...

**Spanish:** *Yo le había preguntado a la muchacha allá que si nos podían dar la clase a las dos. O sea, que le explicaran a ella, sabiendo ella tener, este, um... No quiero confundirla (mi hija). Prefiero que sea una persona profesional porque no quiero confundirla. No sé qué debo hacer, no sé cómo debo...*

Several participants commented that they did not know what their daughters already know about SRTs. They believe their daughters have an idea about SRTs but they do not want to give too much or too little information. As a result, they asked for help in knowing how to explain SRTs to their daughters.

**English:** Aha. That's one of the things that I'd like help with, um, explaining it to my daughter. Because she, like they... I imagine they have an idea already; but maybe, we as parents, we have to tell her more openly. Because I think, I don't know, maybe she knows more than I do, but I think she thinks it's just holding each other and kissing and getting one on top of the other. I

don't, I don't know if she's aware about what penetration is. So, I don't know how to talk to her about that.

***Spanish:** Ajá. Esa es una de las cosas que yo quisiera que a mí me ayudaran, um, a explicarle a mi hija. Porque ella, como que ellos... Yo me imagino que ellos tienen una idea ya; pero tal vez sea, nosotros como padres, se lo tengamos que decir más abiertamente. Porque yo tiempo, no sé, tal vez ella sabe más que yo, pero yo pienso que ella piensa que es nada más abrazarnos y besarnos y subirnos uno arriba de otro. No, no sé si ella esté consciente de lo que es la penetración. Entonces yo no sé cómo hablar de eso con ella.*

### **Conclusion of Qualitative Findings**

The focus group responses address research question three because it is clear background factors, especially past experience, influence mothers' intentions regarding the DSRTs with their daughters. The focus group findings suggest that while mothers intend to discuss SRTs with their adolescent daughters, they face many barriers. Barriers include: cultural factors such as the fact that sex is generally not discussed in their culture (past experience); having low levels of knowledge and confidence (control beliefs); and uncertainty about whether the discussion will protect their daughters or give them ideas (behavioral beliefs). However, the barriers are tempered by their past experiences such as their own lack of information, misinformation and personal experiences which move them to want different experiences for their own daughters. Hispanic mothers want to protect their daughters and have high hopes for their futures which motivates them to ask for help with the DSRTs.



## CHAPTER FIVE

### Interpretation of Findings

Chapter Five includes three broad sections. First the empirical evidence provided by the quantitative and qualitative portions of the study will be used to answer the research questions and evaluate the plausibility of the hypothesis. Following this discussion the findings will be examined with consideration of the prevailing literature and the study rationale provided by the Theory of Planned Behavior. Finally, the implications for the findings for future research, clinical application and theoretical considerations will be discussed. The discussion of findings will be presented for each research question and hypothesis while integrating the qualitative findings.

**Research Question 1: How do Hispanic mothers' background factors (mother's education level, daughter's age, past behavior, past experience, acculturation, familism) influence their normative beliefs regarding the DSRTs?**

Several background factors were associated with normative beliefs while one was not. Daughter's age were not significantly related to normative beliefs. This may be because there was little variability in daughter's age because all of the daughters were in 6<sup>th</sup> through 8<sup>th</sup> grade. The analysis indicated a significant negative correlation ( $r = -.26$ ) between past behavior and normative beliefs. Lower past behavior scores indicate the behavior has taken place. Thus, mothers who have engaged in the DSRTs in the past have higher levels of normative beliefs regarding the DSRTs. This finding indicates that mothers who perceive that important people in their lives approve of them discussing SRTs with their daughters were more likely to have already discussed SRTs with their daughters.

There was also a significant negative correlation between past experience (participants' mothers discussed SRTs with them when they were their daughter's age) and normative beliefs ( $r = -.26$ ). Lower past experience scores indicate a greater number of experiences have taken

place. Thus, participants whose mothers engaged in the DSRTs with them were more likely to perceive that the important people in their lives approve of their discussing SRTs with their daughters. Although past experience was significantly correlated with normative beliefs, it was not a significant predictor of normative beliefs. This finding is somewhat surprising since the discussion group revealed many references to mothers' past experiences as motivating factors for them to discuss SRTs with their daughters. Perhaps the past experiences that were measured on the past experience subscale (whether their own mothers discussed SRTs with them) did not adequately capture the past experiences that the participants referenced in the discussion. For example, although many participants in the focus groups shared that their own mothers had not discussed SRTs with them, some of the other past experiences the focus group participants discussed during the focus group included: experiences with sexual abuse, experiences with becoming pregnant at an early age, and their experiences and feelings as a result of having misinformation about sex. Previous qualitative studies involving Hispanic mothers also found that parents had not discussed SRTs with their daughters and this fact made it more difficult for them to engage in DSRTs with their own children (Wilson, et al., 2010; Guilamo-Ramos et al., 2006a). While their mother not discussing SRTs with them is past experience, the difficulties they experience in discussing SRTs with their daughters are considered control beliefs according to the TPB. It could be that past experience has a greater relationship with control beliefs or behavioral beliefs than normative beliefs.

This study intended to look at Hispanic mothers' normative beliefs as they relate to the DSRTs largely because of the Hispanic cultural aspect of familism. In reviewing the relevant literature, normative beliefs were deemed to be culturally important primarily due to the closeness of family relationships. Interestingly, the current study demonstrates that while significant, normative beliefs were not found to be overwhelmingly important. Familism, a background factor, had the strongest (positive) correlation with mothers' normative beliefs ( $r = .35$ ). Thus, participants who had higher familism scores (dedication to their family) also had higher levels of

normative beliefs (beliefs that important persons in their lives approve of their discussing SRTs with their daughters). However, the first regression model revealed that while familism was a significant predictor of normative beliefs, it only accounted for 10.8% of the variance in normative beliefs related to the DSRTs among Hispanic mothers of adolescent daughters. While the findings are consistent with the Theory of Planned Behavior and the Parent-Based Expansion of the TPB, which posit that background factors (or external influences on parents) influence their normative beliefs, it is surprising that familism did not have more influence on normative beliefs. Likewise, while focus group participants discussed the fact their mothers in the context of their lack of discussion of SRTs, there was little discussion of the influence of other family members. The lack of discussion of other family members can, in part, be attributed to the way the focus group was facilitated. The questions that were asked may not have elicited information regarding other family members. Also, the dynamics of the group were such that they chose to discuss other concerns and experiences.

The final regression model indicated that when past behavior was added to familism, the model accounted for an additional 3.2% of the variance in normative beliefs. The demographic variable, daughter's age, did not significantly influence mothers' normative beliefs about the DSRTs with their adolescent daughters. The fact that daughters' age did not influence normative beliefs is somewhat surprising as Askelson, Campo, & Smith (2013) found that daughter's age informed mother's intention to DSRTs with their daughters in the context of having been given the human papilloma virus vaccine. Likewise the focus groups revealed concerns that some mothers thought their daughters were too young to discuss SRTs, which is consistent with previous qualitative findings by Wilson, et al (2010). The fact that daughter's age did not predict normative beliefs may be due to the lack of variability in daughter's age since they were all in 6<sup>th</sup> through 8<sup>th</sup> grade.

Although many Hispanic families often have extended family members and friends closely involved with their families, the focus group revealed that mothers will ultimately do

what they think is best for their children despite the influence of important others (Barker, Cook, Borrego, 2010). It appears that while the participants have high degrees of familism, the closeness of the family relationship may not translate into the DSRTs. One possible explanation for the low amount of variance in normative beliefs accounted for by familism is the fact that SRTs are generally not discussed in their culture. In fact, the uncustomary nature of DSRTs was discussed during the focus groups and is also present in the literature as they refer to it as “taboo” (Gomez & Marin, 1996). Specifically, Stubbs (2008), Marvan and Trujillo (2010) established that the discussion of menstruation is not discussed in the Hispanic culture. Adding to the uncustomary nature of the DSRTs, a majority of the sample was found to be traditional in terms of acculturation. This means they tend to maintain the culture of origin’s values, customs, and culture. Also over 90% of the sample was from Mexico, nearly all (97.5%) of the sample was Catholic, and 76.5% were born outside of the United States, which means the majority are immigrants. The combination of their Mexican heritage, Catholicity, and immigrant status combined with their acculturation classification of traditional means that most of the mothers are likely most comfortable with abstinence as the cornerstone of sexual education (Rouvier, Campero, Walker, & Caballero, 2011). Also, it should be noted that this particular group of Hispanic mothers are enculturated living in a geographical area of the city that has a high concentration of persons of Hispanic descent and their children attend a Catholic school that has a student body of 99% Hispanic origin, which allows them to maintain their culture of origin more than Hispanics who are a minority in the community. This, in turn, means they are more likely to be able to hold onto their cultural tendencies involving the uncustomary nature of SRTs.

**Research Question 2: How do Hispanic mothers’ scores on the normative beliefs subscale influence their scores on the intentions subscale?**

Participants’ normative beliefs regarding the DSRTs with their adolescent daughters was significantly correlated ( $r = .42$ ) with their intentions to discuss SRTs with their adolescent daughters. Analysis of a simple linear regression model revealed that mothers’ normative beliefs

were a significant predictor of intention ( $R^2 = .16$ ). This finding is consistent with the TPB and the PBETPB, which hypothesize that normative beliefs predict mothers' intentions to discuss SRTs with their adolescent daughters. Guilamo-Ramos, Jaccard, Dittus and Collins (2008) also found that when mothers have increased normative beliefs, it was associated with increased DSRTs. These authors also concluded that control beliefs (believe they lack knowledge, embarrassment) play a role in whether mothers discuss SRTs with their children. While the current study revealed that normative beliefs significantly predicted intentions, this factor only accounted for 15.8% of the variance in mothers' intention. This finding could also be attributed to the uncustomary nature of the DSRTs in the Hispanic culture.

As the focus groups revealed, the participants said that the DSRTs was uncustomary in their culture. The point that DSRTs is not generally discussed in the Hispanic culture is consistent with findings from related studies (Gomez & Marin, 1996; Marvan & Trujillo, 2010; Stubbs, 2008). It is possible the lack of experience with DSRTs leaves the mothers with less family support related to the DSRTs because they simply do not discuss it. Although they are highly connected to their family as evidenced by their scores on the familism subscale, if they still consider the DSRTs as something uncustomary, then they would not look to family for support in this instance. Thus, while there is a relationship between mothers' normative beliefs and their intention to engage in the DSRTs, there are likely other factors that more strongly predict their intention. This finding is not a surprise as the current study only analyzed normative beliefs but the Theory of Planned Behavior (TPB) and Parent-Based Expanded Theory of Planned Behavior (PBETPB) both include behavioral beliefs and control beliefs as potential influences on mothers' intentions to DSRT.

In reference to normative beliefs, focus group discussions revealed that mothers were concerned about the parenting practices of their daughters' peers. The concern was due to a lack of parental monitoring by the parents of their daughters' peers. Some mothers stated they did not want their daughter spending time with particular girls because of the lack of supervision by their

parents. These comments about peer parenting practices were categorized as normative beliefs in the qualitative analysis. This particular normative referent was not included on the normative beliefs subscales, however an item stating “Many people like me have talked about sexual topics with their daughter at least once in the past three months” was included but it did not specify parents of their daughters’ peers. The focus group participants believed their parenting practices of closely monitoring where their children are and who they are with will protect them. This belief is warranted as research shows that when children are closely monitored they are less likely to have ever had sex (Morales-Campos, Markham, Fleschler Peskin, Fernandez, 2012) and engage in other problem behaviors such as alcohol use, risky sex, and drugs (Luthar, Coltrane, Parke, Cookson, Adams, 2010).

As stated above, while there was a significant correlation between normative beliefs and intentions, the correlation was weak. The weak correlation and small amount of variance in intention accounted for by normative beliefs can be explained by the absence of other belief factors in the study including control beliefs and behavioral beliefs. While there was a positive relationship between normative beliefs and intentions the qualitative data support the direction of future studies to include behavioral beliefs and control beliefs, as they were present in the discussion to a greater extent than normative beliefs. Mothers had behavioral beliefs about the effects of discussing SRTs but the data from the current study was limited in terms of how these beliefs influenced their intentions and actual behaviors. Mothers reiterated throughout the discussion that they intend to discuss SRTs with their daughters and believe it is important in order to prevent problems (behavioral beliefs) but they need help. They do not feel they have the information they need in order to be able to discuss SRTs accurately (control beliefs). Some mothers said they felt too embarrassed to engage in DSRT with their daughters. These findings are consistent with the findings of Wilson, Dalberth, Koo, and Gard (2010) who also found that lack of information and embarrassment as reasons for mother not having discussed SRTs with their children. Their stated lack of knowledge regarding how to discuss SRTs with their

daughters may be an indicator of low levels of control beliefs. However, this is not known as control beliefs were not measured in the quantitative portion of the study.

**Research Question 3: How do Hispanic mothers' background factors (daughter's age, past behavior, past experience, familism) and normative beliefs influence their intentions regarding the DSRTs?**

Spearman correlations revealed a significant relationship between mothers' intentions to engage in the DSRTs and the following variables: past behavior ( $r = -.47$ ), past experience ( $r = -.24$ ), and normative beliefs (.42). Although there is a negative correlation, it indicates that there is presence of past behavior and past experience. Data were coded with as 1 = yes and 2 = no. Thus, a lower past experience score and past behavior score is actually positive in description. For example, increased intention is associated with mothers having discussed SRTs with their daughters in the past. Familism and age of daughter were not significantly related to intention. When using stepwise regression, the first model including past behavior was significantly related to intentions, accounting for 22% of the variance in intention. Thus mothers who already have discussed SRTs also intend to discuss SRTs in the next three months. The final model including the linear combination of past behavior and normative beliefs was significant and accounted for 32% of the variance in intention. Past experience, a background factor, did not enter into the equation. This finding is surprising because according to the focus group discussions, past experience is a great influence on mothers' intentions to engage in the discussion of SRTs with their daughters. One explanation might be that past experience is associated more with control beliefs or behavioral beliefs than with normative beliefs. While the significant findings related past behavior and normative beliefs supports the use of the TPB, the small amount of variance in intention accounted for demonstrates how important the inclusion of the other belief factors is. Future studies may wish to include measures of behavioral beliefs and control beliefs in order to provide a better prediction of mother's intention to DSRTs with their daughters. Perhaps a linear

combination of past experience and either behavioral beliefs or control beliefs would have significantly predicted mothers' intentions.

The fact that past behavior (having discussed sex-related topics in the past) predicted intention to discuss SRTs in the future, is expected. It makes sense that mothers who have discussed SRTs in the past, will do so again in the future because they have opened the lines of communication (Martino, et al., 2008). The one case where this may not take place is if the mother believes the DSRTs is a one-time occurrence instead of a dialogue that takes place many different times. However this was not supported by the qualitative data. Mothers did not indicate they thought it should be a one-time occurrence. While popular culture suggests the "big talk" is the way to approach talking with one's child about sex (Martino, et al., 2008), it was not supported by the discussion group.

The discussion groups revealed that mothers want to discuss SRTs with their daughters. However, the timeframe in which they intend to do so was not clear during the focus groups. Several mothers said they would discuss the topics at an appropriate age whereas the literature states that the mothers should already be discussing SRT topics with their daughters' at or before middle school age (Byers, Sears, & Weaver, 2008). Reasons mothers have not discussed SRTs included the fear that they may give them ideas by discussing SRTs (behavioral beliefs) and the belief that they do not know how to discuss SRTs (control beliefs). The finding that Hispanic mothers do not feel they know how to discuss SRTs has been revealed in previous literature (Guilamo-Ramos, et al., 2006). One study examined behavioral beliefs including prevention (belief that DSRTs would help prevent pregnancy and STIs) and communication reaction (belief that parents would be embarrassed or that the adolescent would react negatively to the discussion) (Villarruel, et al., 2008). However, the finding from the current study, the behavioral belief that "the DSRTs would give them ideas", has not been measured in previous literature. Since this behavioral belief is a barrier to the DSRTs, it should be included in future studies.



The discussion groups also revealed that in reference to particular topics such as oral sex, they had little intention of discussing it due to the fact they had no idea how. While one study examined the impact of parent-based interventions on the adolescent behavior oral sex (Guilamo-Ramos, et al., 2011), no study has examined how mothers feel about discussing oral sex with their children. This is an important finding due to the fact that 45% of females aged 15-19 and 81% of females aged 20-24 have had oral sex at least once and 37% of Hispanic females aged 15-24 had oral sex before first vaginal intercourse (Chandra, Mosher, and Copen, 2011). Furthermore, oral sex can transmit sexually transmitted infections include chlamydia, genital herpes, gonorrhea, and syphilis (Bruce & Rogers, 2004) thus reinforcing the inclusion of the discussion of oral sex as a sex-related topic.

There was a strong relationship between past behavior and intentions and normative beliefs and intentions. There was a weak relationship between past experience and intention. Past behavior and normative beliefs predicted mothers' intention to discuss SRTs with their adolescent daughters. Although past experience was prevalent in the discussion group, it did not predict mothers' intentions.

**Research Question 4: What is the internal consistency (reliability) of the RNBI.DSRT and the RNBI.DSRT subscales?**

Cronbach's alpha calculation revealed that the Rodriguez Normative Belief Instrument (RNBI.DSRT) total score (.82) and the four subscales (.85-.89) exhibited acceptable internal consistency. This analysis indicated that the reliability of the total instrument and its subscales could not be markedly improved by deleting any item from the instrument. The high Cronbach's alpha may indicate that future investigators could revisit the number of items included in instrument. The overall RNBI.DSRT and its subscales had good internal consistency. The fact that past behavior and past experience were significantly correlated with normative beliefs and that normative beliefs predicted intention further supports the reliability of the RNBI.DSRT and its use within the TPB framework.

**Research Question 5: What evidence for convergent validity does the RNBI.DSRT demonstrate?**

The RNBI.DSRT scale demonstrated evidence for convergent validity. This evidence includes the normative beliefs of the participants being significantly correlated with mothers' intentions to engage in the DSRTs ( $r = .42$ ), which is consistent with the TPB framework. Also consistent with the TPB, mothers' intentions to engage in the DSRTs with their adolescent daughters were predicted by their normative beliefs ( $R^2 = .16$ ). Also, background factors (past behavior, past experience, and familism) were correlated with normative beliefs. These findings are consistent with the models of PBETPB and TPB and thus demonstrate convergent validity of the RNBI.DSRT.

Focus group findings did provide some limited support of the validity of the RNBI.DSRT. The participants of the focus groups did speak of how past experience was the main reason for their intention to discuss SRTs which was consistent with the TPB. While participants mentioned their mothers and other parents as topics within normative beliefs, the constructs they discussed the most was control beliefs followed by behavioral beliefs. Many of the focus group participants spoke of the difficulty they have discussing SRTs (control beliefs) and some expressed their fear that these discussions may give their daughters ideas (behavioral beliefs) about engaging in an additional number of sexual activities. These findings indicate that, future studies utilizing the RNBI.DSRT may wish to include measures of control beliefs and behavioral beliefs in an attempt to more accurately predict intention to engage in DSRTs.

The convergent validity was demonstrated because theoretically background factors influence normative beliefs, control beliefs, and behavioral beliefs and a combination of the three beliefs influence intentions. Operationally, the background factors (familism, past experience, past behavior) influenced normative beliefs and intention was predicted by normative beliefs. Familism was a significant predictor of normative beliefs providing evidence of predictive

validity. Convergent validity was further supported through factor analysis. The four pre-determined subscales consistent with the TPB were confirmed through factor analysis.

**Hypothesis One: Mothers' scores on the intention subscale are directly correlated with their scores on the normative belief subscale.**

Hypothesis 1 was supported by the data as evidenced by the positive correlation between mothers' scores on the intention subscale and their scores on the normative beliefs subscale ( $r = .42$ ). As mothers believe important normative referents in their life approve of them discussing SRTs with their daughters, their intention to discuss SRTs increases. This finding matches previous studies (Guilamo-Ramos, Jaccard, Dittus and Collins, 2008; Villarruel, et al., 2008) that found normative beliefs to influence intentions to engage in the DSRTs. This positive correlation is also predicted by the TPB and provides evidence in support of concurrent validity of the RNBI.DSRT. In addition to the positive correlation, mothers' intentions to discuss SRTs were also predicted by normative beliefs ( $R^2 = .16$ ) again reinforcing the use of the TPB.

### **Discussion Conclusion**

Two interesting findings emerged from the mixed-method approach to the study. While quantitative methods indicated that normative beliefs significantly influenced intentions to DSRT, there was little dialogue about normative beliefs among the focus group attendees. This finding is interesting due to the nature of the Hispanic culture and familism. Given the high importance of family, it is surprising that the participants did not talk about their family beyond whether their mothers had discussed SRTs with them and references to sexual abuse. This could be in part due to the way the focus group was led including the questions that were asked and the dynamics of the group. An alternative explanation may be that the DSRTs is uncustomary in Hispanic culture (Marvan & Trujillo, 2010; Prado, et al., 2007) and therefore they have not talked about the DSRTs with family or friends, which has lead them to be unaware of the perceptions of important persons in their lives.

Second, the discussion groups revealed that past experience contributes more to the mothers' intentions to discuss SRTs with their daughters than do normative beliefs. In contrast, in the quantitative analysis, while past experience significantly correlated with intention, it was not a significant predictor of intention. This could be because behavioral beliefs and control beliefs were missing from the quantitative analysis. It is possible that past experience would significantly predict behavioral beliefs and/or control beliefs and in turn those beliefs could predict intention. The qualitative findings supported this possibility because many focus group participants discussed how they did not think they had the skills or knowledge to discuss SRTs, they felt embarrassed (control beliefs) and that they do not want to give their daughters ideas (behavioral beliefs). Guilamo-Ramos, et al. (2006) also found that Hispanic mothers did not believe they had the skills needed to discuss SRTs (control beliefs) but did not find that mothers were afraid they would give their daughters ideas by discussing SRTs.

Hispanic mothers recognize the importance of discussing SRTs with their adolescent daughters and want to engage in the discussions. As exemplified in their focus groups, their past experiences motivate them to want to discuss SRTs because they know the confusion they experienced as well as the choices they made as a result of a lack of knowledge. However, they face many barriers to the DSRTs. These barriers include cultural factors, personal factors, and fear that the DSRTs may give them idea. The Theory of Planned Behavior serves as an appropriate framework for the analysis of the Hispanic mothers' intentions regarding the DSRTs with their adolescent daughters. While normative beliefs predict mothers' intentions regarding the DSRTs, the account for a small portion of the variance in mothers' intentions. Thus, other concepts of TPB, behavioral beliefs and control beliefs, should be included in future studies.

### **Theoretical Considerations**

Ajzen's Theory of Planned Behavior (Ajzen, 1991; Fishbein & Ajzen, 2010) and The Parent-Based Expansion of the Theory of Planned Behavior (PBETPB) (Hutchinson & Wood, 2007) provided a useful theoretical frameworks to examine the factors influencing Hispanic

mothers' intentions related to the DSRTs with their adolescent daughters. Background factors, normative beliefs, intentions and behavior were represented by study variables. This study examined the influence of background factors on normative beliefs and the influence of normative beliefs on intentions.

The TPB behavior concepts (past experience, normative beliefs, control beliefs, behavioral beliefs and intention) were also used to code the focus group transcripts. Overall, the TPB pre-determined themes were adequate in coding the focus group transcripts. The focus groups allowed for a greater understanding of what mothers believe and experience related to the discussion of SRTs with their daughters.

While normative beliefs provided limited predictive ability of mothers' intentions regarding the DSRTs, the focus groups provided evidence that other concepts of the TPB may contribute to predicting intention. This conclusion is based upon the fact that a nearly all of the focus group participants said it was difficult for them to discuss SRTs, that they did not know what to say or how to approach the topics, and that they felt embarrassed (control beliefs). They also thought that while discussing SRTs may help their daughters not make the same mistakes they made, they were afraid the discussions would give their daughters ideas regarding sexual activity that they may not have been thinking of doing (behavioral beliefs). Future inquiry into this area may wish to include measures of behavioral beliefs and control beliefs when studying DSRT among Hispanic mothers.

### **Implications for Vulnerable Populations**

The Hispanic women in this sample are considered a vulnerable population as it relates to the DSRTs with their daughters for a number of reasons. These reasons include that many of them were born outside of the United States, making the immigrant women and many of these women speak only Spanish or speak Spanish as their primary language. A majority of the participants are considered traditional Hispanics and are living in the United States. This means they have to contend with language and cultural barriers. While some may live close to relatives,

other relatives and social support may live far away or outside of the United States. Most of the sample in this study is living in poverty as evidenced by 99% of their children being enrolled in the Federal Free and Reduced Lunch Program. As further evidence of the poverty status of the target population, a majority of the participants did not graduate from high school.

According to Flaskerud and Winslow's Vulnerable Populations Conceptual Model (1998), immigrants, women and people of color are social groups that are vulnerable to adverse health outcomes. The vulnerability is due to a relationship between lack of resources (social, economic, and environmental) and increased exposure to risk factors. Further, the literature has referred to inadequate social support, immigration status and limited English proficiency as social barriers to help seeking. Additional barriers include financial constraints including income, education, employment, and insurance as well as lack of childcare and transportation (Callister, Beckstrand, & Corbett, 2011).

The sample is vulnerable to difficulties with the DSRTs with their adolescent daughters first because they have low education levels, which in most cases means they lack the information they need. Most of them speak Spanish and are living in a primarily English-speaking city. While many of the businesses and health care facilities have bilingual workers, the primary language spoken is English, which makes it more difficult to find resources. In this sample their past experience also makes them vulnerable because they did not experience their mothers engaging in the DSRTs. Their lack of experience makes it difficult for them to know what to say to their own daughters or how to say it. Adding to their vulnerability, it can be difficult to find local experts in this topic who are bilingual. In contrast, it is important to note that their vulnerability may be tempered by the fact that they are immigrants. While they face difficulties, immigrants are known for being hardworking, ambitious and successful citizens (Pieter van Oudenhoven, 2006). The concept of Immigrant Paradox states that immigrants often do better than their peers who were born in the US on a variety of indicators including, health, education, and criminal behaviors (Nguyen, 2006). The findings of this study will address the vulnerability

by providing nursing professionals with an understanding of this sample of Hispanic women and their intentions to engage in the DSRTs with their daughters. Implications for future nursing practice and research will be explained in the coming sections.

### **Implications for Nursing Practice**

The results of this study have a number of implications for nursing practice. First, nurses can address the social vulnerability of the participants in the context of the DSRTs. Their vulnerability can be addressed by being knowledgeable of the intentions, background factors, normative beliefs and context of Hispanic mothers related to the DSRTs. As a result of the study, nurses can provide culturally appropriate resources and programs for mothers aimed to increase the DSRTs with their adolescent daughters. As is evident by the majority of the participants completing the questionnaire in Spanish and the focus groups being conducted in Spanish, the programs should be in the language of their preference. The resources should also be appropriate for their education level, which, in this case, would be a 5<sup>th</sup>-6<sup>th</sup> grade reading level.

Programs involving the DSRTs between Hispanic mothers and their daughters are needed as was evidenced when participants of the focus groups requested professional help. They appreciated the discussion group and asked if more discussions could be scheduled that offered the information they need. Thus, implications for nursing practice include holding regularly scheduled parent meetings or coffee discussions regarding the DSRTs. A nurse facilitator who is a cultural referent and an expert in adolescent health could facilitate the meetings. This would be an opportunity for parents to share their questions and concerns, receiving answers from a trained professional. Another approach would be to have mother daughter meetings. This would allow for dialogue to begin between the mothers and daughters and may promote future discussions of DSRTs between them.

The current study indicates that this sample and groups with similar demographics would benefit from abstinence or religious based programs that are culturally sensitive and in their own language. It also indicates that most of the participants' mothers did not discuss DSRTs with them.

Based on the mothers stated lack experience with their own mothers, lack of information and lack of knowing how to discuss SRTs, resources should include the information the mothers are lacking and strategies regarding how to approach the DSRTs with their adolescent daughters. Opportunities for role-playing as a means of practicing the DSRTs may be helpful for the sample (Guilamo-Ramos, et al, 2011). The focus groups also revealed that some mothers are uncertain as to whether the DSRTs might actually give their daughters ideas instead of prevent problems. This finding reinforces the need for programs that empower mothers (parents) to be the primary educators of their children when it comes to SRTs. When mothers are empowered by the information and training they receive, they will be able to discern what information their daughters (and children) receive. A part of the empowerment may include strategies for parental monitoring. Parental monitoring includes an aspect of communication with the adolescent regarding activities and whereabouts. A program aiming to increase the DSRTs could utilize a parental monitoring component, which this study revealed as an important practice for the participants. By incorporating a more familiar practice, it may lead the women to be empowered as it could increase control beliefs and as a result, intention. The programs should not only include the information they need but also practical strategies that can be used to initiate discussions of the various topics.

Nurses should be aware of the uncustomary nature of SRTs in the Hispanic culture. Thus, expecting the mothers to discuss oral sex might be asking a lot of them. Nurses should assess the mothers comfort level with topics such as menstruation, religious beliefs about sex, cultural beliefs about sex and work up to the more difficult topics such as oral sex. Additional topics that may be included are anal sex and the human papilloma virus vaccine. Again, opportunities for role-playing may help increase their comfort level.

In order to disseminate the findings and make a greater impact on the community, findings from the study could be presented to local school stakeholders and healthcare providers at local clinics with a largely Hispanic population. These presentations may increase



understanding of Hispanic mothers' intentions regarding the DSRTs with their adolescent daughters so they tailor their education based on their needs.

### **Implications for Nursing Research**

This study was conducted exclusively at Catholic Schools. Future studies could be conducted at public schools to determine if the instrument psychometric properties are similar for Hispanic mothers of children who attend non-Catholic institutions. This study led to the generation of additional research questions to be addressed in future research studies related to the DSRTs. These questions were generated by the integration of the findings from the quantitative and the qualitative portions of the study. The data from the qualitative portion of the study suggest control beliefs and behavioral beliefs are important to understand mothers discussing SRTs with their daughters. Thus, more research is needed to fully understand this part of the theory. These questions include but are not limited to: How do Hispanic mothers' behavioral beliefs influence their intentions regarding the DSRTs?; How do Hispanic mothers' control beliefs influence their intentions regarding the DSRTs?; What has the greatest influence on mothers' intentions (behavioral beliefs, control beliefs, or normative beliefs)? A longitudinal study may be conducted to determine if mothers' intentions translate to behavior within the timeframe specified (3 months).

As a response to focus group participants' requests for information and help, future studies may also include studying the effectiveness of an intervention that invites Hispanic mothers to come together to receive information about SRTs and strategies regarding how to discuss them with their daughters. The intervention could be held at their daughters' schools. Outcomes would include mothers' intentions and mothers' behavior regarding the DSRTs. This intervention could be conducted as community-based participatory research where the researcher works with community members to answer questions from the community, collect the data locally, and then disseminate the findings to the community (Wallerstein & Duran, 2010). Finally, future studies may also be conducted with fathers and daughters, fathers and sons, and

mothers and sons aimed to increase the discussion of sex-related topics.

### **Implications for Nursing Education**

The findings from this study may be utilized in nursing education in a number of ways. First, nursing educators of community theory and clinical groups may reflect on and discuss with their students the social vulnerabilities of the sample and how they might help Hispanic mothers to overcome some of the vulnerabilities they face related to the DSRTs. Some of the social vulnerabilities include a lack of resources, low education level, and their preferred language being different than the mainstream language. Nursing educators and students may also become aware of the barriers to discussing SRTs that Hispanic mothers are facing. The barriers include lack of knowledge, not knowing how to discuss SRTs, lack of prior experience with their own mothers, and fear that the discussions may give their daughters ideas. This knowledge may allow them to be culturally sensitive by being prepared to provide them with strategies to engage in the DSRTs in addition to the provision of print materials that are in their preferred language and at their reading level. While they cannot assume that all Hispanic women with similar demographic characteristics will have the same beliefs and experiences related to the DSRTs, the findings allow the nursing student to see a vantage point that is perhaps different from their own. This understanding of the Hispanic mothers as it relates to the DSRTs with their daughters will allow nursing students to be able to provide culturally sensitive care.

### **Strengths and Limitations**

A major strength of the study is that it examines a population that has historically been understudied. The population studied is unique because it consists of two inner-city Catholic schools. In order to obtain access into these schools the PI had to establish a trusting relationship with stakeholders within the schools by speaking with the school leaders about the purpose and content of the study in order to obtain their approval. Further, given the research took place in a Catholic setting, the researcher had to assure the school leaders that the study would not compromise the teachings of the Catholic Church, in other words the study would not promote

the use of contraception. Although this could be considered a limitation, it can be seen as a strength because the study reaches an understudied group. Another strength of the study was that it took place in a setting that is familiar to the participants, their daughters' school. This allowed the participants to feel comfortable in the setting and there was ease of access to the study site as they bring their children to and from school daily. Conducting the study in this environment likely enhanced the internal validity of the findings.

Although the study has many strengths, it also has several limitations. First there are some limitations related to the sample. The sample includes a convenience sample of Hispanic mothers of adolescent females from two Midwestern Catholic middle schools that are living in the United States but immersed in their native culture (primarily traditional, Mexican). The relative homogeneity of the sample limits the generalizability of the findings to mothers of adolescent females in schools not of the Catholic religion. Another possible limitation of the sample is the sample size resulting in inadequate statistical power to conduct the psychometric analysis to the RNBI.DSRT. Some sources (Comrey and Lee, 1992; Tabachnick & Fidell, 2007) indicate that the sample size (N=119) may not be adequate for factor analysis that includes 44 items while others (Guadagnoli & Velicer, 1988; Mundfrom, Shaw, & Tian, 2005) disagree. Factor analysis was done bearing in mind that if factor loadings are low (<.40) it may be due to a small sample size (Guadagnoli & Velicer, 1988). Although there is controversy in the literature regarding the necessary sample size for factor analysis, the number of participants did not impact the findings. While most items loaded high on each factor, there was one factor that loaded low (.089) on the past behavior scale. This item should be examined and possibly removed for use in future studies.

Another limitation of the study is that the study utilized a recently developed instrument, RNBI.DSRT, as the primary quantitative source of data collection. Preliminary data indicated the RNBI.DSRT exhibited face and content validity and preliminary internal consistency. The current study provided further evidence to support the psychometric characteristics of the

RNBI.DSRT. Although this is a new instrument, the findings from this study supported the internal consistency and reliability of this instrument. Another limitation related to the instrument is that it did not include all possible sex-related topics. Some additional topics that were not included in the instrument are anal sex and the human papilloma virus vaccine (HPV vaccine). These topics should be included in an intervention aimed to increase the DSRTs.

A potential limitation of the RNBI.DSRT is that items were grouped by subscale on the questionnaire for the current study. Due to the number of items and the similar question stems, it is possible some participants did not read each item and may have circled the same answer for all items in the subscale. To prevent this, items could be re-ordered but this may also increase the length of time required to complete the survey.

A limitation of the qualitative portion of the study is that it is possible some mothers may not have wanted to disclose information regarding SRTs due to the sensitive nature of the topics. To address this possibility, confidentiality was assured to the participant during the consent process. It was reiterated at the time of the focus groups. However, as evidenced by the focus group excerpts, it appears the participants did feel comfortable as there were sensitive issues discussed.

Another limitation of the study is the omission of the TPB constructs of behavioral beliefs and control beliefs. It is possible that behavioral beliefs and control beliefs may also significantly influence intention among to this population and therefore the study could have missed a significant amount of meaningful data. The focus groups allowed these constructs to surface naturally, providing research questions for future research.

### **Chapter Five Summary**

This chapter provides a detailed discussion of study findings including each research question and hypothesis. Study rationale, theoretical considerations and implications for theory development, vulnerable populations, implications for nursing practice, nursing research, and nursing education are discussed. Strengths and limitations are also presented.

### **Concluding Statement**

This study examined Hispanic mothers' intentions related to the DSRTs with their adolescent daughters within the context of two inner city, Catholic schools. The study findings indicate that the mothers' background factors, specifically familism, past behavior, and past experience, influence their normative beliefs. The findings of this study indicate that Hispanic mothers want their daughters to have information yet they are fearful of the potential consequences of giving information in a wrong way or that information will lead to sexual activity. Their intentions to engage in DSRTs are also somewhat predicted by their normative beliefs although additional potential predictors were identified by the focus groups, that were consistent with the TPB. The findings indicate that the RNBI.DSRT is a reliable instrument and may be used to predict Hispanic mothers' intentions regarding the DSRTs with their adolescent daughters. The TPB and PBETPB provided useful frameworks to examine Hispanic mothers' intentions. Finally the findings of this study indicate that future studies examining Hispanic mothers' intentions need to include control beliefs and behavioral beliefs in addition to normative beliefs. The study offers a unique perspective on Hispanic mothers living in the United States, who are immersed in their native culture, and their beliefs regarding and experiences with the DSRTs with their adolescent daughters.

## BIBLIOGRAPHY

- Allmark, P. (2003). Popper and nursing theory. *Nursing Philosophy*, 4, 4-16.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- Ajzen, I. (2005). *Attitudes, personality, and behavior* (2nd ed.). New York, NY: Open University Press.
- Ajzen, I. (2012). *Constructing a Theory of Planned Behavior Questionnaire*. Retrieved from <http://people.umass.edu/ajzen/pdf/tpb.measurement.pdf>
- Appleton, J. V. & King, L. (2002). Journeying from the philosophical contemplation of constructivism to the methodological pragmatics of health services research. *Methodological Issues in Nursing Research*, 40(6), 641-648.
- Armitage, C. J., Conner, M., & Norman, P. (1999). Differential effects of mood on information processing: evidence from the theories of reasoned action and planned behavior. *European Journal of Social Psychology*, 29, 419-433.
- Askelson, N. M., Campo, S., Lowe, J. B., Smith, S., Dennis, L. K., & Andsager, J. (2010). Using the theory of planned behavior to predict mothers' intentions to vaccinate their daughters against HPV. *J Sch Nurs*, 26(3), 194-202. doi: 10.1177/1059840510366022
- Askelson, N. M., Campo, S., Lowe, J. B., Smith, S., Dennis, L. K., & Andsager, J. (2011). The birds, the bees, and the HPVs: what drives mothers' intentions to use the HPV vaccination as a chance to talk about sex? *Journal of Pediatric Health Care*, 25(3), 162-170.
- Askelson, N. M., Campo, S., & Smith, S. (2012). *Mother-daughter communication about sex: The influence of authoritative parenting style*, 27(5), 439-448.
- Bannon, W. (2013). *The 7 Steps of Data Analysis: A manual for conducting a quantitative research study*. (1<sup>st</sup> Edition). Brooklyn, New York: Stats Whisperer Press.
- Barker, C. H., Cook, K. L., Borrego, J. (2010). Addressing cultural variables in parent training programs with Latino families. *Cognitive and Behavioral Practice*, 17, 156-166.
- Bauman, S. (2005). The Reliability and Validity of the Brief Acculturation Rating Scale for Mexican Americans-II for Children and Adolescents. *Hispanic Journal of Behavioral Sciences*, 27(4), 426-441. doi: 10.1177/0739986305281423
- Benavides, R., Bonazzo, C., & Torres, R. (2006). Parent-child communication: a model for Hispanics on HIV prevention. *Journal of Community Health Nursing*, 23(2), 81-94.
- Benjet, C., & Hernandez-Guzman, L. (2001). Gender differences in psychological well-being of Mexican early adolescents. *Adolescence*, 36(141), 47-65.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. M. Padilla (Ed.), *Acculturation: Theory, models, and some new findings* (pp. 117-122). New York: Routledge.

- Brady, S. S., & Halpern-Felsher, B. L. (2007). Adolescents' reported consequences of having oral sex versus vaginal sex. *Pediatrics*, *119*(2), 229-236. doi: 10.1542/peds.2006-1727
- Bruce, A. & Rogers, R. (2004). Oral manifestations of sexually transmitted diseases. *Clin Dermatol*, *22*, 520-7.
- Byers, E. S., Sears, H. A., & Weaver, A. D. (2008). Parents' reports of sexual communication with children in kindergarten to grade 8. *Journal of Marriage and Family*, *70*, 86-96.
- Cabassa, L. (2003). Measuring acculturation: Where we are and where we need to go. *Hispanic Journal of Behavioral Sciences*, *25*(2), 127-146.
- Celenk, O. & Van de Vijver, F. (2011). Assessment of acculturation: Issues and overview of measures. *Online readings in psychology and culture*, *8*(10). Retrieved from: <http://scholarwords.gvsu.edu/orpc/vol8/iss1/10>
- Center for Disease Control and Prevention. (2009). Sexually Transmitted Disease Surveillance 2008: Division of STD Prevention. Retrieved from: <http://www.cdc.gov/std/stats08/surv2008-complete.pdf>
- Center for Disease Control and Prevention. (2012a). Trends in HIV-related risk behaviors among high school students -- United States, 1991-2011: Morbidity and Mortality Weekly Report (MMWR). Retrieved from: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6129a4.htm?s\\_cid=mm6129a4\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6129a4.htm?s_cid=mm6129a4_w)
- Center for Disease Control and Prevention. (2012b). About teen pregnancy: Retrieved from: <http://www.cdc.gov/teenpregnancy/aboutteenpreg.htm>
- Center for Disease Control and Prevention. (2013a). Sexually Transmitted Diseases: STD Awareness Month. Retrieved from: <http://www.cdc.gov/std/sam/>
- Center for Disease Control and Prevention. (2013b). Ten Birth Rates Drop But Disparities Persist. Retrieved from: <http://www.cdc.gov/features/dsteenpregnancy/>
- Cha, E. S., Doswell, W. M., Kim, K. H., Charron-Prochownik, D., Patrick, T. E. (2007). Evaluating the Theory of Planned Behavior to explain intention to engage in premarital sex amongst Korean college students: a questionnaire survey. *International Journal of Nursing Studies*, *44*(7), 1147-1157.
- Cha, E. S., Kim, K. H., & Patrick, T. E. (2008). Predictors of intention to practice safer sex among Korean college students. *Archives of Sexual Behavior*, *37*(4), 641-651.
- Chandra, A., Mosher, W. D., & Copen, C. (2011). Sexual behavior, sexual attraction, and sexual identity in the United States: Data from the 2006-2008 National Survey of Family Growth. National health statistics reports no 36. National Center for Health Statistics. Retrieved from: <http://www.cdc.gov/nchs/data/nhsr/nhsr036.pdf>.
- Charmaraman, L., & McKamey, C. (2011). Urban early adolescent narratives on sexuality: Accidental and intentional influences of family, peers, and the media. *Sex Res Soc Policy*, *8*, 253-266.
- Chung, P. J., Travis, R., Jr., Kilpatrick, S. D., Elliott, M. N., Lui, C., Khandwala, S. B., . . . Schuster, M. A. (2007). Acculturation and parent-adolescent communication about sex in

- Filipino-American families: a community-based participatory research study. *Journal of Adolescent Health*, 40(6), 543-550. doi: 10.1016/j.jadohealth.2007.01.004
- Clark Callister, L., Beckstrand, R. L., & Corbett, C. (2011). Postpartum depression and help-seeking behaviors in immigrant Hispanic women. *JOGNN*, 40(4), 440-449.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Erlbaum.
- Commendador, K. A. (2010). Parental influences of adolescent decision making and contraceptive use. *Pediatric Nursing*, 36(3), 147-170.
- Comrey, A. L., and Lee, H. B. (1992). *A first course in factor analysis (2<sup>nd</sup> ed.)*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Coohey, C. (2001). The Relationship between Familism and Child Maltreatment in Latino and Anglo Families. *Child Maltreatment*, 6(2), 130-142. doi: 10.1177/1077559501006002005
- Creswell, J. W. & Plano Clark, V. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2009). *Research Design: Qualitative, quantitative, and mixed methods approaches, 3<sup>rd</sup> edition*. Thousand Oaks, CA: Sage.
- Cuellar, I., Arnold, B. & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the origican ARSMA scale. *Hispanic Journal of Behavioral Sciences*, 17, 275-304.
- Cuellar, I., Harris, L. S., & Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. *Hispanic Journal of Behavior Science*, 2, 199-217.
- Denzin, N. K. (1989). *The research act: A theoretical introduction to sociological methods*. (3<sup>rd</sup> ed.). Englewood Cliff, NJ: Prentice Hall
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method (3rd ed.)*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Doswell, W. M., Kim, Y., Braxter, B., Taylor, J., Kitutu, J., & Hsu, Y. A. (2003). A theoretical model of early teen sexual behavior: What research tells us about mother's influence on the sexual behavior of early adolescent girls. *Journal of Theory Construction and Testing*, 7(2), 56-60.
- Fantasia, H. C. (2011). Influences of social norms and context on sexual decision making among adolescent women. *Journal of Midwifery and Womens Health*, 56(1), 48-53. doi: 10.1111/j.1542-2011.2010.00014.x
- Fasula, A. M., & Miller, K. S. (2006). African-American and Hispanic adolescents' intentions to delay first intercourse: parental communication as a buffer for sexually active peers. *Journal of Adolescent Health*, 38(3), 193-200. doi: 10.1016/j.jadohealth.2004.12.009
- Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2010). G\*Power 3.0 [Software], from <http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3>



- Finer, L. B. and Philbin, J. M. (2013) Sexual initiation, contraceptive use, and pregnancy among young adolescents, *Pediatrics*, April, 2013.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York, NY: Psychology Press.
- Flaskerud, J. H. & Winslow, B. J. (1998). Conceptualizing vulnerable populations health-related research. *Nursing Research*, 47(2), 69-78.
- Francis, J. J., Eccles, M. P., Johnston, M., Walker, A., Grimshaw, J., Foy, R., . . . Bonetti, D. (2004). Constructing questionnaires based on the Theory of Planned Behaviour: A manual for health services researchers. Retrieved from: [http://pages.bangor.ac.uk/~pes004/exercise\\_psych/downloads/tpb\\_manual.pdf](http://pages.bangor.ac.uk/~pes004/exercise_psych/downloads/tpb_manual.pdf)
- Gilliam, M. (2007). The role of parents and partners in the pregnancy behaviors of young Latinas. *Hispanic Journal of Behavioral Sciences*, 29(1), 50-67.
- Gomez, C. A. & Marin, B. V. (1996). Gender, culture, and power: Barriers to HIV prevention strategies for women. *Journal of Sex Research*, 33, 355-362.
- Guadagnoli, E., & Velicer, W. F. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin*, 103(2), 265-275.
- Guba, E. G. (1990). *The paradigm dialogue*. Newbury Park, CA: Sage Publications.
- Guba, E. G. & Lincoln, Y. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 60-69). Thousand Oaks, CA: Sage
- Guilamo-Ramos, V., Dittus, P., Jaccard, J., Goldberg, V., Casillas, E., & Bouris, A. (2006). The content and process of mother-adolescent communication about sex in Latino Families. *Social Work Research*, 30(3), 169-181.
- Guilamo-Ramos, V., Jaccard, J., Dittus, P., Bouris, A. (2006). Parental expertise, trustworthiness, and accessibility: Parent-Adolescent communication and adolescent risk behaviors. *Journal of Marriage and Family*, 68(December): 1229-1246.
- Guilamo-Ramos, V., Jaccard, J., Dittus, P., & Collins, S. (2008). Parent-adolescent communication about sexual intercourse: an analysis of maternal reluctance to communicate. *Health Psychology*, 27(6), 760-769. doi: 10.1037/a0013833
- Guilamo-Ramos, V., Bouris, A., Jaccard, J., Lesesne, C., & Ballan, M. (2009). Familial and cultural influences on sexual risk behaviors among Mexican, Puerto Rican, and Dominican youth. *AIDS Education & Prevention*, 21(5), 61-79. doi: 10.1521/aeap.2009.21.5\_suppl.80
- Guilamo-Ramos, V., Bouris, A., Jaccard, J., Gonzalez, B., McCoy, W., & Aranda, D. (2011). A parent-based intervention to reduce sexual risk behavior in early adolescence: building alliances between physicians, social workers, and parents. *Journal of Adolescent Health*, 48(2), 159-163.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.

- Hulley, S., Cummings, S., Browner, W., Grady, D., & Newman, T. (2007). *Designing clinical research*. (3<sup>rd</sup> ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Hutchinson, M. K. (2002). The influence of sexual risk communication between parents and daughters on sexual risk behaviors. *Family Relations*, *51*, 238-247.
- Hutchinson, M. K., Jemmott, J. B., Sweet Jemmott, L., Braverman, P., & Fong, G. T. (2003). The role of mother–daughter sexual risk communication in reducing sexual risk behaviors among urban adolescent females: a prospective study. *Journal of Adolescent Health*, *33*(2), 98-107. doi: 10.1016/s1054-139x(03)00183-6
- Hutchinson, M. K., & Wood, E. B. (2007). Reconceptualizing adolescent sexual risk in a parent-based expansion of the theory of planned behavior. *Journal of Nursing Scholarship*, *39*(2), 141-146.
- IBM SPSS. (2013). SPSS for Mac (version 21.0) [computer software]. New York: IBM Corporation.
- Kana'iaupuni, S. M., Donato, K. M., Thompson-Colon, T. & Stainback, M. (2005). Counting on Kin: social networks, social support, and child health status. *Social Forces*, *83*(3): 1137-1164.
- Karofsky, P. S., Zeng, L., & Kosorok, M. R. (2001). Relationship between adolescent parental communication and initiation of first intercourse by adolescents. *Journal of Adolescent Health*, *28*(1).
- Landale, N. & Oropesa, R. (2007). Hispanic Families: Stability and Change. *Annual Review of Sociology*, *33*, 381-405.
- Lara, M., Gamboa, C., Kahramanian, M. I., Morales, L. S., Bautista, D. E. (2005). Acculturation and Latino health in the United States: a review of the literature and its sociopolitical context, *Annual Review of Public Health*, *26*, 367-97.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Liu, J., Probst, J. C., Harun, N., Bennett, K. J., & Torres, M. E. (2009). Acculturation, physical activity, and obesity among Hispanic adolescents. *Ethnicity and Health*, *14*(5), 509-525.
- Luthar, K., Coltrane, S., Parke, R. D., Cookston, J., and Adams, M. (2011). Youth risk behavior among Mexican origin adolescents: Cross generational differences. In S. S. Chuang & R. P. Moreno (Eds.), *Immigrant Children: Change Adaptation, and Cultural Transformation* (99-124). Boulder, CO: Lexington Books.
- Martino, S. C., Elliott, M. N., Corona, R., Kanouse, D. R. & Schuster, M. A. (2008). Beyond the “Big Talk”: The roles of breadth and repetition in parent-adolescent communication about sexual topics. *Pediatrics*, *121*(3), e612-e618
- Marvan, M. L. & Trujillo, P. (2010). Menstrual socialization, beliefs, and attitudes concerning menstruation in rural and urban Mexican Women. *Health Care for Women International*, *31*, 53-67.
- McLafferty, I. (2004). Focus group interviews as a data collecting strategy. *Journal of Advanced Nursing*, *48*(2), 187-194.

- McNeely, C., Shew, M., Beuhring, T., Sleving, R., Miller, B., & Blum, R. (2002). Mothers' influence on the timing of first sex among 14 and 15 year olds. *Journal of Adolescent Health, 31*(3), 256-265.
- Miller, K. S., Lin, C. Y., Poulsen, M.N., Fasula, A., Wyckoff, S. C., Forehand, R., ... Armistead, L. (2011). Enhancing HIV communication between parents and children: Efficacy of the Parents Matter! Program. *AIDS Education and Prevention, 23*(6), 550-563.
- Montgomery, D. C., Peck, E. A., & Vining, G. G. (2012). *Introduction to linear regression analysis*. Hoboken NJ: John Wiley and Sons, Inc.
- Morales-Campos, D. Y., Markham, C., Fleschler, Peskin, M., Fernandez, M. E. (2012). Sexual initiation, parent practices, and acculturation in Hispanic seventh graders. *Journal of School Health, 82*(2), 75-81.
- Mundfrom, D. J. & Shaw, D. G. (2005). Minimum sample size recommendations for conducting factor analyses. *International Journal of Testing, 5*(2), 159-168.
- Munhall, P.L. (2012). *Nursing research: A qualitative perspective*. Sundbury, MA: Jones and Bartlett Learning.
- National Campaign to Prevent Teen Pregnancy. (2009). *Unplanned Pregnancy and Community Colleges*. Retrieved from <http://www.thenationalcampaign.org/resources/pdf/briefly-unplanned-pregnancy-and-community-colleges.pdf>.
- National Campaign to Prevent Teen Pregnancy. (2010). Likelihood of Latinas getting pregnant by age 20, from [http://www.thenationalcampaign.org/resources/pdf/FastFacts\\_Latino\\_3in10.pdf](http://www.thenationalcampaign.org/resources/pdf/FastFacts_Latino_3in10.pdf)
- National Campaign to Prevent Teen Pregnancy. (2011). *Counting it up: The public costs of teen childbearing in Wisconsin in 2008*. Retrieved from <http://www.thenationalcampaign.org/costs/pdf/counting-it-up/fact-sheet-wisconsin.pdf>
- Nguyen, H. H. (2006) *The Cambridge Handbook of Acculturation Psychology*. Sam, D. L. & Berry, J. W. (Eds.) . Cambridge, UK: Cambridge University Press.
- Nunnally, J. O. (1978). *Psychometric theory*. New York: McGraw-Hill.
- Ojeda, L., Navarro, R. L., Morales, A. (2011). The role of la familia on Mexican American men's college persistence intentions. *Psychology of Men & Masculinity, 12*(3), 216-229.
- Padilla, Y. C., & Villalobos, G. (2007). Cultural responses to health among Mexican American women and their families. *Family Community Health, 30*(1S), S24-S33.
- Padilla, Y. C., & Villalobos, G. (2007). Cultural responses to health among Mexican American women and their families. *Family Community Health, 30*(1S), S24-S33.
- Palen, L., Ashley, O. S., Gard, J. C., Kan, M. L., Davis, K. C., & Evans, W. D. (2011). Effects of media campaign messages targeting parents on adolescent sexual beliefs: A randomized controlled trial with a national sample. *Fam Community Health, 34*(1), 28-38.
- Pallant, J. (2007). *SPSS survival manual* (3<sup>rd</sup> ed.). New York: Open University Press.

- Perper, K., Peterson, K., Manlove, J. (2010). Diploma attainment among teen mothers. *Child Trends*, Sheet Publication #2010-01: Washington, DC: Child Trends.
- Pieter van Oudenhoven, J. (2006) *The Cambridge Handbook of Acculturation Psychology*. Sam, D. L. & Berry, J. W. (Eds.). Cambridge, UK: Cambridge University Press.
- Playle, J. F. (1995). Humanism and positivism in nursing: contradictions and conflicts. *Journal of Advanced Nursing*, 22(5),979-984.
- Polit, D. F. (2010). *Statistics and data analyses for nursing research* (2nd ed.). Upper Saddle River, NJ: Pearson.
- Prado, G., Pantin, H., Briones, R., Schwartz, S. J., Feaster, D., Huang, Shi., Sullivan, S., Tapia, M. I., Sabillon, E., Lopez, B., & Szapocznik, J. (2007). A randomized controlled trial of a parent-centered intervention in preventing substance use and HIV risk behaviors in Hispanic adolescents. *Journal of Consulting and Clinical Psychology*, 75(6), 914-926.
- Racher, F. E. & Robinsin, S. (2002). Are phenomenology and post positivism strange bed fellows? *Western Journal of Nursing Research*, 25(5), 464-481.
- Rinaldi Carpenter, D. (2011). Triangulation as a qualitative research strategy. In H. J. Streubert & D. Rinaldi Carpenter (Eds.), *Qualitative Research in Nursing: Advancing the Humanistic Imperative*. (p. 350-360). Philadelphia, PA: Lippincott Williams & Wilkins.
- Robert, A. C., & Sonenstein, F. L. (2010). Adolescents' reports of communication with their parents about sexually transmitted diseases and birth control: 1988, 1995, and 2002. *Journal of Adolescent Health*, 46(6), 532-537. doi: 10.1016/j.jadohealth.2009.11.201
- Rueschenberg, E. & Buriel, R. (1989). Mexican American Family Functioning and Acculturation: A Family Systems Perspective. *Hispanic Journal of Behavioral Sciences*, 11(3), 233-244.
- Sabogal, F., Marin, G., Otero-Sabogal, R., & Marin, B. V. (1987). Hispanic familism and acculturation: What changes and what doesn't? *Hispanic Journal of Behavioral Sciences*, 9, 397-412.
- Sam, D. L. & Berry, J. W. (Eds.). (2006). *The Cambridge Handbook of Acculturation Psychology*. Cambridge, UK: Cambridge University Press.
- Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description? *Research in Nursing & Health*, 23, 334-340.
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, 33, 77-84.
- Santiago-Rivera, A. L., Kanter, J. W., Busch, A. M., Rusch, L. C., Reyes, W., West, P., Runge, M. (2011). Latino immigrants with depression: An initial examination of treatment issues at a community clinic. *Journal of Immigrant Minority Health*, 13: 772-779.
- Schwartz, S. J., Des Rosiers, S., Huang, S., Zamboanga, B. L., Unger, J. B., Knight, G. P., Pantin, H., Szapocznik, J. (2013). Development trajectories of acculturation in Hispanic adolescents: Associations with family functioning and adolescent risk behavior. *Child Development*, 1-18.

- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., Szapocznik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist*, 65(4), 237-251.
- Sneed, C. D. (2008). Parent-adolescent communication about sex: the impact of content and comfort on adolescent sexual behavior. *Journal of HIV/AIDS Prevention in Children & Youth*, 9(1), 70-83.
- Sprecher, S., Harris, G., & Meyers, A. (2008). Perceptions of sources of sex education and targets of sex communication: sociodemographic and cohort effects. *Journal of Sex Research*, 45(1), 17-26. doi: 10.1080/00224490701629522
- Tabachnick, B. G. & Fidell, L. S. (2001). *Using Multivariate Statistics*. Boston: Allyn and Bacon.
- Tapia, J. (1995). Making a living: The microeconomics of U.S. Mexican Households. *Urban Anthropology*, 24(3-4), 255-281.
- Tseng, V. & Fuligni, A. (2000). Parent-adolescent language use and relationships among immigrant families with East Asian, Filipino, and Latin American backgrounds. *Journal of Marriage and Family*, 62, 465-476.
- Twinn, S. (1998). An analysis of the effectiveness of focus groups as a method of qualitative data collection with Chinese populations in nursing research. *Journal of Advanced Nursing*, 28(3), 654-661.
- United States Census Bureau (2012). Profile America for Facts Features: Hispanic Heritage Month 2012. Retrieved from: [http://www.census.gov/newsroom/releases/pdf/cb12ff-19\\_hispanic.pdf](http://www.census.gov/newsroom/releases/pdf/cb12ff-19_hispanic.pdf)
- U.S. Department of Health and Human Services (2002). Outreach notebook: For the inclusion, recruitment, and retention of women and minority subjects in clinical research *Principal Investigators' Notebook* (Vol. December): National Institutes of Health. Retrieved from: [http://www.utexas.edu/research/rsc/humansubjects/forms/equity\\_women\\_minorities.pdf](http://www.utexas.edu/research/rsc/humansubjects/forms/equity_women_minorities.pdf)
- Valentine, S., & Mosley, G. (2000). Acculturation and Sex-Role Attitudes among Mexican Americans: A Longitudinal Analysis. *Hispanic Journal of Behavioral Sciences*, 22(1), 104-113. doi: 10.1177/0739986300221006
- Villarreal, R., Blozis, S. A., Widaman, K. F. (2005). Factorial Invariance of a Pan-Hispanic Familism Scale. *Hispanic Journal of Behavioral Sciences*, 27(4), 409-425. doi: 10.1177/0739986305281125
- Villarruel, A. M., Cherry, C. L., Cabriaes, E. G., Ronis, D. L., Zhou, Y. (2008). A parent-adolescent intervention to increase sexual risk communication: results of a randomized controlled trial. *AIDS Education & Prevention*, 20(5), 371-383.
- Villarruel, A. M., Loveland-Cherry, C. J., Ronis, D. L. (2010). Testing the efficacy of a computer-based parent-adolescent sexual communication intervention for Latino parents. *Family Relations*, 59(5), 533-543.
- Wallace, P. M., Pomery, E. A., Latimer, A. E., Martinez, J. L., & Salovey, P. (2009). A Review of Acculturation Measures and Their Utility in Studies Promoting Latino Health. *Hispanic Journal of Behavioral Sciences*, 32(1), 37-54. doi: 10.1177/0739986309352341

- Wallerstein, N. & Duran, B. (2010). Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. *American Journal of Public Health, 100*(S1), S40-S46.
- Wallerstein, I. and Smith, J. (1992). *Creating and transforming households: The constraints of the world economy*. Cambridge: Cambridge University Press.
- Waltz, C., Strickland, O., & Lenz, E. (2010). *Measurement in Nursing and Health Research* (Fourth ed.). New York, NY: Springer Publishing Company.
- Weber, R. P. (1990). *Basic content analysis*. Newbury Park, CA: Sage Publications.
- Whittemore, R. (1999). Natural science and nursing science: where do the horizons fuse? *Journal of Advanced Nursing, 30*(5), 1027-1033.
- Wilson, E. K., Dalberth, B. T., Koo, H. P., & Gard, J. C. (2010). Parents' perspectives on talking to preteenage children about sex. *Perspectives on Sexual & Reproductive Health, 42*(1), 56-63. doi: 10.1363/4205610
- World Health Organization (2012). Adolescent health Retrieved June 26, 2012, from [http://www.who.int/topics/adolescent\\_health/en/](http://www.who.int/topics/adolescent_health/en/)
- Wyckoff, S. C., Miller, K. S., Forehand, R., Bau, J. J., Fasula, A., Long, N., & Armistead, L. (2007). Patterns of Sexuality Communication Between Preadolescents and Their Mothers and Fathers. *Journal of Child and Family Studies, 17*(5), 649-662. doi: 10.1007/s10826-007-9179-5
- Zhang, Y. & Wildemuth, B. M. (2009). Qualitative analysis of content. In B. Wildemuth (Ed.), *Applications of social research methods to questions in information and library science* (pp.308-319). Westport, CT: Libraries Unlimited. Accessed online: [https://www.ischool.utexas.edu/~yanz/Content\\_analysis.pdf](https://www.ischool.utexas.edu/~yanz/Content_analysis.pdf)
- Zoucha, R., & Purnell, L. D. (2003). People of Mexican heritage. In L. D. Purnell & B. J. Paulanka (Eds.), *Transcultural health care: A culturally competent approach* (end ed., pp. 264-278). Philadelphia: F. A. Davis

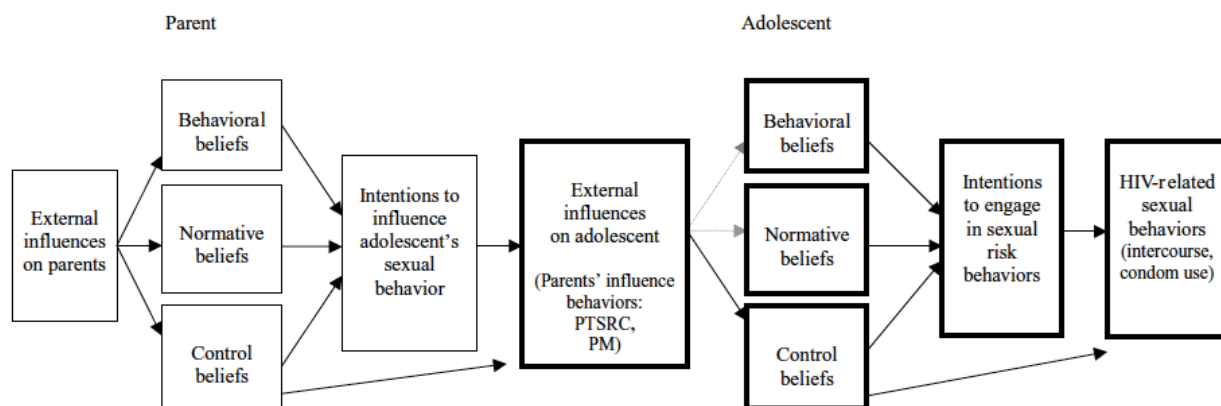


Figure 1. Parent-based expansion of the theory of planned behavior (Hutchinson, 2007)

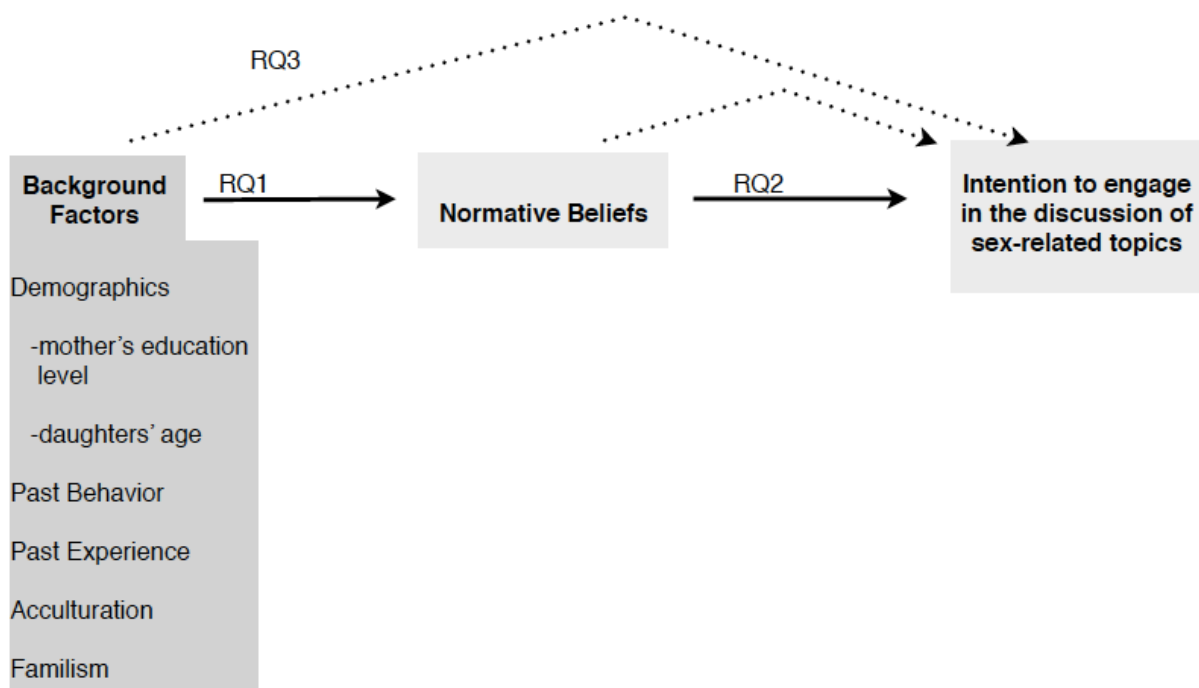


Figure 2. Model of how research questions will test the theoretical model, Hispanic mother-based, normative belief model of the Theory of Planned Behavior.



**Appendix A:**  
**Study Forms and Instruments**

**Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (English)**

**INSTRUCTIONS:**

Below are sentences. Each sentence is about talking to your daughter about sexual topics.

**The following is a list of possible sexual topics:**

Menstruation (Having a period)  
 Sexual intercourse  
*Oral sex*  
 Not having sex  
 Pregnancy  
 Sexual diseases  
 HIV  
 How having sex may affect her emotions  
 My religious beliefs about having sex  
 My cultural beliefs about having sex  
 My beliefs about birth control

**CIRCLE ONE RESPONSE FOR EACH STATEMENT BELOW**

We want to know if you agree or disagree with each sentence. Read each sentence. Circle the number that **BEST** shows how much you agree or disagree. Number 1 means you disagree a lot with the sentence. Number 7 agree a lot means you with the sentence. Please answer every item.

1. Most people who are important to me, like family and friends, approve of me talking about sexual topics with my daughter.
  - a. strongly disagree
  - b. disagree
  - c. slightly disagree
  - d. no opinion
  - e. slightly agree
  - f. agree
  - g. strongly agree
  
2. Most people like me have talked about sexual topics with their daughter at least once in the past three months.
  - a. strongly disagree
  - b. disagree
  - c. slightly disagree
  - d. no opinion
  - e. slightly agree
  - f. agree
  - g. strongly agree

3. Most of my friends have talked about sexual topics with their daughter at least once in the past three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree
4. My friends would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree
5. My mother would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree
6. My father would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree
7. My sister and close friends would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree

8. My *daughter's* father would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree
9. My doctor or health care provider would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree
10. My priest or religious advisor would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree
11. My daughter's godmother (comadre) would approve of me talking about sexual topics with my daughter within the next three months.
- strongly disagree
  - disagree
  - slightly disagree
  - no opinion
  - slightly agree
  - agree
  - strongly agree

**SCORING Normative Belief Subscale:** The item responses are then summed to result in a normative beliefs score ranging from 11-77 with higher scores meaning mothers believe to a greater degree that important people in their life support their DSRTs.

**To review, sexual topics include:**

Menstruation (Having a period)  
 Sexual intercourse  
*Oral sex*  
 Not having sex  
 Pregnancy  
 Sexual diseases  
 HIV  
 How having sex may affect her emotions  
 My religious beliefs about having sex  
 My cultural beliefs about having sex  
 My beliefs about birth control

12. I plan to talk about at least one sexual topic on this list, with my daughter within the next three months.

- a. strongly disagree
- b. disagree
- c. slightly disagree
- d. no opinion
- e. slightly agree
- f. agree
- g. strongly agree

13. I plan to talk with my daughter in the next three months about menstruation (her period).

- a. strongly disagree
- b. disagree
- c. slightly disagree
- d. no opinion
- e. slightly agree
- f. agree
- g. strongly agree

14. I plan to talk with my daughter in the next three months about sex.

- a. strongly disagree
- b. disagree
- c. slightly disagree
- d. no opinion
- e. slightly agree
- f. agree
- g. strongly agree

15. I plan to talk with my daughter in the next three months about *oral* sex.

- a. strongly disagree
- b. disagree
- c. slightly disagree
- d. no opinion
- e. slightly agree
- f. agree
- g. strongly agree

16. I plan to talk with my daughter in the next three months about not having sex.
- a. strongly disagree
  - b. disagree
  - c. slightly disagree
  - d. no opinion
  - e. slightly agree
  - f. agree
  - g. strongly agree
17. I plan to talk with my daughter in the next three months about how to avoid pregnancy.
- a. strongly disagree
  - b. disagree
  - c. slightly disagree
  - d. no opinion
  - e. slightly agree
  - f. agree
  - g. strongly agree
18. I plan to talk with my daughter in the next three months about how to avoid sexual diseases like HIV.
- a. strongly disagree
  - b. disagree
  - c. slightly disagree
  - d. no opinion
  - e. slightly agree
  - f. agree
  - g. strongly agree
19. I plan to talk with my daughter in the next three months about emotions involved with sexual activity.
- a. strongly disagree
  - b. disagree
  - c. slightly disagree
  - d. no opinion
  - e. slightly agree
  - f. agree
  - g. strongly agree
20. I plan to talk with my daughter in the next three months about my religious beliefs about sex.
- a. strongly disagree
  - b. disagree
  - c. slightly disagree
  - d. no opinion
  - e. slightly agree
  - f. agree
  - g. strongly agree

21. I plan to talk with my daughter in the next three months about my cultural beliefs about sex.

- a. strongly disagree
- b. disagree
- c. slightly disagree
- d. no opinion
- e. slightly agree
- f. agree
- g. strongly agree

22. I plan to talk with my daughter in the next three months about my cultural beliefs about sex.

- a. strongly disagree
- b. disagree
- c. slightly disagree
- d. no opinion
- e. slightly agree
- f. agree
- g. strongly agree

**SCORING the intention subscale:** The item responses are then summed to result in a normative beliefs score ranging from 11-77, with higher scores indicating a greater intention to discuss SRTs in the next 3 months.

**To review, sexual topics include:**

Menstruation (Having a period)

Sexual intercourse

Oral sex

Not having sex

Pregnancy

Sexual diseases

HIV

How having sex may affect her emotions

My religious beliefs about having sex

My cultural beliefs about having sex

My beliefs about birth control

23. In the past three months, have you discussed at least one sexual topic from this list with your daughter?

YES

NO

24. In the past three months, have you talked about menstruation (her period) with your daughter?

YES

NO

25. In the past three months, have you talked with your daughter about sex?

YES

NO

26. In the past three months, have you talked with your daughter about *oral sex*?

YES

NO

27. In the past three months, have you talked with your daughter about not having sex?

YES NO

28. In the past three months, have you talked with your daughter about pregnancy?

YES NO

29. In the past three months, have you talked with your daughter about sexual diseases like HIV?

YES NO

30. In the past three months, have you talked with your daughter about the emotions involved with sexual activity?

YES NO

31. In the past three months, have you talked with your daughter about your religious beliefs about sex?

YES NO

32. In the past three months, have you talked with your daughter about your cultural beliefs about sex?

YES NO

33. In the past three months, have you talked with your daughter about your beliefs about birth control?

YES NO

**SCORING the past behavior subscale:** The responses (1=yes, 2=no) to items in the subscale are summed to arrive at a past behavior score ranging from 11-22, with higher score indicating lower past behavior scores.

#### **Past Experience**

34. When I was my daughter's age, my mother talked about sexual topics with me.

YES NO

35. When I was my daughter's age, my mother talked about menstruation (period) with me.

YES NO

36. When I was my daughter's age, my mother talked about sex with me.

YES NO

37. When I was my daughter's age, my mother talked about *oral* sex with me.

YES NO

38. When I was my daughter's age, my mother talked with me about not having sex.

YES NO



39. When I was my daughter's age, my mother talked with me about pregnancy.

YES

NO

40. When I was my daughter's age, my mother talked with me about methods of avoiding sexual diseases like HIV.

YES

NO

41. When I was my daughter's age, my mother talked with me about the emotions involved with sex.

YES

NO

42. When I was my daughter's age, my mother talked about her religious beliefs about sex with me.

YES

NO

43. When I was my daughter's age, my mother talked with me about her cultural beliefs about sex.

YES

NO

44. When I was my daughter's age, my mother talked with me about her beliefs about birth control.

YES

NO

**SCORING the past experience subscale:** The responses (1=yes, 2=no) to items in the subscale are summed to arrive at a past experience score ranging from 11-22, with a higher score indicating lower past behavior scores.

**Rodriguez Normative Belief Instrument Regarding the Discussion of Sex-Related Topics (Spanish)**

**INSTRUCCIONES:**

A continuación encontrará una serie de oraciones. Cada oración habla acerca de cómo hablarle a su hija sobre temas sexuales.

**A continuación, se enlista una serie de posibles temas sexuales:**

Menstruación (período o regla).

Relaciones Sexuales.

Sexo oral.

No tener relaciones sexuales. (Abstinencia)

Embarazo.

Enfermedades venéreas (enfermedades por actividad sexual)

Sida.

Cómo tener relaciones sexuales puede afectar mis emociones.

Mis creencias religiosas sobre las relaciones sexuales.

Mis creencias culturales sobre las relaciones sexuales.

Mis creencias sobre el control de natalidad.

**CIRCULE UNA RESPUESTA PARA CADA ORACION**

Nos gustaría saber cuánto usted está de acuerdo o desacuerdo con cada una de estas oraciones. Lea cada oración. Seleccione el número que **se acerque más** a su realidad, es decir, si está de acuerdo o en desacuerdo. El número 1 significa que está completamente en desacuerdo con lo que ahí se menciona, y el número 7 significa que usted está 100% de acuerdo.

1. Muchas personas que son muy importantes en mi vida, como mis familiares y amigos, aprueban que yo hable con mi hija sobre temas sexuales.
  - a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
  
2. Muchas personas que son muy importantes en mi vida, como mis familiares y amigos, aprueban que yo hable con mi hija sobre temas sexuales.
  - a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo

3. La mayoría de mis amigos han hablado con su hija sobre temas sexuales, al menos una vez en los últimos tres meses.
  - a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
  
4. Mis amigos aprobarían que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
  - a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
  
5. Mis madre aprobaría que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
  - a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
  
6. Mis padre aprobaría que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
  - a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
  
7. Mi (s) hermana (s) más cercanas, aprobaría que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
  - a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo

8. El padre de my hija aprobaría que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
9. Mi doctor aprobaría que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
10. Mi párroco de mi parroquia o mi director spiritual aprobaría que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
11. Mi comadre aprobaría que yo hable con mi hija en los próximos tres meses sobre las temas sexuales.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo

**A continuación, se enlista una serie de posibles temas sexuales:**

Menstruación (período o regla).

Relaciones sexuales.

Sexo *oral*.

No tener relaciones sexuales. (Abstinencia)

Embarazo.

Enfermedades venéreas (enfermedades por actividad sexual)

Sida.

Cómo tener relaciones sexuales puede afectar mis emociones.

Mis creencias religiosas sobre las relaciones sexuales.

Mis creencias culturales sobre las relaciones sexuales.

Mis creencias sobre el control de natalidad.

12. Revisando la lista, tengo planeado hablar con mi hija al menos una vez en los próximos tres meses sobre uno de los temas ahí mencionados.

- a. en gran desacuerdo
- b. en desacuerdo
- c. un poco en desacuerdo
- d. sin opinión
- e. de acuerdo un poco
- f. de acuerdo
- g. de gran acuerdo

13. Tengo planeado hablar con mi hija en los próximos tres meses sobre menstruación (período de regla).

- a. en gran desacuerdo
- b. en desacuerdo
- c. un poco en desacuerdo
- d. sin opinión
- e. de acuerdo un poco
- f. de acuerdo
- g. de gran acuerdo

14. Tengo planeado hablar con mi hija en los próximos tres meses sobre las relaciones sexuales.

- a. en gran desacuerdo
- b. en desacuerdo
- c. un poco en desacuerdo
- d. sin opinión
- e. de acuerdo un poco
- f. de acuerdo
- g. de gran acuerdo

15. Tengo planeado hablar con mi hija en los próximos tres meses sobre el sexo *oral*.

- a. en gran desacuerdo
- b. en desacuerdo
- c. un poco en desacuerdo
- d. sin opinión
- e. de acuerdo un poco
- f. de acuerdo
- g. de gran acuerdo

16. Tengo planeado hablar con mi hija en los próximos tres meses sobre la importancia de abstenerse de tener relaciones sexuales.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
17. Tengo planeado hablar con mi hija en los próximos tres meses sobre como evitar quedar embarazada.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
18. Tengo planeado hablar con mi hija en los próximos tres meses sobre como evitar infecciones sexuales, como sería el Sida.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
19. Tengo planeado hablar con mi hija en los próximos tres meses sobre los estados de ánimo relacionados con las actividades sexuales.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo
20. Tengo planeado hablar con mi hija en los próximos tres meses sobre mis creencias religiosas en relación al sexo.
- a. en gran desacuerdo
  - b. en desacuerdo
  - c. un poco en desacuerdo
  - d. sin opinion
  - e. de acuerdo un poco
  - f. de acuerdo
  - g. de gran acuerdo

21. Tengo planeado hablar con mi hija en los próximos tres meses sobre mis creencias culturales en relación al sexo.

- a. en gran desacuerdo
- b. en desacuerdo
- c. un poco en desacuerdo
- d. sin opinion
- e. de acuerdo un poco
- f. de acuerdo
- g. de gran acuerdo

22. Tengo planeado hablar con mi hija en los próximos tres meses sobre mis creencias relacionados con el control de natalidad.

- a. en gran desacuerdo
- b. en desacuerdo
- c. un poco en desacuerdo
- d. sin opinion
- e. de acuerdo un poco
- f. de acuerdo
- g. de gran acuerdo

**A continuación, se enlista una serie de posibles temas sexuales:**

Menstruación (período o regla).

Relaciones sexuales.

Sexo *oral*.

No tener relaciones sexuales. (Abstinencia)

Embarazo.

Enfermedades venéreas (enfermedades por actividad sexual)

Sida.

Cómo tener relaciones sexuales puede afectar mis emociones.

Mis creencias religiosas sobre las relaciones sexuales.

Mis creencias culturales sobre las relaciones sexuales.

Mis creencias sobre el control de natalidad.

23. ¿En los últimos tres meses, Usted ha hablado con su hija sobre temas aquí mencionados?

Sí

No

24. ¿En los últimos tres meses, ha hablado con su hija sobre la menstruación (o el período de la regla)?

Sí

No

25. ¿En los últimos tres meses, ha hablado con su hija sobre las relaciones sexuales?.

Sí

No

26. ¿En los últimos tres meses, ha hablado con su hija sobre el sexo *oral*?.

Sí

No

27. ¿En los últimos tres meses, ha hablado con su hija sobre no tener relaciones sexuales?.

Sí No

28. ¿En los últimos tres meses, ha hablado con su hija sobre el embarazo?

Sí No

29. ¿En los últimos tres meses, ha hablado con su hija sobre la posibilidad de infecciones sexuales como el Sida?

Sí No

30. ¿En los últimos tres meses, ha hablado con su hija sobre como los estados de ánimo son afectados cuando hay actividad sexual?

Sí No

31. ¿En los últimos tres meses, ha hablado con su hija de sus creencias religiosas sobre el sexo?

Sí No

32. ¿En los últimos tres meses, ha hablado con su hija de sus creencias culturales sobre el sexo?

Sí No

33. ¿En los últimos tres meses, ha hablado con su hija de sus creencias sobre el control de natalidad?

Sí No

**Experiencia pasada.**

34. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre temas sexuales.

Sí No

35. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre la Menstruación (período de regla).

Sí No

36. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre las relaciones sexuales.

Sí No

37. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre el sexo oral.

Sí No

38. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre la importancia de no tener relaciones sexuales.

Sí No



39. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre el embarazo.

Sí

No

40. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre como evitar las infecciones sexuales como el Sida.

Sí

No

41. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo sobre como los estados de ánimos se ven afectados cuando hay actividad sexual.

Sí

No

42. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo de sus creencias religiosas sobre los temas sexuales.

Sí

No

43. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo de sus creencias culturales sobre los temas sexuales.

Sí

No

44. Cuando yo tenía la misma edad de mi hija, mi madre habló conmigo de sus creencias sobre el control de natalidad.

Sí

No

### Demographic Questionnaire (English)

1. How old are you? \_\_\_\_\_
  
2. Are you:
  - a. Biological mother
  - b. Step mother
  - c. Grandma
  - d. Aunt
  - e. Other \_\_\_\_\_ (please specify)
  
3. How many daughters do you have? \_\_\_\_\_ daughters
  - a. What are their ages? \_\_\_\_\_
  - b. Which daughter were you thinking of when you filled out the survey?  
 \_\_\_\_\_(age of this daughter)
  
4. How many sons do you have? \_\_\_\_\_ sons
  - a. What are their ages?  
 \_\_\_\_\_
  
5. Right now are you:
  - a. Married
  - b. Single
  - c. Divorced
  
6. Does the father of your teen daughter live with you? Yes / No (Circle one)
  
7. What is the highest academic grade you have completed? (Circle one)
  - a. 6<sup>th</sup> grade
  - b. 9<sup>th</sup> grade
  - c. High school
  - d. Some college
  - e. College graduate
  - f. Master's degree or Doctorate

8. What is your religion?
- a. Catholic
  - b. Lutheran
  - c. Jewish
  - d. No Religion
  - e. Other \_\_\_\_\_ (Please specify)
9. Regardless of religion, how often do you go to church? (Circle one)
- a. More than once a week
  - b. Once a week
  - c. One to three times per month
  - d. Less than once a month
  - e. Never
10. Where were you born? \_\_\_\_\_
11. What is your ethnic/raical group? (**Circle all that apply.**)
- a. Mexican
  - b. Puerto Rican
  - c. Cuban
  - d. Salvadorian
  - e. Dominican
  - f. Guatemalan
  - g. Colombian
  - h. Honduran
  - i. Ecuadorian
  - j. Peruvian
  - k. Costa Rican
  - l. Other \_\_\_\_\_ (Please Specify)

12. As far as you know, which of these people in your family was **born in a country outside** the United States? **(Circle all that apply.)**
- a. You
  - b. Your mother
  - c. Your father
  - d. All of your grandparents
  - e. Some of your grandparents
  - f. None (all of these people were born in the US)

### Demographic Questionnaire (Spanish)

#### Demografía

1. Cuántos años tiene usted? \_\_\_\_\_
2. Usted Es:
  - a. Mamá biológica?
  - b. Mamá adoptiva?
  - c. Abuela?
  - d. Tía?
  - e. Otra? \_\_\_\_\_ (favor de especificar)
3. Cuántas hijas tiene usted? \_\_\_\_\_ daughters/ hijas.
  - a. Qué edad tienen? \_\_\_\_\_
  - b. En que hija está usted pensando en este momento que esta haciendo este cuestionario? \_\_\_\_\_ (Edad de esa niña).
4. Cuántos hijos tiene? \_\_\_\_\_ sons/ hijos.
  - a. Qué edad tienen? \_\_\_\_\_
5. Cual es el estado civil de usted?
  - a. Casada
  - b. Soltera
  - c. Divorciada
6. Actualmente el papa de su hija adolescente, vive con ustedes? Si / No (Marque alguna)
7. Cual es el grado académico más alto que usted termino e indique el ultimo año cumplido? (Marque uno)
  - a. Primaria
  - b. Secundaria
  - c. Preparatoria
  - d. Escuela tecnica
  - e. Licenciatura universitaria
  - f. Titulo profesional, Maestria, o Doctorado
8. Cual es tu religion?
  - a. Catolica
  - b. Luterana
  - c. Judia
  - d. Ninguna religion
  - e. Otro \_\_\_\_\_ (Sea específico)

9. Con relación a su religión, ¿qué tan frecuente va a la Iglesia? (Marque una)
- Más de una vez a la semana
  - Una vez a la semana
  - De una a tres veces por mes
  - Menos de una vez al mes
  - Nunca
10. ¿Cuál es su país de nacimiento? \_\_\_\_\_
11. ¿Cuál es su grupo étnico/racial? (**Circle all that apply/ Marque todos los que aplican**)
- Méxicana
  - Puertorriqueña
  - Cubana
  - Salvadoreña
  - Dominicana
  - Guatemalteca
  - Colombiana
  - Hondureña
  - Ecuatoriana
  - Peruana
  - Costarricense
  - Other/ Otro \_\_\_\_\_ (Por favor especifique)
12. De acuerdo a lo que usted sabe, ¿Cuántas personas de su familia nacieron afuera de los Estados Unidos? (**Marque todas las que aplican**)
- Usted
  - Su madre
  - Su padre
  - Todos sus abuelos
  - Alguno de sus abuelos
  - Ninguno (Todas estas personas nacieron en los Estados Unidos).

## ARSMA-II English and Spanish

### The Brief Acculturation Rating Scale for Mexican Americans–II (English)

#### CIRCLE ONE ANSWER FOR EACH STATEMENT

1. I speak Spanish.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

2. I speak English.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

3. I enjoy speaking Spanish.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

4. I associate with Anglos.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

5. I enjoy English language movies.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

6. I enjoy Spanish language TV.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

7. I enjoy Spanish language movies.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

8. I enjoy reading books in Spanish.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

9. I write letters in English.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

10. My thinking is done in the English language.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

11. My thinking is done in the Spanish language.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5

12. My friends are of Anglo origin.

Not at all	Very little	Moderately	Very often	Almost always
1	2	3	4	5



**The Brief Acculturation Rating Scale for Mexican Americans–II (Spanish)**

**CIRCULE UNA RESPUESTA PARA CADA ORACION**

**1. Yo hablo Español.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchisimo, casi todo el tiempo
1	2	3	4	5

**2. Yo hablo Inglés.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchisimo, casi todo el tiempo
1	2	3	4	5

**3. Me gusta hablar Español.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchisimo, casi todo el tiempo
1	2	3	4	5

**4. Me asocio con Anglos.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchisimo, casi todo el tiempo
1	2	3	4	5

**5. Me gusta ver películas en Inglés.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchisimo, casi todo el tiempo
1	2	3	4	5

**6. Me gusta ver programas en la televisión que sean en Español.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchisimo, casi todo el tiempo
1	2	3	4	5

**7. Me gusta ver películas en Español.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchísimo, casi todo el tiempo
1	2	3	4	5

**8. Me gusta leer en Español.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchísimo, casi todo el tiempo
1	2	3	4	5

**9. Escribo (como cartas) en Inglés.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchísimo, casi todo el tiempo
1	2	3	4	5

**10. Mis pensamientos ocurren en el idioma Inglés.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchísimo, casi todo el tiempo
1	2	3	4	5

**11. Mis pensamientos ocurren en el idioma Español.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchísimo, casi todo el tiempo
1	2	3	4	5

**12. Mis amigos recientes son Anglo Americano.**

Nada	Un poquito o a veces	Moderado	Mucho o muy frecuente	Muchísimo, casi todo el tiempo
1	2	3	4	5

### Familism Scale --- (English and Spanish)

**CIRCLE ONE ANSWER FOR EACH STATEMENT**

**1. My family is always there for me in times of need.**

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

**2. I am proud of my family.**

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

**3. I cherish the time I spend with my family**

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

**4. I know my family has my best interests in mind.**

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

**5. My family members and I share similar values and beliefs.**

strongly disagree	disagree	neutral	agree	strongly agree
1	2	3	4	5

## Familism Scale (Spanish)

**CIRCULE UNA RESPUESTA PARA CADA ORACION****1. Mi familia siempre está ahí cuando los necesito.**

Muy en desacuerdo	desacuerdo	neutral	Estoy de acuerdo	Muy de acuerdo
1	2	3	4	5

**2. Estoy orgulloso de mi familia.**

Muy en desacuerdo	desacuerdo	neutral	Estoy de acuerdo	Muy de acuerdo
1	2	3	4	5

**3. Valoro el tiempo que paso con mi familia.**

Muy en desacuerdo	desacuerdo	neutral	Estoy de acuerdo	Muy de acuerdo
1	2	3	4	5

**4. Sé que mi familia tiene en mente los mejores intereses para mi.**

Muy en desacuerdo	desacuerdo	neutral	Estoy de acuerdo	Muy de acuerdo
1	2	3	4	5

**5. Los miembros de mi familia y yo compartimos valores y creencias similares.**

Muy en desacuerdo	desacuerdo	neutral	Estoy de acuerdo	Muy de acuerdo
1	2	3	4	5

### Pre-notice Letter

Attention Mothers (of middle school girls):

Marquette University wants to get your opinions. Please consider participating in a study by filling out a survey. On *Wednesday October 23 please come in the morning between 7am to 8:00 or any time between 3pm to 5pm*. It will take approximately 15-20 minutes to complete the survey. **You will receive a \$10 gift card** for completing the survey.

Thank you for your time.

Dana Rodriguez, RN, MSN, CPNP

Marquette University

---

### Carta de Pre-Aviso

Atención madres (De las niñas de la secundaria):

La Universidad de Marquette quiere pedirle su opinión. Por favor de considerar en participar en una encuesta para un estudio. *El miércoles 23 de Octubre venga por la mañana de 7:00a.m. – 8:00a.m. o en cualquier horario por la tarde de 3:00p.m. – 5:00p.m.* Tomará aproximadamente de 15-20 minutos para completar la encuesta. **Usted recibirá una tarjeta de regalo de \$10** por completar éste estudio.

Muchas gracias por su tiempo.

Dana Rodríguez, RN, MSN, CPNP

Universidad de Marquette

## Focus Group Recruitment Request

### DISCUSSION GROUP

In addition to this questionnaire, we are looking for volunteers to participate in a discussion group.

The purpose of this discussion is to learn more about mothers' discussion of sex-related topics with their daughters.

The discussion will last approximately 1 to 1.5 hours.

You will receive a \$15 gift certificate after completing the focus group. There will also be snacks at the focus group. There will be free childcare available during the focus group.

If you want to be in the discussion group, put your name and phone number below.

We will call you.

Thank You!

---

(name)

(phone number)

Please let us know what times are best for you to meet: (Days, nights, weekends)

---

## GRUPO DE DISCUSIÓN

Además de este cuestionario, estamos buscando algunos voluntarios que quieran formar parte de un grupo para discutir acerca de esta encuesta.

La duración de esta discusión tendrá una duración de una hora a una hora y media.

Discutiremos sobre los siguientes temas:

- ¿Qué es lo que piensa de las preguntas del cuestionario?
- ¿ Por que respondiste aquello que respondiste?
- Por favor diga aquello que no se preguntó y que debería haber sido consultado?
- Por favor diga cual cree que es el mejor camino para invitar a más madres para que puedan participar en este estudio.

Usted recibirá una tarjeta de regalo de "TARGET" por US\$15.00 una vez concluido el grupo de análisis y discusión. Asimismo, le informamos que habrá servicio de guardería durante este tiempo.

Si usted quiere formar parte de este grupo de discusión, por favor complete la información de abajo.

Nosotros les estaremos llamando.

Muchas gracias

---

(Nombre)

(Número telefónico)

Por favor díganos que horario le conviene más a usted: (día, noche, entre semana, fines de semana, etc..)

---

### Focus Group Interview Guide

Hello and welcome. Thank you for taking the time to participate in the focus group.

The purpose of this discussion is to learn more about mothers' discussion of SRTs with their daughter.

Please remember anything said during the discussion should not be shared with anyone when we leave this room. Please feel free to share as little or as much information as you would like. You may leave the meeting at any time. The meeting will be audiorecorded.

Does anyone have any questions before we get started?

Tell me about your experience talking to your daughter about sex-related topics.

What are your reasons for having discussed sex related topics with your daughter?

What are your reasons for not having discussed sex related topics with your daughter?

Which specific topics (see white board) do you intend to discuss? Why?

Which specific topics (see white board) do you not intend to discuss? Why?

Are there any particular sex-related topics that you discuss other than those listed on the whiteboard?

Which persons in your life influence your intention to discuss or to not discuss SRTs?

Are there any other reasons you do (or do not) intend to discuss SRTs with your daughter?

Is there anything stopping you from discussing these topics with your daughter?



**Appendix B:**  
**Institutional Review Board**

September 27, 2013  
Ms. Dana Rodriguez  
College of Nursing

Dear Ms. Rodriguez:

The amendment you submitted for your protocol number HR-2484, titled, "*Hispanic Mother-Daughter Communication about Sex: The Role of Mother's Normative Beliefs,*" received expedited approval on September 25, 2013, from a member of the Marquette University Institutional Review Board.

This amendment increases the number of subjects to 180 participants, adds three research personnel, revises the Normative Belief Instrument, adds a research location, includes focus groups, modifies recruitment procedures by sending a notice, and modifies the compensation amount.

Your IRB approved informed consent form is enclosed with this letter. Use the stamped copies of this form when recruiting research participants. Each research participant should receive a copy of the stamped consent form for their records.

Your protocol is valid until September 24, 2014. Prior to this date, you will be contacted regarding continuing IRB review. Any public advertising of this project requires prior IRB approval. If there are any changes in your protocol or adverse events, please notify the IRB immediately.

If you have any questions or concerns, please do not hesitate to contact me. Thank you for your time and cooperation.

Sincerely,

Amanda J. Ahrndt, RN, MS, MSN, CIM, CIP  
IRB Manager  
cc: Dr. Christopher Okunseri, IRB Chair  
Dr. Robert Topp  
Enclosures (4)

## MARQUETTE UNIVERSITY

## AGREEMENT OF CONSENT FOR RESEARCH PARTICIPANTS – Written Surveys

**Hispanic mother-daughter communication about sex: The role of mother's normative beliefs**

Dana Rodriguez

College of Nursing

You have been invited to participate in this research study. Before you agree to participate, it is important that you read and understand the following information. Participation is completely voluntary. Please ask questions about anything you do not understand before deciding whether or not to participate.

**PURPOSE:** The purpose of this research study is to explore your communication about sexual topics with your daughter. You will be one of approximately 122 participants in this research study.

**PROCEDURES:** You will complete the paper and pen questionnaire. Please answer all questions. The last page of the questionnaire asks if you would like to be a part of a discussion group. If you are interested, the research team will contact you to return to talk about the questionnaire with a group of 3-9 other mothers.

**DURATION:** Your participation will consist of about 15-20 minutes to complete the survey.

**RISKS:** The risks associated with participation in this study include the possibility that the discussion group will evoke strong emotion of past personal, sensitive childhood experiences. If this happens, the researcher will give you referral information for counselors or psychological help. If child abuse is disclosed, it will be reported to child protective services.

**BENEFITS:** The benefits associated with participation in this study include awareness of the various topics that may be openly discussed with your daughter. The participation in the survey may increase the mother's understanding of sexual topics.

**CONFIDENTIALITY:** All information you reveal in this study will be kept confidential. The only people who have access to the information is the research team. They will not share your information with anyone. All your data will be assigned an arbitrary code number rather than using your name or other information that could identify you as an individual.

**COMPENSATION:** The participants who complete the hand written survey will receive a \$5 gift card.

**EXTRA COSTS TO PARTICIPATE:** None anticipated.

**VOLUNTARY NATURE OF PARTICIPATION:** Participating in this study is completely voluntary and you may withdraw from the study and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. If you want to withdraw your data, tell the research team. If it is while you are filling out the survey, it will be immediately destroyed. Once you have filled out the survey and if you did not volunteer for the focus group, there will be no way to track which survey is yours and will be analyzed with the other surveys.

**CONTACT INFORMATION:** If you have any questions about this research project, you can contact Dana Rodriguez, Principal Investigator or Sarah Thiry, Research Assistant at Marquette University at 414-288-3803. If you have any questions or concerns about your rights as a research participant, you can contact Marquette University's Office of Research Compliance at (414) 288-7570.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT.

---

Participant's Signature

---

Date

---

Participant's Name

---

Researcher's Signature

---

Date

*Appendix N*

## MARQUETTE UNIVERSITY

## AGREEMENT OF CONSENT FOR RESEARCH PARTICIPANTS – Focus Groups

**Hispanic mother-daughter communication about sex: The role of mother's normative beliefs**

Dana Rodriguez

College of Nursing

You have been invited to participate in this research study. Before you agree to participate, it is important that you read and understand the following information. Participation is completely voluntary. Please ask questions about anything you do not understand before deciding whether or not to participate.

**PURPOSE:** The purpose of this research study is to explore your communication about sexual topics with your daughter. You will be one of approximately 20 participants in focus group portion of the research study.

**PROCEDURES:** You will be asked to engage in a discussion about a series of questions referring to the questionnaire you filled out a few weeks ago. You will be audiotaped during the discussion portion of the study to ensure accuracy. The tapes will later be transcribed and destroyed after completion and publication of the study. For confidentiality purposes, your name will not be recorded.

**DURATION:** The focus group will last approximately 60 to 90 minutes.

**RISKS:** The risks associated with participation in this study include the possibility that the discussion group will evoke strong emotion of past personal, sensitive childhood experiences. If this happens, the researcher will give you referral information for counselors or psychological help. If child abuse is disclosed, it will be reported to child protective services.

**BENEFITS:** The benefits associated with participation in this study include awareness of the various topics that may be openly discussed with your daughter. The participation in focus group may increase the mother's understanding of sexual topics that other moms in the community are or are not talking about with their daughters.

**CONFIDENTIALITY:** All information you reveal in this study will be kept confidential. The only people who have access to the information is the research team. They will not share your information with anyone. When the results of the study are published, you will not be identified by name. The data will be destroyed by shredding paper documents and deleting electronic files after the completion of the study and publication of results. The audiotapes will be destroyed at the same time. The data will not be shared with school staff. At the beginning of the focus group, all participants will be told to keep the discussions confidential. However, the researcher(s) cannot guarantee that all focus group participants will respect everyone's confidentiality.

**COMPENSATION:** The participants in the discussion group will receive a \$10 gift card, snacks, and childcare during the focus group.

**EXTRA COSTS TO PARTICIPATE:** The discussion group participants will have to pay for transportation to the focus group.

**VOLUNTARY NATURE OF PARTICIPATION:** Participating in this study is completely voluntary and you may withdraw from the study and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled. If you want to withdraw your data, tell the research team.

**CONTACT INFORMATION:** If you have any questions about this research project, you can contact Dana Rodriguez, Principal Investigator or Sarah Thiry, Research Assistant at Marquette University at 414-288-3803. If you have any questions or concerns about your rights as a research participant, you can contact Marquette University's Office of Research Compliance at (414) 288-7570.

I HAVE HAD THE OPPORTUNITY TO READ THIS CONSENT FORM, ASK QUESTIONS ABOUT THE RESEARCH PROJECT AND AM PREPARED TO PARTICIPATE IN THIS PROJECT.

---

Participant's Signature

---

Date

---

Participant's Name

---

Researcher's Signature

---

Date

## Counseling Resources

### Renew Counseling

1225 West Historic Mitchell Street

Milwaukee, WI 53204

(414) 383-4455

Counseling and psychiatric services for children, adolescents, adults, couples, and families. Bilingual staff.

### Sixteenth Street Community Health Center

1032 South Cesar E. Chavez Drive, Milwaukee 53204

(414) 672-1353; FAX: (414) 383-5597

Counseling and psychiatric services for children, adolescents, adults, couples, and families. Bilingual therapists and psychiatrist speak Spanish/English. Sliding fee scale, Title 19, all other insurances. M-F, 8:30 a.m. – 5:00 p.m.

**Spanish support line:** *Linea de APOYO:* 414-257-5333

*Linea de APOYO* is a non-crisis, supportive listening phone line in Spanish.



**Saint Anthony School**  
Since 1872

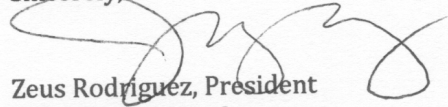
9/23/12

**Letter of Support**

To Whom It May Concern,

Dana Rodriguez has my permission to contact parents of St. Anthony School to participate in the study she is conducting concerning Hispanic mothers and their normative beliefs concerning sex-related topics and communication with their adolescent daughters.

Sincerely,

  
Zeus Rodriguez, President  
St. Anthony School  
414-384-6612





Notre Dame Middle School  
 1420 W. Scott St.  
 Milwaukee, WI 53204  
 Phone: (414) 671-3000 Fax: (414) 671-3170  
[www.ndmswi.org](http://www.ndmswi.org)

---

April 27, 2013

Dana Rodriguez  
 Marquette University  
 530 N. 16<sup>th</sup> St.  
 Milwaukee, WI 53233

Dear Ms. Rodriguez:

This letter is written in support of your dissertation studying the normative beliefs of Hispanic mothers as they relate to discussion of sex-related topics with their adolescent daughters.

On behalf of Notre Dame Middle School, I agree to allow you to sample mothers of the students of our school.

Sincerely,

Sister Jean Ellman  
 Principal