

The Pennsylvania State University

The Graduate School

College of the Liberal Arts

**THE ROLE OF FRIENDSHIP SUPPORT IN
EMERGING ADULTS' RISKY SEXUAL DECISION-MAKING:
A TEST OF THE REGRET REGULATION THEORY**

A Dissertation in
Communication Arts and Sciences

by

Alysa Ann Lucas

Submitted in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

December 2009

The dissertation of Alysa Ann Lucas was reviewed and approved* by the following:

Jon F. Nussbaum
Professor of Communication Arts and Sciences and Human Development and Family
Studies
Dissertation Adviser
Chair of Committee

Dennis S. Gouran
Professor of Communication Arts and Sciences and Labor Studies and Employment
Relations

Denise H. Solomon
Professor of Communication Arts and Sciences

Mary Beth Oliver
Professor of Communications

Thomas W. Benson
Professor of Communication Arts and Sciences
Head of the Department of Communication Arts and Sciences

*Signatures are on file in the Graduate School.

ABSTRACT

Responsible sexual decision-making is a critical step in assuring a healthy life. College-aged individuals, highly at-risk for unintended pregnancies and sexually transmitted infections, often face this situation. Since the decision concerning whether or not to participate in risky sexual behaviors can be difficult to make in isolation, college-aged individuals may turn to their friends for assistance. Previous research validates the potential influence of friends on one's sexual behavior. Because friends are valued candidates for consultation when making difficult decisions, it is critical to understand how the role of friendship communication may influence sexual behavior.

This dissertation had three goals all focused on analyzing the ways in which sexually transmitted infections and unintended pregnancies can be prevented among college-aged individuals. The first was to apply the regret regulation theory to interpersonal college-aged friendships. The regret regulation theory proposes that individuals will evaluate the possibility of experiencing regret, often with significant others, when decisions are important. The second goal was to test the parts of the theory relating to the anticipation of regret. The theory suggests that individuals will regulate regret according to levels of anticipated regret. Finally, the third goal was to acquire information concerning social support among friends during conversations involving sexual decision-making.

Two foundational studies and one main study contributed to the pursuit of these goals. Study 1 was an investigation of the sexual decision-making conversation of college-aged individuals with their friends as well as the types of social support provided

during these conversations. The data were used to generate twenty-four scenarios based on the contextual details provided by the participants in conjunction with varying levels of anticipated regret and social support. Study 2 was a survey involving six scenarios in which a sample of participants rated events for typicality and relational importance to their friendships. Study 3 entailed use of a 2 (anticipated regret: low and high) x 2 (social support: positive and negative) design with participants completing measures of friendship quality, as well as sexual disclosures and behavior. In addition, the participants reviewed, rated, and responded to the hypothetical scenario identified as the most typical - one depicting a conversation among friends about whether or not to engage in a hook-up. The participants' intentions to engage in the hook-up and to seek friend's input in the future were also matters of interest.

The results of the studies indicated that college-aged individuals make sexual decisions both with and without the assistance of their same-sex friends. Participants rated the hypothetical scenarios detailing sexual decision conversations as typical, although not highly important to their friendships. The initial test of regret regulation theory revealed that anticipated regret was a strong predictor of intentions to engage in sexual behavior. The interaction effects were not significant; however, which indicated issues with its utility for the sexual decision-making process as related to emerging adulthood friendship consultation and support. The analyses showed positive social support to be a strong predictor for participants who reported strong intentions to seek a friend's advice in the future. Open-ended data reinforced this finding with esteem (ego) support reported being communicated most frequently during sexual decision

conversations. Sex differences indicated that male college-aged individuals had greater expressed inclinations to engage in the behavior; females had greater intentions to seek the friend's advice in the future and also reported higher levels of anticipated regret than males.

The findings of each study are discussed with a particular focus on how the studies contribute to the existing research in the sexuality and communication fields. Theoretical, methodological, and practical contributions of this dissertation are outlined while also noting the importance of studying the role of friendship especially during a time period critical to the development of one's sexual identity and skills necessary for later romantic relationships. Finally, the limitations of this dissertation are acknowledged, and future directions for research involving sexual decision-making are proposed.

TABLE OF CONTENTS

LIST OF FIGURES	ix
LIST OF TABLES	x
ACKNOWLEDGEMENTS	xii
Chapter 1 Statement of the Problem and Related Scholarship	1
Introduction	1
Anticipated Regret	5
Regret Regulation Theory: Application to Interpersonal Relationships	7
The Role of College-Aged Friendships in Risky Decision-Making	11
Impact of Sex-Related Decisions	18
Chapter 2 Rationale, Hypotheses and Research Questions.....	21
Introduction.....	21
Anticipated Regret	21
Social Support.....	22
Combination of Anticipated Regret and Social Support.....	23
Chapter 3 Development of Hypothetical Scenarios (Study1).....	28
Introduction.....	28
Methodology	29
Participants	29
Procedure.....	29
Frequency of Sexual Decision Conversations and Handling Missing Data.....	31
Intercoder Reliability: Unitizing and Coding.....	33
Categories from Open-Ended Responses.....	34
Reasons For/Against Sexual Decision Conversations.....	34
Contexts of Sexual Decision Conversations	41
Types of Sexual Decisions	42
Types of Social Support	47
Scenarios Developed for Study 2	53
Summary	55
Chapter 4 Rating of Hypothetical Scenarios (Study 2).....	57
Introduction.....	57
Methodology	57
Participants.....	57
Procedure.....	58
Preliminary Analyses	59
Data Distribution.....	60

Handling Missing Data.....	60
Evaluating Group Differences: Chi-Square Tests of Independence.....	61
Evaluating Group Differences: Independent-Samples <i>t</i> -Tests	62
Substantive Analyses	65
Measures	65
Linear Mixed-Effects Model.....	67
Assumptions for Linear Mixed-Effects Model	69
Results.....	71
Order Effect.....	71
Typicality	72
Additional Analyses.....	72
Final Scenarios.....	76
Summary	78
Chapter 5 Testing the Regret Regulation Theory (Study 3)	79
Introduction.....	79
Methodology	79
Participants.....	79
Procedure.....	80
Experimental Design.....	81
Preliminary Analyses	83
Data Distribution.....	83
Handling Missing Data	84
Social Desirability.....	85
Selection Bias	87
Group Differences.....	90
Measures	93
Dependent Variables.....	93
Intentions to Engage in Behavior	93
Intentions to Seek Friend's Advice	94
Typicality and Relational Importance.....	94
Scenario Manipulations	96
Anticipated Regret.....	96
Friend's Support.....	97
New Conditions	98
Intercoder Reliability: Unitizing and Coding.....	101
Substantive Analyses	102
Assumptions for ANOVA.....	102
Intentions to Engage in Behavior.....	103
Intentions to Seek Friend's Advice.....	105
Additional Analyses: Regression	107
Research Question.....	110
Types of Social Support.....	110
Summary	116

Chapter 6 Discussion	118
Introduction.....	118
Study 1: Development of Hypothetical Scenarios	119
Study 2: Rating of Hypothetical Scenarios	129
Study 3: Testing the Regret Regulation Theory.....	134
Anticipated Regret	135
Social Support.....	136
Combination of Anticipated Regret and Social Support.....	139
Sex Similarities and Differences	143
Implications.....	150
Limitations	158
Directions for Future Research	166
REFERENCES	171
Appendix A Complete List of Hypothetical Scenarios by Context	194
Appendix B Study 1 Questionnaire	201
Appendix C Study 2 Questionnaire (Example of Version A for Females).....	217
Appendix D Study 3 Questionnaire (Example of Version A for Females).....	263

LIST OF FIGURES

Figure 1: Residual Plot of Typicality Variable.	70
Figure 2: Normal Q-Q Plot of Typicality Variable.	70
Figure 3: Histogram of Typicality Variable.	71
Figure 4: Anticipated Regret and Social Support Main Effects for Intentions to Engage in Behavior.	104
Figure 5: Social Support Main Effect for Intentions to Seek Friend's Advice.	106

LIST OF TABLES

Table 1: Reasons for/against Sexual Decision Conversations.	35
Table 2: Contexts of Sexual Decision Conversations.	41
Table 3: Types of Sexual Decisions.....	43
Table 4: Types of Social Support.....	47
Table 5: Final Context Examples for Study 2.....	56
Table 6: Means and Standard Deviations for Typicality and Relational Importance Items..	63
Table 7: Means and Standard Deviations for Typicality and Relational Importance Items by Social Support Conditions.....	65
Table 8: Means, Standard Deviations, and Reliabilities for Typicality Scales.	66
Table 9: Means, Standard Deviations, and Reliabilities for Relational Importance Scales.	67
Table 10: Sample Sizes by Survey Versions	68
Table 11: Typicality Ratings: Gender X Context.	74
Table 12: Typicality Ratings: Gender X Scenario.	75
Table 13: Typicality Ratings: Dating Status X Context.....	76
Table 14: Final Hypothetical Scenarios for Study 3.....	77
Table 15: Survey Versions with Conditions	82
Table 16: Sample Sizes by Survey Versions for Study 3	83
Table 17: Means and Standard Deviations for Social Desirability.	87
Table 18: Group Differences by Survey Version.....	91
Table 19: Sex Differences by Measures.	93
Table 20: Medians and Sample Sizes for New Conditions.....	99
Table 21: Correlations Between Independent and Dependent Variables.....	101

Table 22 : Means and Standard Deviations for Intentions to Engage in Behavior	105
Table 23 : Means and Standard Deviations for Intentions to Seek Friend's Advice.	107
Table 24 : Predictors of Intentions to Engage in Behavior.	109
Table 25 : Predictors of Intentions to Seek Friend's Advice	110
Table 26 : Types of Social Support for Study 3.....	111

ACKNOWLEDGEMENTS

I have had the privilege of working or interacting closely with a wide range of talented, intelligent, funny, and enthusiastic individuals who have all had a heavy hand in my progression through Penn State's doctoral program and "dissertating." I would like to take this space to thank these individuals for their support, encouragement, and help.

Hands down, I have learned the most from my advisor, Dr. Jon Nussbaum. First, Jon is one of the best people I ever met, which is a reminder that one can participate in quality scholarship while being respectful, fair, supportive, and friendly to others. [Even after the most intense sporting events and disappointing losses, he always had nice things to say about my beloved Michigan State Spartans!] Second, Jon is supportive of his advisees and their projects. You'll always find him in the crowd while you present a conference paper, waiting for your phone call after an interview, or sitting on his couch eagerly waiting to talk to you about your research. Third, Jon wants me to be my own researcher with my own ideas. Although sometimes I would just want the quick answer to move on during the dissertation process, I know the hours I spent looking up and researching potential solutions were all to help me become a more effective, resourceful, and quality scholar. Finally, Jon is a life-saver. Thanks for believing in me when no one else did. I feel lucky to have had the chance to meet, know, and work with Jon Nussbaum. I have learned from him the qualities necessary to be a successful scholar and advisor. I look forward to my future because he has influenced me in such a positive way.

When I was accepted at Penn State, I knew I wanted to work with Dr. Walid Afifi and after I first met him, I knew working with him would prove to be a wise decision. He challenged me while at the same time welcoming me into his home and family. During the summer after my first year, Walid went on vacation and asked me to develop my own idea for research by the time he returned. From this task, I put together a study on sexual communication that would end up becoming formative research for my dissertation. I was sad to see Walid leave for University of California, Santa Barbara, but I was appreciative to have learned how important it is to have my own ideas when conducting research. I know that our relationship will continue for years to come as well as I will continue to apply the lessons I have learned from him.

I am grateful for the opportunity to have worked with Dr. Dennis Gouran while at Penn State. In particular, I am appreciative of the time Dr. Gouran spent reviewing and editing my papers (as well as all the red pens I am sure he went through when reviewing my work). His detailed comments provided me with the guidance I needed to improve in the areas of clarity, style, and editing. Certainly, my dissertation is a better written document thanks to his feedback. In addition, through Dr. Gouran's supervision and observation, I was able to learn a lot about myself as a teacher. I thoroughly enjoyed discussions with him about teaching and strategies to use in the classroom. These interactions helped me shape the teaching philosophy that I exercise and support in the classroom today. Thank you! I am more confident in my abilities as a writer and teacher because of your knowledge, expertise, time, insights, and support.

While so many things have changed, Dr. Denise Solomon has been my constant. She is the one committee member who has stuck it out with me for all five years of my

doctoral work. Thank you for building a house and looking both ways before crossing the street! Some of my favorite moments at Penn State include interacting with Denise in the classroom, in her office, in the hall, in the department's conference room, and at conferences. These conversations almost always led me to a pad of paper to write down all the ideas that were sparked and/or encouraged. Thank you for always listening when I was rooting for the study of friendships!

I am grateful to have worked with a number of other people while at Penn State. Thanks to Dr. Mary Beth Oliver for her input on my dissertation and time as my committee member. Dr. Oliver offered interesting and unique points conceptually and methodologically that proved to make the final product of the dissertation stronger. Whether in Café Laura, his office, or communicating from Alabama, Dr. Jeffrey Parker always welcomed me to be part of the research and learning process. His enthusiasm for research is contagious! Thanks to Patricia Koch for sharing her experience and information. I had the opportunity to sit in on her 400-level undergraduate Human Sexuality as a Health Concern course and I was amazed how much it helped me as a researcher *and* as a teacher. I will be a better scholar thanks to these individuals and their enthusiasm.

I would like to thank my research assistants Jamie Urbanowicz, Sarah Cohen, Ashley Stoddard, Chris Germani, Tessa Greiman, Leah Triola, and Elyce Levin for their hard work on one or more of my dissertation studies. The completion of the dissertation would have been impossible without their enthusiasm, curiosity, patience, creativity, attention to detail, and, of course, reliability! A special thanks to Jamie, Sarah, and Ashley for collecting data, which included carrying a bulky and heavy box around

campus! Although this process was often annoying and embarrassing, there was the added benefit of participating in “Alysa’s Workout Program” which resulted in buff bicep muscles! An *extra* special thanks to Jamie and Sarah for coding just *one* more question! While at Penn State, I have been lucky enough to work with outstanding students. My research assistants are my past students, my recent colleagues, and my current and future friends. I can only hope that I will have the opportunity to work with students throughout my career with as much intelligence and compassion as them. Thank you for making my doctoral and dissertation experience especially meaningful.

My dissertation would not exist without my research participants. I am appreciative of every student who considered participating or participated in one of the three dissertation studies. The topic is private, personal, intimate, sometimes embarrassing, and sometimes difficult or uncomfortable. Thanks for sharing your experiences with me so openly.

To say that the degree is mine alone would be a mistake. It has been a long journey and my father and mother, Jim and Nancy, have been there for every exciting and scary step of the way (including a ruptured appendix!). Because of the amount of time, investment, and support my parents have provided me over the last seven years, they deserve their own honorary PhDs! I have come a long way from the girl who could not finish her homework without the TV being taken away, but I am where I am today because of them! I am also grateful for the encouragement of my older brothers, Jeff and Michael. Although they are at a great distance from me, their support is enduring. The phone calls and texts to touch base, to distract, to laugh, to talk sports or movies, and to

listen were helpful in continuing to work on my dissertation. I am proud to be part of the Lucas family and I am proud to call each one of them my friends!

I conduct research with the belief that friendships are important to every single person's life and that friends can have both a positive and negative impact on our well-being. My best friend, Kate Cosgrove, has had such a positive impact on my life that I cannot imagine what it would be like without her. K8 has this wonderful ability of always "being there" at just the right moment and amazing way with words, that even in the lowest moment, she can make me laugh. She is my research muse – my inspiration to continue studying friendships. Thanks for encouraging me every step of the way to my "white doctor's coat."

The collegial atmosphere among graduate students at Penn State is unique. I have been amazed time and time again with not only the graduate students' intelligence, but also their willingness to help you with...well, really, anything. You need a source I have? You got it. You need me to help you with a CFA? You got it. You need me to cover your class? You got it. You need help moving? You got it. You need a place to stay? You got it. Additionally, I have learned so many lessons from the graduate students whether in the classroom, in 313 or 316 Sparks, as part of the Afifi family, at trivia, at Mad Mex, at tailgates, at Pickles, waiting for a midnight showing of a movie, over Qdoba burritos, on the island of Crete, or at The Glenn. My peers and friends are extraordinary people and I do not think my words could be enough to express my gratitude for their presence in my life over the last five years. I would to thank Tara McManus, my roommate and all-around homie, and Jennifer Kam, my Automatic (Ever Long) Friend, for being there during every twist, turn, tear, talk, movie (that I probably made them see), and

conference. I look forward to our future adventures at conferences, but do not think I'll forget about London. We are totally going. Also, thanks to my fellow graduate students for a memorable experience: Megan Dillow (during formative PhD years!), Mandy Goodwin, Rachel McLaren, Carla Fisher, Kirsten Weber, Ed Downs, Keli Steuber, Julie Volkman, Masaki Matasunaga, Chris Morse, Andy High, and Amanda Travaglini (before she broke out of academia). Finally, I officially bestow the honor onto Andy High to work at the best computer station in 313 Sparks! It is all yours!

Thanks to Elizabeth. Without her, I would have never been privy to the role and potential impact friendship communication can have on one's well being. Thirty days of interaction have led, potentially, to a lifelong program of research. I hope I can continue to conduct research that will help the Elizabeths out there.

Finally, like Chauncey Billups making the game winning shot with less than 2 seconds left to play in overtime, there are a couple of people who have showed up late in the dissertation game to help me out. Thanks both to Toutain and Jeanne for being my Chauncey Billups!

Chapter 1

Statement of the Problem and Related Scholarship

Introduction

Nineteen million new cases of sexually transmitted infections (STIs) are reported each year (Centers for Disease Control and Prevention, 2007). Most of these STIs could be prevented through the proper use of condoms or other safer sex practices (Coleman & Ingham, 1999). Furthermore, 49% of all pregnancies each year are unintended (Finer & Henshaw, 2006). According to the data released by the CDC and confirmed by Finer and Henshaw, the highest rates of these STIs and unintended pregnancies fall within the 15-24 year old age group (see also Weinstock, Berman, & Cates, 2004). The choices these individuals face regarding their sexual behavior may increase their chances of exposure to STIs and/or unintended pregnancy. Logically, promoting responsible sexual decision-making could be a significant first step toward helping this population have healthy lives (Weiss, 2007). To provide further insight into how to prevent STIs and unintended pregnancies in this age group, it is critical to understand the influences on young people's sexual decision-making. Friendship support provided during sexual decision-making and the anticipated emotional states that may accompany these decisions can be important essential influences.

Young people's peers and friends are the most frequently reported influences on risky sexual decision-making (Christopher & Roosa, 1991; Finken, 2005; Holtzman & Rubinson, 1995). The strength of these influences occurs because children begin to spend

more time in adolescence with friends and being more comfortable talking about sex with their friends than with their parents (Herold & Way, 1988; Papini, Farmer, Clark, & Snell, 1988). According to Spanier (1977), friends are the primary source of sexual information in adolescence and young adulthood, and research has indicated that young people often turn to their friends for opinions concerning dating and sex (Finken, 2005; Wilks, 1986). It is during the transition to emerging adulthood (i.e., those individuals aged 18-25) that sexual discussions among friends intensifies (Arnett, 2000). Lefkowitz, Shearer, and Boone (2004) reported that college students discuss sex more often with their best friends than with their parents and that they feel comfortable when talking with each other about sex.

Unfortunately, little is known about the extent to which, and in what capacity, a friend's influence has on one's sexual decisions. Most often, peer influence is assessed using reports of participants' sexual behavior and attitudes in addition to the participants' perceptions of the friends' behavior and attitudes (e.g., Berndt, 1996; Billy & Udry, 1985; Jaccard, Blanton, & Dodge, 2005). The reports of friends' behavior, however, are a result of participants' transference of their own behavior (Maxwell, 2002), and college-aged individuals often overestimate the sexual behavior in which their peers engage (Agostinelli & Seal, 1998; Page, Hammermeister, & Scanlan, 2000). The conclusions from these studies attempt to provide an understanding of peer influence based on simple correlations between the participant and friend reports (Berndt, 1996). However, individuals frequently develop friendships and interact with people who share common experiences (Baumeister & Leary, 1995) or who have similar attitudes and beliefs (Berndt, 1982; Jaccard et al.). Instead of capturing the significance of peer influence,

these correlations highlight the effects of friendship selection (Jaccard et al., 2005), in other words, individuals initiate friendship with similar others (Baumeister & Leary, 1995; Berndt, 1996). Therefore, correlations between self-reports of behavior may not adequately reveal the role that friends play in sexual decision-making whereas the sexual conversations among friends may be important to the sexual decision process (Halpern-Felsher, Kropp, Boyer, Tschann, & Ellen, 2004). To clarify the relationship of peer influence in sexual decision-making, an understanding of the role of the friend as a consultant, determined by studying the sexual communication behavior of young people, would be most helpful.

Communication in the form of social support is a key element in evaluating the role of friends in decision-making. Often, the function of a friend is to provide social support during a time of need (Burlison & Samter, 1994). Making poor sexual decisions may induce negative emotions (Gilovich & Medvec, 1995). To avoid negative feelings, such as regret, one may seek information to reduce the risk of making bad decisions (Zeelenberg, 1999). Decision-making concerning sex is one situation in which the feedback of friends can help assure one that he or she can avoid negative effects (Finken, 2005).

Regret is a negative emotion experienced by a decision maker when he or she realizes that another decision would have produced a better outcome (Zeelenberg, 1999). From the perspective of regret regulation theory, this emotion is one most people would like to avoid (Zeelenberg & Pieters, 2007). To do so, a decision-maker must spend time considering what regret he or she might experience (Janis & Mann, 1977). For example, Richard, van der Pligt, and de Vries (1996) asked participants to consider the feelings

they would experience *after* participating in unsafe or safe(r) sex; the respondents who reflected on involvement in unsafe sex reported more feelings of regret than those in the safe condition. Therefore, young people faced with similar sexual decisions regarding whether or not to participate in unsafe sex might decrease the chance of experiencing regret by taking the time to consider anticipated regret. Additionally, as suggested by regret regulation theory, anticipated regret is experienced when decisions are “difficult and important.” Finken (2005) suggests that in making these tough decisions, one’s friends become important consultants. In fact, during sexual conversations with friends, feedback may be critical to identifying decision-making outcomes that will likely produce the least amount of regret (e.g., participating in safe sex vs. unsafe sex).

Studies focusing on the role of friendship in sexual communication and decision-making are limited (see Halpern-Felsher et al., 2004; Holtzman & Robinson, 1995; Lefkowitz et al., 2004). However, the consultation of friends during risky sexual decision making may be a critical factor when considering the astounding STI and unintended pregnancies statistics for young people (Finken, 2005). The purpose of this dissertation was to test aspects of the regret regulation theory and friendship support communicated during sexual conversations. Specifically, it focused on whether the type of support one receives from a friend during the experience of anticipated regret influences the decisions to enact a particular sexual behavior and the likelihood of turning to that friend for support in the future.

Anticipated Regret

The Experience of Regret

Zeelenberg (1999) notes, “[R]egret is a negative, cognitively based emotion that we experience when realizing or imagining that our present situation would have been better, had we decided differently” (p. 94). Because there are many instances in which we would have preferred to make a different choice or we realized that another decision would have been more profitable, the experience of regret is inevitable (Zeelenberg & Pieters, 2007). In fact, regret has been rated as the negative emotion most intensely experienced and the one second most frequently reported after anxiety (Saffrey, Summerville, & Roese, 2008). Regret cannot be experienced without alternative choices and is rooted in social comparison (Zeelenberg & Pieters). Hence, individuals may find it difficult to avoid not assessing decisions made in relation to what “... ‘could have,’ ‘might have,’ or ‘should have’ happened” (Gilovich & Medvec, 1995, p. 380).

Regret Theory, Anticipated Regret, and Feedback

Regret theory (Bell, 1982; Loomes & Sugden, 1982) focuses on the choices individuals make and, in turn, the feelings induced from the options they pass up (Zeelenberg, Beattie, van der Pligt, & de Vries, 1996). Underlying this theory are two assumptions: (1) regret is experienced when comparing an actual outcome with a

potential outcome, and (2) feelings of regret are anticipated and are then considered during the decision-making process (Loomes & Sugden, 1982; Zeelenberg et al.). Even though regret is frequent, most individuals would like to avoid it and are motivated to take steps to do so (Gilovich & Medvec, 1995). Therefore, anticipating regret becomes a useful means for identifying the post-decisional feelings (i.e., regret) an individual may experience from making a particular choice. Baumeister, Vohs, and Tice (2006) have suggested that anticipating emotions, such as regret, serves as a venue to evaluate potential outcomes, positive emotions result in positive outcomes and negative emotions result in negative outcomes. For example, considering post-decision regret, or anticipating regret, allows the individual to delay making a decision, which should result in making a decision that is more likely to avoid regret and to result in a more positive outcome (Janis & Mann, 1977).

Comparison of the obtained outcome to the other outcomes that in retrospect may have been better to select can induce regret. Thus, feedback is a critical factor in regret theory (Zeelenberg, 1999). Feedback about the available decision options allows an individual to evaluate which one would provide the most effective way to avoid regret (Zeelenberg et al., 1996). If a decision maker does not receive feedback regarding the alternatives, there can be no comparison of actual and potential outcomes. In this circumstance, there is no reason to anticipate regret (Zeelenberg, 1999). Consequently, feedback for the potential choices should influence one's levels of anticipated regret, his or her decision-making process and, ultimately, the regret he or she has experienced, once the decision is made. Yet feedback may not focus on the most risk-averse (avoids risk)

option but instead the one that is most regret-averse (avoids regret), which could be one that is highly risky (Zeelenberg, 1999; Zeelenberg et al., 1996). For example, an individual may be presented with a safe option (e.g., having protected sex) and risky option (e.g., having unprotected sex). The risk-averse (avoids risk) option is to have protected sex; however, anticipated regret may be experienced if that individual believes his or her sexual partner will be hurt by the decision to have sex with a condom (e.g., ruins mood, suggests partner is “dirty,” is not exclusive, etc.). In this case, the most regret-averse (avoids regret) decision may be to proceed with risky unprotected sex as a way to avoid relationally-harmful situations (Cleary, Barhman, MacCormack, & Herold, 2002; Cline, Freeman, & Johnson, 1990; Cline, Johnson, & Freeman, 1992).

Regret is a complex emotion induced when one believes that having made another decision made would have resulted in a better, more positive outcome. Most individuals prefer to avoid this feeling and, therefore, may engage in decision-making processes that include consideration of anticipated regret and feedback, both of which suggest the most regret-averse options. These ideas have been incorporated into Zeelenberg and Pieters’s (2007) regret regulation theory which guided the research for this dissertation.

Regret Regulation Theory: Application to Interpersonal Relationships

Zeelenberg and Pieters introduced ten propositions in their theory of regret regulation (2007). Specifically, they outlined the conditions under which regret would be experienced, the components of decisions that may be regretted, and the behavioral implications of regret. These propositions include:

Proposition 1: Regret is an aversive, cognitive emotion that people are motivated to regulate in order to maximize outcomes in the short-term and learn maximizing them in the long run.

Proposition 2: Regret is a comparison-based emotion of self-blame, experienced when people realize or imagine that their present situation would have been better had they decided differently in the past.

Proposition 3: Regret is distinct from related other specific emotions such as anger, disappointment, envy, guilt, sadness, and shame and from other general negative affect on the basis of its appraisals, experiential content, and behavioral consequences.

Proposition 4: Individual differences in the tendency to experience regret are reliably related to the tendency to maximize and compare one's outcomes.

Proposition 5: Regret can be experienced about past ('retrospective regret') and future ('anticipated or prospective regret') decisions.

Proposition 6: Anticipated regret is experienced when decisions are difficult and important and when the decision maker expects to learn the outcomes of both the chosen and rejected options quickly.

Proposition 7: Regret can stem from decisions to act or not to act: The more justifiable the decision, the less regret.

Proposition 8: Regret can be experienced about decision process ("process regret") and decision outcomes ("outcome regret").

Proposition 9: The intensity of regret is contingent on the ease of comparing actual with counterfactual decision processes and outcomes, and the importance,

salience and reversibility of the discrepancy (added by Pieters & Zeelenberg, 2007).

Proposition 10: Regret aversion is distinct from risk aversion, and they jointly and independently influence behavioral decisions.

Proposition 11: Regret regulation strategies are decision-, alternative-, or feeling-focused and implemented based on their accessibility and their instrumentality to the current overarching goal (p. 4).

Previous studies have provided empirical evidence illuminating regret and how it is experienced. According to Landman (1993), regret is a “reasoned-emotion”; it is most often a distressful, negative experience for those involved (Gilovich & Medvec, 1995; Jokisaari, 2003; Landman, Vandewater, Stewart, & Malley, 1995) (See Proposition 1). Furthermore, research has demonstrated that anticipated regret may be included in the process of decision-making as a way to avoid such negative, regretful experiences (Zeelenberg, 1999) (See Proposition 2 and Proposition 6). On the other hand, the use of feedback regarding the potential choices assists the decision-maker in determining which option (whether risky or not) will likely produce the least amount of future experienced regret (Zeelenberg et al., 1996; Zeelenberg & Beattie, 1997) (See Proposition 6 and Proposition 9). Together these propositions constitute a model that allows for testing regret and decision-making.

In presenting the cognitive processes or the “psychology of regret” in their theory, Zeelenberg and Pieters (2007) imply that decisions are made in relative isolation from other people. Although individuals may be the final decision makers in many situations such as purchasing a lottery ticket (Zeelenberg, 1999) or placing a bet on a sports team

(Zeelenberg & Pieters, 2007), it is likely that other people, especially significant others, will influence the process of decision-making even if they are not present at the scene (Finken, 2005). In times of need, Finken noted, an individual may turn directly to friends as consultants, to help analyze problems and make tough decisions (Wilks, 1986), which suggests a social nature to the decision-making process (Janis & Mann, 1977). In fact, an individual may seek support from friends to assist with evaluation of potential post-decisional feelings. Similarly, Proposition 6 of Zeelenberg and Pieters's regret regulation theory posits that anticipated regret will be experienced when the decisions are difficult and important. In an earlier report, Fischhoff (1996) noted that adolescents may have a difficult time making significant decisions. According to Wilks (1986), mothers and same-sex friends are the most important people in a typical adolescent's life; however, they reportedly discussed problems more frequently with their friends and value them more in the decision-making process. To derive the broadest understanding, anticipation of regret needs to be viewed through a social lens (Janis & Mann, 1977; Zeelenberg, 1999). Individuals may experience increased anticipated regret if a decision is socially important and if other people expect that decision to be followed through. The social aspect of anticipated regret suggests that (a) significant individuals help us make decisions, and (b) these individuals may influence the process of making decisions and implementing decisions.

Zeelenberg and Pieters's regret regulation theory proposes that regret can be induced by the process of decision-making and the decision outcome. Previous research has focused on the regret that may follow a decision or actual regret felt once a decision is made. Little research has focused on *how* the process of decision-making may

influence the regret experienced (Richard et al., 1996; Simonson, 1992; Zeelenberg, 1999). Pieters and Zeelenberg (2005) observed that regret may still be experienced despite a successful decision outcome if the method of decision-making is poor. For example, one function of friendship is to provide social support (Burleson, 1995). However, if an individual provides poor or unhelpful social support, the friend may be unhappy. In this situation, a friend's poor advice may cause problems during the decision-making process. Specifically, as predicted by regret regulation theory, bad advice may actually decrease levels of anticipated regret which, in turn, may increase intentions to engage in risky behavior. Because anticipated regret should cause individuals to think more about the decisions they are going to make, higher levels of regret will be experienced if they engage in risky behavior as a result of not anticipating regret (e.g., Janis & Mann, 1977; Zeelenberg, 1999). Indeed, whether portending positive or negative effects, decisions may be made with the assistance of others. Thus, support communicated during this process may be critical in understanding how anticipated regret is experienced, decisions are made, and even how regret is experienced, especially among college-aged individuals.

The Role of College-Aged Friendships in Risky Decision-Making

Friendships provide an abundance of benefits to those involved, including companionship, acceptance, trust, respect, emotional support, intimacy, help, and enjoyment (Bukowski, Newcomb, & Hoza, 1987; Button, 1979; Hartup & Stevens, 1997; Kuttler, La Greca, & Prinsten, 1999; Reohr, 1991). In fact, the most commonly reported benefit of friendship is having someone with whom to talk or self-disclose (Duck & Wright, 1993; Monsour, 1992; Parks & Floyd, 1996; Rawlins, 1992; Reohr, 1991).

According to Reohr, friendship provides an opportunity for two individuals to establish a sense of exclusivity that promotes sharing secrets and optimal communication. Duck and Wright describe “talk” as the primary reason why both men and women get together with their friends. Moreover, Fehr (2004) suggests that through talk, friends are able to achieve intimacy; in her study, participants reported self-disclosure as the interaction pattern most likely to increase the intimacy in their friendships because if one “need[s] to talk to, my friend will listen” (p. 15). Similarly, research by Monsour and by Parks and Floyd on intimacy in friendships has revealed that self-disclosure, is part of participants’ definitions of closeness and intimacy. Clearly, as Wheelless (1976) posited, talking and self-disclosing are major benefits of friendship, as well as means for developing solidarity.

Friends appear to be the main communication partners in discussions of sex-related topics during adolescence and emerging adulthood (Lefkowitz et al., 2004). Therefore, it is surprising that so few studies have examined sexual communication patterns among college friends (Halpern-Felsher et al., 2004; Holtzman & Robinson, 1995; Lefkowitz et al., 2004). Researchers have recently begun to investigate the discussions college-aged friends have about sex (Lefkowitz et al., 2004; Lucas, 2007; Lucas & Afifi, 2006). Their findings indicate that college friends talk about a wide range of sexual topics. When thinking about people with whom to discuss sexual behavior, participants often rank their friends highest on the list (Dickinson, 1978; Handelsman, Cabral, & Weisfeld, 1987; Kallen, Stephenson, & Doughty, 1983; Spanier, 1977). Methodologically, these studies have asked participants to either (a) list the sexual topics they discuss (Lefkowitz et al., 2004; Lucas & Afifi, 2006) or (b) respond to a one item

measure of communication (e.g., “Do you talk to your mother about sex?”) (Jaccard, Dittus, & Gordon, 2000). In general, these studies have not explicated the nuances of sexual communication amongst college-aged friends. Although young people identify friends as major sources of sexual information, the information and the influence friendships have on sexual behavior decisions has remained a mystery.

The social approach to anticipated regret posited by Janis and Mann (1977) and by Zeelenberg (1999) suggests that peers and friends presumably do influence sexual decision-making and the enactment of particular sexual behavior (Halpern-Felsher et al., 2004; Holtzman & Robinson, 1995). During the transition to adolescence, peers and friends become critical sources of influence in sex-related decisions (Christopher & Roosa, 1991), and sexual conversations among friends may affect young people’s decisions about sexual behavior (Halpern-Felsher et al., 2004). Investigating the communication between friends may provide a more descriptive, nuanced, and accurate view of the influence friends may have in sexual decision-making to help better understand the sexual decision-making process.

What does seem likely, in light of research involving risky sexual decision-making and the benefits of friendship is that people would be motivated to help their friends assess anticipated regret. Although young people identify friends as a major source of sexual information (Dickinson, 1978; Handelsman et al., 1987; Kallen et al., 1983; and Spanier, 1977), the way in which social support operates and the influence that friendships have on communication relating to sexual matters and subsequent decision-making is not clear. However, it seems likely that communication between friends will play a critical role in the process of sexual risky decision-making.

Social Support in Friendship

Burleson and Samter (1994) note that a functional approach to relationships “stresses the things that certain relationships typically *do* for people and, consequently, the things that people come to look to those relationships *for*” (p. 62). Friends provide benefits for those involved (Burleson, 1995) that may be different from those benefits received in familial and romantic relationships (Burleson & Samter, 1994). For example, the ostensible benefits of friendship include a “friendly ear” (Rawlins, 1992), enjoyment, help, social support, and acceptance (Reohr, 1991). In turn, these benefits may become an expectation of how a friend should behave. A college-aged individual may seek a friend during times of need because that is what he or she wants, needs, or expects from this friend (Goldsmith, 2004). In turn, the friend may understand that he or she is to perform tasks expected of friends (e.g., “I listen because that’s what a friend is supposed to do”) (Burleson & Samter, 1994). Through communication, according to Burleson and Samter, this friend is able to enact the functions, or behaviors (social support) that are considered as critical to friendship.

Social support is a fundamental characteristic of the friendship relationship. In crises, we turn to our friends for support (Barnes & Duck, 1994). As friendships become closer and more intimate, opportunities to provide friends with support arise frequently (Albrecht & Adelman, 1987), and the support becomes important and valued (Wilks, 1986). Goldsmith and Parks (1990) reported that three-fourths of their participants sought social support from a same-sex friend as opposed to support from other individuals (e.g., family members). Furthermore, particular skills are essential and preferred by college students when friends are providing social support. In particular, affectively-oriented

skills, such as ego, emotional, and conflict management support, are considered most critical to friendship (Burleson & Samter, 1994; Westmyer & Myers, 1996). Similarly, Goldsmith and Parks's (1990) participants felt it important for best friends to have such affectively-oriented skills as conflict management (the ability to develop mutually satisfying in solutions), comforting skill (the ability to make person feel better when depressed), ego support (the ability to help a friend feel good about her/himself), and regulative skill (the ability to help someone who has violate a norm fix a mistake) (Burleson, Samter, & Lucchetti, 1992; Westmyer & Myers, 1996). A friend providing competent and appropriate social support can help alleviate one's problems and troubles. Simply put, receiving social support from our friends affects our mental and physical well-being in positive ways (Cutrona, 1986).

Friendships also serve as a resource for achieving personal goals throughout life (Burleson & Samter, 1994). Social support that provides friends with rewarding consequences has been the focus of extensive research (Burleson & Samter, 1994; Burleson et al., 1992; Westmyer & Myers, 1996). Burleson and his colleagues have investigated the role of high person-centered (HPC) messages and determined that in social support, they are more effective than low person-centered (LPC) messages (Holmstrom, Burleson, & Jones, 2005). HPC messages convey that one recognizes and is validating of the other's feelings. On the other hand, LPC messages neglect or deny the feelings of the friend (see Holmstrom et al.). Although social support is fundamental to friendships from the functional perspective, Burleson and Samter (1994) note that the support between friends may also assist in maintaining the relationship. Unhelpful support, such as LPC messages, may be problematic to the continuation of the friendship

(e.g., Burleson & Samter, 1994; Cutrona & Russell, 1990); however, can helpful social support be effective in maintaining the friendship, but damaging to the recipient?

Ego support may be one factor in why social support generally goes more awry in friendships, particularly in respect to sex-related decisions. As Burleson et al. (1992) point out, friends who have skill in ego support engage in communication that makes other parties feel good about themselves, believe in themselves, and feel that they can achieve personal goals. Yet, friends may effectively support their friends' egos and encourage them to engage in behavior that is dangerous. For example, in a close friendship, unconditional support and understanding may be expected and may be provided during conversations about sex, although in an inadvisably poor way.

According to Monsour (1992) and Parks and Floyd (1996), "unconditional support" is a means for defining a close or intimate friendship that entails "being there for each other." Certainly, to make a friend feel good about his or her sexual behavior or decisions, one may feel obligated to be supportive and understanding (e.g., Burleson & Samter, 1994). During the transition to college and emerging adulthood, a time in which old social networks change and new ones are established (Oswald & Clark, 2003), individuals may be motivated to enact positive and supportive behavior with respect to their friends. In fact, during discussions of decisions, friends may be active in their supportive role and thus may influence how the decision-making process unfolds (Finken, 2005).

Similar to Le Poire's (1994) notion of inconsistent nurturing as control (INC), friends may enable risky behavior through the support they provide. INC theory suggests that partners of "afflicted individuals" (such as drug-dependent people, gamblers, and

depressed individuals) are likely to encourage these individuals to enact the very behavior they were initially trying to eliminate (Le Poire, 1994; Le Poire, Hallett, & Erlandson, 2000). According to Le Poire (1994), the partner may both punish and reinforce the afflicted individual's behavior due to the competing goals of nurturing and controlling their loved one. When applying the INC theory to friendships, one may be more motivated to nurture and encourage a friend's behavior that is risky instead of punishing and discouraging him or her. A focus on reinforcing one's sexual behavior falls in line with (a) the characteristics of friendship (e.g., "A friend is accepting of who I am no matter what") (Reohr, 1991) and (b) the similarity of the friendship (e.g., "We participate in the same risky behavior or have similar beliefs about the behavior") (Jaccard et al., 2005).

Barbee, Rowatt, and Cunningham (1998) conclude that successful and unsuccessful coping skills may have long-term consequences for friendships. Clearly, friends are important and provide us with many benefits, including having someone in whom to confide and who can provide social support (Rawlins, 1992; Reohr, 1991). On the other hand, friends may also provide poor support (Burleson et al., 1992) or support that adversely affects the decision-making process (Finken, 2005). When considering a friend's role in decision-making, unhelpful or negative support may damage the friendship (Cutrona & Russell, 1990). Therefore, a friend who provides negative support would not be sought for help because he or she may hinder the process of anticipating regret and decision-making. Previous research suggests that individuals turn first to friends to talk to about sex (Herold & Way, 1988; Papini et al., 1988) and these friends are the most influential in risky decision-making (Christopher & Roosa, 1991; Finken,

2005; Wilks, 1986). It is essential to learn more about how communication between friends can affect the levels of anticipated regret one experiences when sex-related decisions are made.

Impact of Sex-Related Decisions

The rates of STIs and unplanned pregnancies among college-aged individuals are overwhelming. Research suggests that the majority of the American population with STIs is below the age of 25 (Brooks-Gunn & Furstenberg, 1989; Weinstock et al., 2004; Weiss, 2007). The spread of these infections is astonishing, as many of the infections are asymptomatic (Institute of Medicine, 1997; Marr, 2007). As a result, individuals may be unaware that they or their partner carry an infection when making sexual behavior and risk-protection decisions. Acquiring an STI can have profound long-term effects on the healthy lives of young people, including the financial cost of treatment (Institute of Medicine, 1997), problems with infertility and pregnancy (Westrom, 1992; CDC, 2007), the transmission of HIV/AIDS (UNAIDS, 1998), and the diagnosis of cervical cancer (American Cancer Society, 2008). Indeed, risky sexual behavior can affect the life-long health and well-being of a vast number of individuals.

Although the statistics may be startling, the decision to engage in risky sexual behavior appears to be commonplace for individuals in the 18-25 year old age group. Arnett (2000, 2006a, 2006b) observes that individuals in the 18-25 age group experience a unique transition in their lives labeled “Emerging Adulthood” in which identity exploration with sexual experimentation and sexual relationships ensues (see also Thompson & Spanier, 1978; Weiss, 2007). Furthermore, this period of time often emphasizes many “first” sexual experiences and relationships (Arnett, 2006b) that

contribute to the shaping of their sexual selves. Emerging adults are certainly at-risk for both STIs and unplanned pregnancies as a consequence of their sexual behavior (e.g., Brooks-Gunn & Furstenberg, 1989; CDC, 2007).

College-aged individuals are unlikely to talk about sex, including making risk protection decisions, until *after* they have introduced sex into their relationships (Cleary et al., 2002). Instead, they turn to methods of evaluating sexual risks that do not promote healthy sexual practices. For example, college-aged participants reported determining whether or not a partner is “clean” or “unclean” (Marston & King, 2006) by using implicit personality theories (Williams, Kimble, Covell, Weiss, Newton, Fisher, & Fisher, 1992) or general appearance of the potential partner (Edgar, Freimuth, Hammond, McDonald, & Fink, 1992). Thus, if they “know” the individual or “like” how the individual looks, sex with the potential sex partner may seem to be less risky. Additionally, risk decisions are often made without communication between sexual partners, which increases the chances of contracting an STI or resulting in an unintended pregnancy (von Sadoyszky, Keller, Vahey, McKinney, Powwattanta, & Pornchikate, 2002). For example, Afifi and Weiner (2006) reported that college students were fairly certain their sexual partners did not have an STI, which suggests that if one believes a partner is safe, sex talk about being safe is unnecessary. Clearly, understanding the role of decision-making in practicing safer sex is crucial for a long-term healthy life.

One may wonder why sexual partners are unable to talk about sex. Continued research suggests that communicating with a sexual partner is a difficult task because of potential relationship-damaging outcomes, such as loss of trust, lack of information, negative attitudes toward sex, suspicions about partner’s motive of inquiry, and

unawareness of safer-sex practices (Cleary et al., 2002; Cline et al., 1990; Cline et al., 1992; Marr, 2007). There are two main reasons for why people refrain from inquiring about sexual history or talking about using contraceptives. First, if an individual asks questions of a partner in attempt to hint around about contraceptives and STIs, that may lead the partner to think the individual has an infection (Cleary et al., 2002); the attempt to gain this information could be seen as a way to inquire about how the partner feels about the individual having a disease. Second, according to Cleary et al., asking about sexual history could lead the partner to believe the individual thinks the partner has an infection; in this case, the attempt to acquire information might be viewed as a way to alleviate or confirm one's own suspicions about the partner being infected. In some cases, Cleary et al. noted, college students concluded that they were better off not asking their romantic partner about sexual history and would continue to engage in risky sex instead of possibility creating relational conflict.

Engaging in unprotected sex and other risky sexual behavior is likely to induce sexual regret (e.g., Paul, 2006). In a recent study of college students, Oswalt, Cameron, and Koob (2005) determined that the majority of their sexually active participants had regretted at least one sexual decision. Specific reasons for sexual regret included enacting behavior inconsistent with moral beliefs, the influence of alcohol, the discovery that one did not want the same thing as the partner, the failure to use condoms, feeling pressured to have sex, and wanting to wait for marriage. Richard et al. (1996) asked college students to reflect on the feelings they might have after having unsafe sex and discovered that they engaged in less risky behaviors during the immediate five months following the study.

Chapter 2

Rationale, Hypotheses, and Research Questions

Introduction

One goal of this dissertation research project was to perform an initial test of Zeelenberg & Pieters' (2007) regret regulation theory in college students' friendships by determining the role a combination of friendship support and anticipated regret may play in risky sexual decision-making.

Anticipated Regret

The decision-making process inherently entails comparisons between an individual's selected option and the other options available. The comparison may result in the experience of a negative emotion, regret, if the chosen option seems less satisfying (Zeelenberg, 1999). As noted by both regret and the regret regulation theories, one way to avoid the experience of regret is to evaluate in advance the possible feelings of regret that may result if a certain decision is made (Janis & Mann, 1977; Zeelenberg & Pieters, 2007). Anticipated regret, according to Janis and Mann (1977), allows the decision maker more time to make a better decision that will minimize regret; thus, if an individual experiences high levels of anticipated regret, he or she will be more likely to resort to inaction (not participating in the behavior) and vice versa in the case of low anticipated regret. Lower levels of anticipated regret theoretically would lead to greater intentions to engage in the risky sexual behavior, whereas higher levels of anticipated regret should produce less inclination to do so. In line with anticipated regret research, if individuals

anticipate being regretful, they will not want to engage in the behavior (Zeelenberg, 1999; Zeelenberg & Pieters, 2007). Specifically:

H1a: College-aged individuals who have high anticipated regret will be less likely to express an intention to engage in sexual behavior than are college-aged individuals who have low anticipated regret.

Having an awareness of possible regret, individuals may turn to significant others such as friends for help in making decisions. Zeelenberg and Pieters (2007) noted the frequent occurrence of anticipated regret when decisions are difficult. Because young people have a trouble making such decisions (Fischhoff, 1996), they look to their friends as consultants (Finken, 2005; Wilks, 1986). Hence:

H1b: College-aged individuals who experience high anticipated regret will be more likely to report seeking out their friends' advice than are college-aged individuals who have low anticipated regret.

Social Support

Through conversation, friends are able to develop intimacy and closeness (Fehr, 2004; Monsour, 1992; Parks & Floyd, 1996). Aries and Johnson (1983) observed that friends who are close are more likely to talk about intimate topics regarding themselves, their feelings, and their relationships. More importantly, Herold and Way (1988) discovered that friendships promote a level of comfort that allows for discussion of the highly intimate subject of sex. The function of a friend is to be supportive, accepting, and helpful (Reohr, 1991). In the context of sexual decision-making, friends may provide support that makes those confronting choices feel good about themselves and encourage

achieving one's personal goals (Burleson et al., 1992). In these cases, if one feels good about the prospect of engaging in sexual behavior, he or she may do so. Accordingly:

H2a: College-aged individuals who receive positive social support from friends will be more likely to report intentions to engage in sexual behavior than are college-aged individuals who receive negative social support from friends.

Friends are a source of support during times of need (Barbee et al., 1998; Barnes & Duck, 1994). Goldsmith and Parks (1990) uncovered evidence showing that individuals are more likely to turn to their same-sex friends for such support than others. Moreover, the support these friends provide may increase in value as more opportunities surface in which a friend can be supportive (Albrecht & Adelman, 1987). In light of this, an expected function of friendship (Youniss & Smollar, 1985), it seems to follow that:

H2b: College-aged individuals who receive positive social support from friends will be more likely to report intentions to seek their friends' advice in the future than are college-aged individuals who receive negative social support from friends.

Combination of Anticipated Regret and Social Support

Given the level of support a friend provides concerning one's concerns about engaging in risky sexual behavior, one's feelings of anticipated regret may decrease or increase. The experience of anticipated regret should influence intentions to engage in risky sexual behavior on some future occasion. Low levels of anticipated regret would foster intentions to enact risky sexual behavior whereas high levels of anticipated regret would presumably not. When one contemplating a decision related to risky sex is contemplated, different expectations concerning support may result in different levels of

anticipated regret and, in turn, influence the intention to engage in such behavior. This leads to several hypotheses:

H3a: College-aged individuals who experience low levels of anticipated regret and receive encouraging support will have stronger inclinations to engage in sexual behavior.

H3b: College-aged individuals who experience low levels of anticipated regret and receive discouraging support will have moderately strong inclinations to engage in sexual behavior.

H3c: College-aged individuals who experience high levels of anticipated regret and receive encouraging support will have moderately strong inclinations to participate in sexual behavior.

H3d: College-aged individuals who experience high levels of anticipated regret and receive discouraging support will have weak inclinations to engage in sexual behavior.

The functional perspective, as articulated by Burleson (1994) and Burleson and Samter (1995), suggests there is a reasonable expectation that a friend will provide social support during times of need (i.e., when experiencing anticipated regret over a sexual decision). However, Burleson's work on person-centered messages also suggests that social support may not always transpire as anticipated. Given the social support one receives from a friend, an individual may repeatedly seek the friend for help relating to sexual decisions or may seek help from a different friend. If an individual is willing to talk to a friend in the future, it is likely that he or she will have less inclination to want to discuss risky sexual behavior if that friend was not encouraging previously. On the other

hand, if the same friend were supportive, it seems likely that he or she would be more included to want to talk with him or her again. Therefore:

H4a: College-aged individuals who experience low levels of anticipated regret and receive encouraging support will have strong inclinations to have sex-related communication with their friend in the future.

H4b: College-aged individuals who experience low levels of anticipated regret and receive discouraging support will have weak inclinations to have sex-related communication concerning their involvement in sexual behavior with their friend in the future.

H4c: College-aged individuals who experience high levels of anticipated regret and receive encouraging support will have weak inclinations to have sex-related communication concerning their involvement in sexual behavior with their friend in the future.

H4d: College-aged individuals who experience high levels of anticipated regret and receive discouraging support will have strong inclinations to have sex-related communication concerning their involvement in sexual behavior with their friend in the future.

Research relating to sexual communication and decision-making among friends is limited (Halpern-Felsher et al., 2004, Holtzman & Robinson, 1995; Lefkowitz et al., 2004). and has relied on correlational analyses (Berndt, 1996; Jaccard et al., 2005). For example, the focus is typically on general associations between participants' reports of sexual behavior and the participants' perceptions of their friends' behavior. Missing has been attention to actual communication among the friends not captured by statistical

analyses. Lucas and Afifi (2006) observed college-aged friends talk about a diverse assortment of sexual topics and are generally satisfied with these conversations.

However, little is known about the context of these conversations, the extent of the topics discussed, and what messages are communicated that may encourage or discourage a young person to engage in sexual behavior.

To provide a more in-depth understanding of the conversation context, topics and decisions discussed, and of the social support communicated between friends, required the attention to the following research questions:

RQ1: What are college-aged individuals' reasons for/against having conversations with their same-sex friends concerning sexual decisions?

RQ2: What is the context of these conversations concerning sexual decisions?

RQ3: What types of sexual decisions do college students make with the help of their same-sex friends?

RQ4: What are the specific forms of social support college-aged individuals receive from their same-sex friends during conversations concerning sexual decisions?

Instead of viewing sexual communication among friends concerning sexual decisions as simply being present or absent, the present inquiry involved a more nuanced examination. Further understanding of college-aged sexual communication presumably would be of value in view of the high rates of STIs and unintended pregnancies for this age group. Identifying the sexual decisions college-aged friends discuss and the types of social support they provide during conversations about them could contribute to more

compelling and realistic hypothetical scenarios for testing the hypotheses like those developed in this chapter.

For college-aged individuals, it appears that the most consistently influential social network member with whom sex is discussed is a friend. Yet the limited number of studies investigating the role of friendship in sexual decision-making has not captured the nuances of the conversations friends have about sex and how such communication may affect sexually based decision-making. Testing the hypotheses and answering the research questions presented in this chapter required three studies. Study 1 focused on the context of conversations, types of sexual decisions discussed, and types of social support; the data provided a basis for the scenarios involved in testing the hypotheses deriving from regret regulation theory and social support research. Study 2 focused on determining the most typical context, types of sexual decisions, and forms of social support messages for use in the principal investigation. Study 3, which was the principal investigation, involved testing the research hypotheses. The following chapters detail the three studies designed and conducted to test these hypotheses and research questions.

Chapter 3

Development of Hypothetical Scenarios (Study 1)

Introduction

Because little is known about friends' sexual communication (Halpern-Felsher et al., 2004; Holtzman & Robinson, 1995; Lefkowitz et al., 2004), a foundational study was conducted to gain a more nuanced understanding of the experiences college-aged individuals have communicating with their friends about sex. The experiences shared by participants were used to generate the most realistic and typical scenarios in which college-aged individuals participate. Specifically, participants responded to a series of open-ended questions related to sexual decisions and conversations that occur with a friend. The purpose of the study was to answer the four following research questions: (1) What are college-aged individuals' reasons for/against having conversations with their same-sex friends concerning sexual decisions? (2) What are the contexts of these conversations concerning sexual decisions? (3) What types of sexual decisions do college-aged individuals make with the help of their same-sex friends? (4) What are the specific forms of social support college-aged individuals received from their same-sex friends during conversations concerning sexual decisions? The data were used to generate a number of hypothetical scenarios rated by a second set of college-aged participants in Study 2 and the highest rated scenarios were used to test the hypotheses in Study 3. External validity should be increased by sampling college-aged individuals to provide their experiences of the phenomena.

Methodology

Participants

The sample for the first study consisted of two hundred and ninety-eight participants ($N = 298$) from a large Northeastern university. The age of the participants ranged from 18 to 27 years, with an average age of 20.33 ($SD = 1.40$). Of the 298 participants, 51.7% reported being female ($n = 154$), 48.0% reported being male ($n = 143$), and one participant reported “other” for gender. In addition, the majority described themselves as Caucasian ($n = 250$; 83.9%) and heterosexual ($n = 287$; 96.3%). Participants’ relationship status ranged from single ($n = 128$; 43%) to casually dating ($n = 50$; 16.8%) to seriously dating ($n = 116$; 38.9%). Finally, participants reported their sexual experience by indicating one of the following: (1) never been sexually intimate with another person ($n = 8$; 2.7%); (2) never had sexual intercourse, but have been sexually intimate (no oral sex) with another person ($n = 12$; 4.0%); (3) never had sexual intercourse, but have been sexually intimate (with oral sex) ($n = 17$; 5.7%); or, (4) have had sexual intercourse one or more times ($n = 261$; 87.6%).

Procedure

Participants completed a questionnaire (see Appendix B) including open-ended questions focused on the sexual decisions participants made in consultation with a same-sex friend and on the social support received from that friend during these conversations. The information was used to create hypothetical scenarios included in Study 3 which focused on the research hypotheses. In addition to open-ended questions, participants also responded to demographic and sexual behavior items. The participants were recruited through two venues: (1) the research pool for the basic public speaking course (CAS

100a) and, (2) via announcements made in Communication and BioBehavioral Health classes. Individuals from the research pool received a 2% course-credit compensation for their participation, whereas individuals from other classes received a 1% extra-credit compensation for participation.

Participants in the CAS 100a research pool signed up for research appointments online. The other participants contacted the researcher to schedule an appointment. All appointments were conducted in empty classrooms around campus. The researcher greeted participants as they arrived, and the participants signed in so that they could be documented for course or extra credit. Consent forms with information about the study were given to all participants so that they could indicate whether or not they wanted to complete the questionnaire or an alternative assignment. Each participant received two copies of the consent form: one to sign and turn into the researcher and the second to keep for their records. After the consent forms were collected, the researcher provided instructions for the completing the questionnaire, with these directions: (1) participants were not to write their names anywhere on the questionnaire to ensure confidentiality; (2) because their responses were confidential, the participants were encouraged to write freely in response to the open-ended questions; (3) because the survey topic was private and sensitive, participants were encouraged to skip any questions they were uncomfortable answering or to write “not applicable (NA)” for any items not relevant to their experience; and (4) participants were to reflect on their closest or best same-sex friend with whom they have sex-related conversations. To help the participants envision their friend and to serve as a reminder of that person, they were to indicate their friend’s initials on the survey form. The questionnaire required approximately 30-45 minutes to

complete. As an additional step to protect confidentiality, each participant placed the completed questionnaire in a sealed envelope and dropped it into a covered box as he or she exited the research appointment site.

For this questionnaire, all participants confirmed that they were reflecting on a same-sex friend (female friend, $n = 154$, 51.7%; male friend, $n = 144$; 48.3%). The majority of the sample indicated that they were “best” friends ($n = 250$; 83.9%). The length of the friendships ranged from four months to 276 months (or 23 years) with an average friendship length of 76 months or 6.33 years ($SD = 60$ months, or 5 years). Participants reported having an average of 5.35 other close friends ($SD = 3.19$) in addition to the friend they reflected on for the questionnaire.

Frequency of Sexual Decision Conversations and Handling Missing Data

The primary function of the survey was to acquire information concerning the participants’ experiences talking about sexual decisions with their same-sex friends. However, discussing sex-related decisions with friends was not every participant’s experience. Each of the open-ended questions had a small percentage of missing data (ranging from 1 to 5%).

Participants responded to a close-ended question designed to reveal the frequency of their sexual decision-related conversations with a friend. They were first asked to report how often they consulted with a same-sex friend about sexual decisions. Responses indicated the following percentages for that question: never ($n = 32$; 10.7%), rarely ($n = 74$; 24.8%), occasionally ($n = 125$; 41.9%), frequently ($n = 51$; 17.1%), and all the time ($n = 16$; 5.4%). At least 89% of the sample reported talking to their friends about sexual decisions on at least one occasion, whereas more than 60% of the sample indicated

having such conversations more frequently. A chi-square test for independence revealed no significant association between gender and frequency of sexual decision-making with friend, $\chi^2(4, n = 298) = 7.96, p = 0.09, \phi = 0.16$. Therefore, there were no differences in the frequency of male participants' talking with their male friends and female participants' talking with their female friends.

Approximately 10% of the sample indicated they did not talk to a friend about sexual decisions; however, further tests indicated whether or not any differences existed between participants who responded (R) and participants who did not respond to open-ended questions (NR). There was no strong pattern to explain the lack of response: tests of gender (NR: females = 13, males = 19), dating status (NR: single = 12, nonsingle = 20), year in school (NR: freshmen = 4, sophomores = 13, juniors = 6, and seniors = 9), sexuality (NR: heterosexual = 31, bisexual = 1), sexual experience (NR: none = 4, sexually intimate/no oral sex = 1, sexually intimate with oral sex = 1, and sexual intercourse = 26), and age (NR = 20.19, R = 20.35). Participants who reported never talking about sexual decisions with their friends and who had missing data were retained for the open-ended analyses to represent the population of interest. Further analyses of the data also showed no significant differences between responders and nonresponders. Therefore, when viewing the themes for the research questions, pairwise deletion was been employed (Harel, Zimmerman, & Dekhtyar, 2008). The results for each research question include the final, total sample size used in analyses.

Intercoder Reliability: Unitizing and Coding

The participants had to (1) identify the reasons they did or did not make sex-related decisions in consultation with their friends; (2) name the types of decisions for which their friends helped; and (3) describe the ways in which their friends provided social support during sexual the conversations. Two independent coders reviewed the open-ended data and unitized the responses for each research question into single thought units. For example, in response to the question, “What types of social support do college-aged individuals report receiving from their same-sex friends during sexual conversations?,” some participants responded with such comments as, “Always will listen to me.” This response was unitized as one thought unit and was coded as *emotional social support*. Other participants responded along the lines, “In general, she is there for hugs and some solid in your face advice.” This statement reflected two thought units and would be coded as *emotional social support* and *informational social support*, respectively. The coders identified thought units by underlining or highlighting the text and a simple percentage of agreement was calculated as the index of intercoder reliability. The levels of agreement were as follows: *reasons for/against sexual decisions* (84.0%), *contexts of sexual decision conversations* (98.7%), *types of sexual decisions* (86.4%), and *types of social support* (86.0%).

To assess reliability for the research questions, separate coding systems were created for *reasons for/against sexual decision conversations*, *contexts of sexual decision conversations*, *types of sexual decisions*, and *types of social support* by identifying categories from the data (Strauss & Corbin, 1998). The researcher and an undergraduate research assistant reviewed 50 random surveys to establish the thematic content to be

included in the coding systems. A list of topics in the data was created, and another set of 50 random surveys were used to confirm, refine, and define the initial coding system. Themes were created for the four open-ended questions, and two undergraduate research assistants were trained to identify the established themes. The researcher trained the two coders using practice surveys. Once the coders were comfortable with the coding system, they received 25 surveys to code. After the coding was completed, a tentative calculation of kappa was determined and problem areas with the coding guidelines and categories were diagnosed. The researcher reviewed these with coders, who then completed a second set of 25 surveys. The coding system was adjusted and refined to establish a final version for the four open-ended questions. The research assistants coded approximately 20% of the sample, and the index of intercoder reliability was Cohen's Kappa (Cohen, 1960). Reliability estimates for the open-ended questions ranged from good to excellent, including: *reasons for/against sexual decisions* ($k = 0.86$), *contexts of sexual decision conversations* ($k = 0.95$), *types of sexual decisions* ($k = 0.92$), and *types of social support* ($k = 0.89$). Once the coders reached an acceptable level of reliability on 20% for the sample, they independently coded the rest of the questionnaires. Discrepancies with themes were resolved by the coders in face-to-face meetings.

Categories from Open-Ended Responses

Reasons For/Against Sexual Decision Conversations

The first open-ended research question had participants ($n = 296$) explain their reasons for/against turning to a same-sex friend for assistance in making sexual decisions after they had quantitatively noted the frequency of these conversations, which ranged

from rarely to all the time. Six main reasons for/against sexual decision conversations emerged (see Table 1).

Table 1

Reasons For/Against Sexual Decision Conversations

Reasons	Total %	Female %	Male %
Help	56.0	30.1	25.7
Do not discuss	49.0	25.3	13.5
Part of Friendship	44.0	23.0	21.0
Difference	10.8	7.1	3.7
Approval and Encouragement	9.4	4.7	4.7
Similarity	7.8	3.7	4.1

Note. n = 296

A number of participants reported that they *do not discuss* sexual decisions with their same-sex friends (n = 145, 49.0%; females = 75, males = 70). They cited being in a relationship as one reason they did not discuss these decisions with friends. For example, one participant noted:

I am in a serious relationship so I am comfortable making sexual decisions on my own. However, before I was in this relationship I did go to her for help with sexual decisions (#004, Female).

Other reasons for not discussing sexual decisions included: the friend was unavailable to discuss decisions because he or she attended a different school or was on studying abroad; decisions could be made without the assistance of the friend; and because the friendship just did not involve that topic of information (e.g., “It’s none of their business” and “My friend doesn’t understand because she’s too inexperienced.”)

Oddly, although these individuals reported they did not discuss sexual decisions with their same-sex friends, they also reported additional reasons for discussing these decisions with their friends. In fact, 101 of the 145 participants indicated they *did not* speak with their friends about sexual decisions, but then indicated an additional reason why they *do* talk to them. These additional reasons are detailed below.

Help was the most frequently reported reason for college-aged individuals to consult with their same-sex friends about sexual decisions (n = 165, 56.0%; females = 89; males = 76). Responses reflecting this theme focused on the friend's being there during problems, seeking advice from the friend, and declaring the friend as a valued, respected, and trusted source. Many participants noted that consultation with a friend was advantageous because the friend was looking out for them and providing critical advice:

It is good to have a close friend's opinion because they should be thinking about your best interest and give you the best advice possible for your specific scenario. It's good to hear advice from an outsider looking in who see or knows something you do not (#009, Female).

Other participants found themselves in problematic situations and described needing their friend's help to resolve or avoid any potential relational and sexual troubles. As one male participant noted:

Sometimes what I want to do isn't what I'm 'suppose' to do it isn't considered to be beneficial to the growth of the relationship (such as calling too much). I depend on my friends to keep myself cool/aligned (#064, Male).

Some participants described alcohol as a potential confounding variable in their decision-making and noted that their friend's help was the factor necessary to avoid the consequences of drinking and decision-making:

Sometimes she keeps me on a straight line. For example, when I am drunk she makes sure I don't make decisions I normally wouldn't with a boy when sober (#074, Female).

The responses indicate that same-sex friends are sought because their sex-related advice is valued and useful. Even more, college-aged individuals appreciate guardian-like qualities in their friends - having someone who will look out for them.

One hundred and twenty-nine participants reported that turning to friends in respect to sex-related decisions was *part of the friendship* (n = 129; 44.0%; females = 68; males = 61). This category included instances in which talking about sexual decisions was a norm and/or expectation in the friendship; that is, these conversations evolve naturally and are often an enjoyable part of the friendship. Simply put, sexual decision conversations occur because, as one person put it, "She is my best friend and I tell her everything (#008, Female)." Other participants noted the benefits of the friendship assisting in these types of conversations:

I feel most comfortable speaking with her about it. It is also, almost always, is fun and amazing to talk about (#095, Female).

For some reason unknown to both of us we seem very comfortable and non-awkward talking about sex. We don't really judge each other or feel like we're being judged so we don't hold back (#208, Male).

These participants noted comfort as a key factor in conversations concerning sexual decisions occurring in the friendship. Comfort was noted by many participants as both a norm and expectation in friendship.

Looking for *approval and encouragement* from a friend was another reason why college-aged individuals reported talking about sexual decisions (n = 28, 9.5%; females = 14, males = 14). To some, this category indicated that they wanted confirmation that it

was okay to do something; however, “something” ranged from abstinence to sexual intercourse (e.g., losing virginity, hooking up, going back to an ex-partner, etc). For example, one participant revealed:

When we are out at parties for the most part and I am interested in a girl at the party I will ask his opinion. I will also ask what he thinks of my chances getting with her. We really just seek approval (#005, Male).

The approval may come in response to a conversation or the college-aged individual asking their friends questions, such as those described by the following participant:

When we are out I usually say something to my friend like “do you think he’s cute?,” “should I go for it or not” type of thing (#295, Female).

Moreover, the approval (or lack of approval) of the friend may be followed by the college-aged individual’s own assessment of a situation:

Sometimes I’ll ask him what he thinks of this girl and based on his response I reevaluate my interest in her (#133, Male).

The friend’s approval seems to be a critical notification, or clearance, that one can participate in a sexual behavior or pursue a connection/relationship with another individual. One male participant noted needing his friend’s approval when confused about whether or not to have sex to encourage himself:

I usually ask his opinion about a girl that I am thinking about having sex with. Especially if I am uncertain about how I feel about her and need a little push to go through with it (#027, Male).

In addition, obtaining approval from the friend beforehand can assist in avoiding any potential conflicts with the friend over one’s behavior. One female participant said:

If we are out and I meet a guy she will tell me if she approves of him or because she knows my tastes and personality and if she thinks it’s ok to involve myself

sexually with that person than she won't make a big deal about going home without me at the end of the night (#216, Female).

In general, the college-aged individuals noted feeling good about their friends' approval since the consent boosted one's ability to make decisions:

It is always good to have the backing of someone else when you go after a girl, to get his approval. It gives you confidence in your decision (#253, Male).

The participants turned to their friends for approval and encouragement so that they could feel good about going through with specific sexual behavior.

Finally, participants reported *similarity* ($n = 23$; 7.8%) and *difference* ($n = 32$; 10.8%) as reasons to discuss or not to discuss sexual decisions with their friends. Those participants who described similarity (females = 11; males = 12) indicated they turned to a friend because they both had identical ideas, beliefs, and attitudes toward sexual behavior, whether conservative or liberal. In particular, the idea of reciprocation was evident in this category, in that the participant consulted with the friend, and the friend consulted with the participant. For example, participants reported on these similarities:

We both share similar ideas about sexual decisions so I know there is someone else there to provide input, feedback, or concerns (#003, Male).

We talk on a daily basis about our relationships because we are in the same situation with a boyfriend back at home and we spend a lot of time with one another up here at school and refer to one another very frequently about the relationship (#017, Female).

Rarely because the consensus between the two of us that we would rather wait until marriage to be sexually active. So, most of our sexual conversations deal with issues of self-control (#047, Male).

We both had sex with our current boyfriends for the first time around the same time, talking about that decision and how we felt about it (#270, Female).

On the other hand, participants who mentioned difference (females = 21; males = 11) had two diverse approaches to conversations concerning sexual decision-making. First, some participants indicated they spoke with their friends about sexual decisions because the friend was *more* experienced and could provide useful tips and advice. For example, one participant noted that the friend was a great source of sex-related information because of her previous relational experience:

She gives good advice since she was in a relationship for five years. I listen to her and she does have experience so she's very credible in that sense (#020, Female).

In addition, the differences between friends ignited a desire to have similar experiences and turning to such a friend might increase one's chances of participating in similar behaviors:

Her stories impact me because I want to have the 'wild/fun/exciting' lifestyle that she is having now in college (#035, Female).

The second approach was that the friends did not discuss sexual decisions because they were so different from each other. These differences made it challenging to obtain advice about sexual decisions, especially if attitudes toward sex and sexual experiences were different. For example, the following participants noted not talking to their same-sex friend because:

Sometimes our morals differ, like he doesn't mind a one night stand, but I will only have sexual relations with a girlfriend (#067, Male).

She is very inexperienced so can't really offer too much advice. She doesn't really understand (#125, Female).

In these cases, differences could both elicit and hinder sexual decision conversations between friends.

Contexts of Sexual Decision Conversations

The second research question had participants ($n = 293$) answer, “Where do these sexual conversations take place?” The responses included a number of locations and situations in which they spoke with their friends about sexual decisions. The ten main contextual themes included: at home (e.g., houses, apartments, dorm rooms, etc.), via technology (e.g., email, chat, text, etc.), at parties, when out to eat, en route (e.g., walking, in cars, etc.), hanging out, at other public places, anywhere, face-to-face, and in private. The most popular location reported was *home* ($n = 194$), with *via technology* ($n = 88$), *anywhere* ($n = 70$), *out to eat* ($n = 63$), *en route* (in cars, walking, etc.) ($n = 53$), *private* ($n = 49$), and *parties* (before, at, and after parties) ($n = 47$) rounding out the top locations (see Table 2).

Table 2

Contexts of Sexual Decision Conversations

Contexts	Total %	Examples
Home	66.2	Apartment, house, dorm room
Via Technology	30.0	Chat, email, phone, text
Anywhere	23.5	“When it comes up,” “When I see my friend”
Out to Eat	21.5	Over food, in the dining commons, Chili’s
En route	18.1	Between classes, walking, in the car
Private	16.7	Quiet, appropriate place, “So people can’t hear”
Parties	16.0	Before and after parties, social setting, drinking
Public Places	15.7	Gym, library, mall, at sporting events
Hanging Out	9.9	Spending time together, watching movie
In Person	9.9	Face-to-face

Note. $n = 293$

Sample comments in which participants reported having the conversations include:

In our living room...phone conversation...when we are getting ready to go out. Basically, whenever (#008, Female).

Most often in private settings like in the car, each other's apartments, etc. But the conversations do happen in public, like in restaurants or at parties, just in a more toned down manner (#024, Female).

...take place either one of our houses or online. The more in-depth conversations occur only in person while the smaller talks, more peaks of curiosity types, will occur online or brief mention in person (#057, Male).

...could take place anywhere but I don't see my friend that much so it's more often than not at parties (#139, Male).

Types of Sexual Decisions

The third research question involved the types of sex-related decisions the participants made in consultation with a friend. Six main themes emerged from the data ($n = 289$) (see Table 3). Similar to the first open-ended question, there were a number of participants who indicated that *no decisions* were made with the help of their same-sex friend ($n = 112$, 38.7%; females = 46; males = 66). However, of these 112 individuals, 42 described scenarios in which the friend “does not help with my sexual decisions except when...” and then mentioned a decision in which they had consulted their friend.

Table 3

Types of Sexual Decisions

Sexual Decisions	Total %	Female %	Male %
Whether or not to engage	57.1	30.8	26.3
No decisions	38.7	15.9	22.8
Relational advice	25.6	13.8	11.8
Sexual performance advice	16.3	9.3	6.9
Sexual health	11.1	8.0	3.1
Sex fun and toys	4.8	3.8	1.0

Note. n = 289

The most frequent decision that participants made in consultation with their same-sex friends was *whether or not to engage in a specific sexual behavior* (n = 165, 57.1%; females = 89; males = 76). Specific sex-related behavior included pursuing or stopping pursuit of certain individuals, abstaining from sex, losing virginity, initiating sex for the first time in a relationship, hooking up with another individual, engaging in a one-night stand, cheating on a current romantic partner, having sex with an ex-partner, and participating in various sexual acts (e.g., anal sex). In particular, the college-aged individuals were looking for either approval and encouragement or disapproval and discouragement. Participants reported on their decisions of “whether or not to” that they discussed with friends:

I was casually dating this one guy for about six months and [my same-sex friend] was doing the same with his best friend. They had had sex the first month, however, I hadn’t because I didn’t want to. He had just been giving me oral sex with nothing in return because I did not want to do anything else. Finally, after talking to my friend she assured me it was no longer just a fling and it would be okay to sleep with him and not look like a slut especially since he had been giving

me oral sex all the time. So not just because she said so, but her appeal helped. I slept with him last month for the first time (#009, Female).

A girl showed interest in me when I met her at a party. We exchanged phone numbers and she insisted we go out together. I know she likes me a lot because she told me a couple of times, but really I wasn't that attracted to her. So I had to ask [same-sex friend's] opinion if she was worth pursuing for a sexual encounter. So, I showed him pictures of her and he said yes. So, I didn't want to pass a nice opportunity so I went through with it (#027, Male).

We were both intoxicated at a party and things began to get a bit heavy with a girl I had met there. She excused herself to the bathroom and I went to consult with my buddy as to whether or not it would be a good idea to take things further. He gave me the thumbs up and from there I needed no further reassurance that my decision was acceptable (#105, Male).

I have a friend with benefits (FWB). I have been involved with this person for approximately five years. My same-sex friend has given me advice on sex-related decisions I have with my FWB in the last six months. She has encouraged me to have sex with this person, she has discouraged me to have sex with this person, she has discouraged me to have anal sex by describing her own experience (#247, Female).

Relational advice was another type for which the participants turned to their same-sex friends for assistance (n = 74, 25.6%; females = 40; males = 34). This category was different from the “whether or not to” theme, in that instead of focusing on sexual activity, the college-aged individuals were looking for advice about specific situations concerning their relationships. For example, one male participant asked his friend for advice regarding deception surrounding a sexually transmitted infection. This participant described his relational issue:

We have talked a lot about my girlfriend's Valtrex medicine she is using. I was very open with her that I did not want to date anyone with herpes or a STD no matter how much I loved them. She does not have genital herpes, however, I have had many conversations with my closest friend about my reluctance towards the fact that she may have it and will not tell me (#072, Male).

In other instances, participants wondered about how to handle rejection, heartache, and jealousy. Although these scenarios might have been about one's sexual partner, the focus of the theme was specific feelings and situations difficult for the relational partners in maintaining their relationship. For example, one participant described:

In the beginning of December, I was still dating my girlfriend of over two years. However, she goes to a different school and the distance and all that started to strain the relationship. My friend had just gotten out of a long distance relationship and gave me helpful advice which ultimately led us to breaking up (#214, Male).

In addition, some participants sought consultation from their friends regarding *sexual performance advice* (n = 47, 16.3%; females = 27; males = 20). The key phrases in such cases were “what to do,” “how to do,” and “here’s what to expect.” Participants reported seeking tips from their friends regarding what sexual positions to try, how to be good at certain types of sexual behaviors (e.g., oral sex), or what to expect from sexual interactions (e.g., “Here’s the problem with having anal sex”). Two participants offered the following account of sexual performance for which they needed help from their friends:

I have been going out with my boyfriend, in May, it will be a year now. The sex is good when we find alone time to have it. However, we do it in the same position, me on top, every time. Not that we haven’t tried other positions, but they do not seem to work as well. [My same-sex friend] suggested having sex on a chair. I am still on top but it is a little different so it can be fun and mix things up a little (#054, Female).

I broke up with my boyfriend in January. The sex was very bad! It was one of the main reasons why I broke up with him. She helped me work on it with him, gave me things to try...(#276, Female).

Another type of sexual decisions college-aged individuals reported talking to their friends about concerned *sexual health* (n = 32, 11.1%; females = 23; males = 9). This category related to one's sexual well-being, including sexual protection and/or prevention (birth control, condoms and the morning-after pill) and personal hygiene and medical concerns (e.g., a urinary tract infection). In one instance, a participant said:

I take birth control but not always at the same time and one night the condom broke so asked my friend if I should get emergency contraception. It's also coming to the point where I know my boyfriend is who I wanted to be with (most likely even in terms of marriage) so HIV testing and testing of other sorts has come up as well. I like to get my friend's opinion on that to see if I'm just being paranoid (#250, Female).

Among female participants, birth control was a popular sexual health topic similar to this participant's reported experience:

I have been taking the birth control pill for a number of years, Yasmin. It has always protected me from pregnancy but did not lighten my period (both in cramping and flow) the way I wanted it to. My friend has been taking Yaz for a few months, her only form of birth control with her boyfriend. She informed me that it really helped with all the pains of her period. I made the decision to switch from Yasmin to Yaz not only to lighten my period, but for birth control as well (#174, Female).

Of those participants who reported talking about sexual health, there were few males who discussed this topic with their same-sex friends. If males did broached the subject, the two main topics they talked about were which condoms to buy and whether or not a girl was seen as "dirty" or having any diseases.

The final sexual decision college-aged individuals indicated asking friends about *sex fun and toys* (n = 14, 4.8%; females = 11, males = 3) that could be introduced into their sexual relationships. Friends provided guidance concerning what type of lingerie, lubrication, vibrators, and dildos to purchase to make sex more exciting and

enjoyable. Participants described going with their friends to pick out lingerie for Valentine's Day, what sex dildos to use, and whether or not to use lubrication during anal sexual intercourse.

Types of Social Support

The fourth research question addressed the types of social support friends provided during conversations about sexual decisions (n = 285) (see Table 4). Six major themes surfaced. As with the first two open-ended questions, a group of participants indicated that they received *no social support* from their same-sex friends (n = 45, 15.8%; females = 18; males = 27) although some of these participants noted other types of social support the friend provided (n = 21). For example, participants indicated receiving "no support" from friends, but "they are there for me when I need them," which would be categorized as *emotional support*.

Table 4

Types of Social Support

Support Types	Total %	Female %	Male %
Ego	53.0	24.9	28.1
Emotional	45.0	31.0	14.0
Informational	42.1	25.3	16.8
No support	15.8	6.3	9.5
Instrumental	14.4	8.8	5.6
Poor	11.9	4.2	7.7

Note. n = 285

Esteem (or ego) social support (n = 151, 53.0%; females = 71; males = 80) was the most frequently mentioned type. Responses were organized for this theme according

to whether friends' communication made the respondents feel good about themselves, their sex-related problem, or the sexual decision to be made. Participants mentioned a number of ways in which the friend could make them feel good, including: congratulating them on their sexual behavior (e.g., praises, high five's, etc.), encouraging the participant to follow through with a sexual behavior (e.g., "Go for it!"), and being interested and sharing in on the happiness and experiences (e.g., "She always like to hear about my sexual experiences"). For example, participants reported the following esteem-enhancing support from their same-sex friends in helping them feel better about themselves:

Often times guys discuss the size of their penis and their stamina in bed. We're no different as he's given me support and confidence by noting I'm not different than the "average" male (#092, Male).

She was always there to make me feel better about myself (#296, Female).
In addition, esteem support was manifested through ways in which the friend was there to share in and cheer on the participant's behavior:

...if I was happy with my hookup she was there share the happiness as well (#004, Female).

My friend is very encouraging when it comes my relationships usually in the form of congratulations and verbal praises (#113, Male).

He usually tells me to always go for it. If I ask him should I do something with a certain girl, he says, 'Yea, why not, she's cute. I say go for it' (#151, Male).

He will cheer me on or say something that will help me flirt more with a certain women (#202, Male).

Certainly, the participants' friends communicated in a number of ways to boost their esteem and encourage participation in different sexual behaviors.

Another type of social support provided by the college-aged friends was *emotional social support* (n = 127, 44.6%; females = 87; males = 40). This is intangible

support of sexual decisions and includes such acts as the friend's listening, "being there," being understanding and non-judgmental, and providing the participant "support no matter what the decision." Following are more detailed accounts of friends' emotional support:

When I found out I was pregnant, my friend...was there for me, gave me support, telling me that no matter what I did, she would support my decision. She was among the first few that I shared this problem with and she's been very good at keeping it a secret (#065, Female).

She has been there a lot for me. Whenever I had a decision or a problem, whether it had been sexual or not, she was always there. About three years ago, I was pressured into having sex with someone I had recently met. When I was sad about it, wishing I could've said no, she was there for me with support to get through. Whenever I need her, she's there (#079, Female).

We also had an incident of trying to be safe, but had something go wrong when the condom broke and I was stressing and he was there to calm me down, saying he'd be there for whatever I needed (#082, Male).

Additionally, friends provided emotional support by refraining from making judgments about the participant and/or their sexual behavior, as noted by the following participants:

When I feel as though I made a mistake (sexually) like slept with my ex-boyfriend, she made it seem as if this was completely ok and that I shouldn't feel bad about it at all. Whenever I need to talk to someone about something that has to do with sex I feel more comfortable talking to her because I know she won't judge me and will always listen to what I am thinking about the given situation (#091, Female).

Open-mindedness towards judgment (doesn't judge me), understanding my situations and feelings (relates to me), confidentiality of my stories (not telling others about what we have talked about), and makes me feel comfortable about talking about it so I don't keep to myself (#168, Male).

She has provided support by being understanding and non-judgmental. It is also understood that we don't tell other people about our experiences, so we have confidentiality. When I was single, I had a weekend where I was a little

promiscuous and had a one night stand. I told my friend about it and she didn't judge me (#201, Female).

I often do things sexually with my FWB that my same-sex friend would not do, but she listens to me when I discuss the sex I have without any kind of judgment (#247, Female).

One female participant defined the benefit of emotional social support as listening:

My friend provides me with the support of simply listening. Sometimes you don't want advice, you just need to vent (#250, Female).

With the sensitive and private nature of sexual behavior, participants described their friends as supportive in ways that were constant no matter what decisions they made.

Responses were also categorized as *informational social support* ($n = 120$, 42.1%; females = 72; males = 48) if the friend provided advice and guidance so that the participant could be an independent decision-maker. The support provided by the friend included sharing information about sexual positions and providing opinions about whether or not the participant should pursue an individual or engage in a certain sexual act. Following are examples of the opinions friends provided:

She gave her opinion on what she would do in my situation, and what she thinks I should do. Then she asked for my opinion and thoughts. She evaluated if she thought I was just caught up in the moment and made me realize the situation for what it really was, not for what I wanted it to be (#060, Female).

She gives me information I need if she knows it and I don't. I like to hear her opinion on things too because it gives you a different perspective on how I think (#250, Female).

A number of the participants' responses focused on the specific information their friends provided to assist with having sex:

He had been having sex about one year before I was and gave me a lot of valuable support on the reliability of birth control, condoms, the Plan-B pill, etc. (#072, Male).

I was not sure where I would buy the condoms. Since I live in a dorm and had no car, I didn't have the transportation to go the stores. However, he told me that there are many places you could get it for free which I didn't know. After I heard information from him, I actually went to the building that provide it and got some of the condoms. So basically he supported me by giving me some useful information (#143, Male).

She always tells me to try new positions and which ones she thinks are the best. Then, after I eventually try a new one, we talk about it and what we liked and disliked about it (#185, Female).

On the other hand, one male participant described the type of support his friend provided to remind him not to initiate sex:

Religious support. Once my friend pointed me to the Christian scriptures as a source of support and in an attempt to encourage me to be self-controlled (#047, Male).

In this case, the friend's support could assist the individual in making decisions about abstaining from sexual intercourse. However, a number of participants indicated that their friends provided information concerning whether or not they approved of what the participant was doing:

She is honest and tells me if she approves of my actions or disapproves. I use her advice and if she disapproves, we talk about it. We rarely disagree though because we hold many of the same morals (#008, Female).

My friend will either approve or disapprove of my actions based solely on two thing: (1) Was the girl attractive (if she was he would approve), and (2) Was she known as dirty (slutty) (if she was he would disapprove). As long as the girl was attractive and did not get around, he would approve. If one of these was not present, he would not (#071, Male).

A number of participants indicated that their friends provided some form of *instrumental social support* (n = 41, 14.4%; females = 25; males = 16). Examples of tangible help that supported the participants' decisions encompassed the friends taking them to the doctor or Planned Parenthood, buying a pregnancy test, giving them a

condom, providing the individual with alcohol, and introducing them to a potential partner or hook-up. The following reports provide examples of instrumental support:

When I found out I was pregnant, my friend gave me resources of places that I could go to back home (#065, Female).

Last year I was really drunk and had unprotected sex with a friend of hers from high school. She had a car and I wanted to go the Planned Parenthood to get the day after pill. She skipped class so she could drive me there and was really understanding and supportive and we hadn't really been friends that long. I think that's when I knew she was going to be my best friend (#126, Female).

Going with follow-up for abnormal pap, sharing stash of condoms, sleeping in living room when a guy stays over, and playing 'wingman' (#220, Female).

Introducing me to girls, putting in good words for me, and acting as a sort of wing man (#226, Male).

Finally, quite a few participants indicated that their friends provided support, but that they considered to be *poor social support* (n = 34, 12.4%; females = 12; males = 22). Responses reflecting this theme represented support that the participant described as not wanting or needing and, therefore, was not seen as useful or helpful. Some participants noted that their friends had attacked them, made fun of them, or expressed negative emotions (e.g., anger, worry, and jealousy) in response to the sexual decisions being discussed. In some cases, they viewed the support was described as poor because the friends had different views of sexuality and sexual behavior. Instances of poor support included:

Sometimes she's supportive but other times her silence or the look she gives me tells me she doesn't approve (#029, Female).

...if I did something I would be out of the circle, the Virgin Circle (#053, Female).

I have been in a slump lately with girls. So, he has been ragging on me for my lack of getting girls abilities...(#073, Male).

In general she has told me not do things. In high school when I first became single I went to parties and made out, sometimes touching, a lot of people. I remember telling her these stories and she would be disgusted or look disappointed all of the time (#261, Female).

Within the poor support theme, participants referred to events in which their friends were either avoidant or imperious in their communication, such as giving them nasty looks, making fun of them, and even suggesting they would be removed from the friendship if they went through with a behavior. The majority of the other themes encompassed positive experiences, but participants viewed this one as negative, unexpected, and unlike what a friend should do.

Scenarios Developed for Study 2

The primary goal of Study 1 was to collect data for the four research questions about the experiences of college-aged individuals' sexual decision-making with the support of a same-sex friend. This data were then utilized to craft hypothetical scenarios that would capture typical experiences in which college-aged individuals participate. The scenarios, in turn, served as part of the manipulation of anticipated regret levels and social support tested in Study 3.

From the open-ended responses, the main type of sexual decision both female and male participants reported was whether or not to take part in a specific type of sexual behavior ($n = 165$; 57.1%). These types of behaviors fell into six different hypothetical scenarios: hooking up with someone you like, engaging in a one-night stand, initiating sex for the first time in a relationship, losing one's virginity, having sex with an ex-partner, and hooking up with someone at random.

The reports indicated a number of locations or contexts in which participants indicated having sexual conversations about. These were integrated into the hypothetical scenarios to provide realistic details relevant to the college-aged individual population. The locations were: in a room getting ready for a party, at a party, hanging out in a dorm room, catching up with each other's lives over the phone, over dinner (out to eat), and chatting online.

The two most popular types of social support for both female and male participants (ego and informational) suggested that conversations centered on encouraging specific sexual behavior/approval and discouraging specific sexual behavior/disapproval. For example, esteem support reportedly encompassed a friend's providing approval and communicating in different ways that encouraged the participant to engage in different forms of sexual behavior or to pursue to certain individual. Similarly, informational support entailed friends' providing opinions concerning why enacting such behaviors was good *or* bad idea. Thus, positive (encouraging) and negative (discouraging) support were treated as the levels of social support manipulated in the final hypothetical scenarios.

Each scenario included the following three elements: (1) a combination of context (location) and sexual decision (e.g., Dorm Room/Losing Virginity); (2) manipulation of anticipated regret (low or high levels); and (3) manipulation of social support (positive/encouraging or negative/discouraging support) (see Table 5). Given the manipulation of anticipated regret (low vs. high) and social support (positive vs. negative), a 2 x 2 design was appropriate. In Study 2, each participant reviewed and rated six different scenarios which reflected a 6 x 2 x 2 design including six contexts, two

levels of anticipated regret, and two levels of social support. In total, there were 24 different scenarios (see Appendix A) over eight versions of the questionnaire. Each scenario was located in two versions of the questionnaire, which allowed each one to be reviewed twice.

Summary

Participants in Study 1 responded to a series of open-ended questions detailing their experiences about making sexual decisions in consultation with a same-sex friend. Six themes evolved concerning reasons for/against sexual decision conversation, types of sexual decisions and types of social support whereas ten themes of locations for the sexual decision conversations were revealed. The open-ended data indicated that a number of college-aged individuals do consult with their friends about sexual decisions; however, the main types of decisions discussed involved *whether or not to* engage in a particular form of sexual behavior. In addition, the participants noted their friends provided them with support during these sexual conversations about their sex-related decisions with esteem and informational support reported as the most frequently communicated types.

Table 5

Final Context Examples for Study 2

Friday Night/Hook-up

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

Party/One Night Stand (ONS)

You and your friend are at a party when you see a good-looking guy. After flirting and dancing with this guy for most of the night, you are thinking about staying the night over at his place, but you are afraid you might feel remorse the next day. You ask your friend whether you should go home and have sex with this guy and she responds with approval encouraging you to go ahead and have some fun!

Over the Phone/Sex for First Time in Relationship

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell her that you have been thinking about whether to have sex with your new partner. You are afraid of making a mistake so you ask your friend what she thinks, but your friend responds enthusiastically encouraging you to go ahead and have some fun!

Dorm/Lose Virginity

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person, but you are afraid losing your virginity might be a mistake. You ask your friend whether you should have sex for the first time and she responds enthusiastically encouraging you to go ahead and go for it!

Out to Eat/Sex with Ex

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again, but you are afraid you might feel remorse after doing it. You ask your friend what she thinks and she responds with approval encouraging you to go ahead and have some fun!

Online/Random Hook-up

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random, but you are afraid you might feel remorse the next day. You ask your friend whether you should hook up with someone random and she responds with approval encouraging you to go ahead and have some fun!

Note. Examples reflect scenarios for female participants in high anticipated regret and positive social support condition. Scenarios for male participants are identical except for gender language (e.g., "he" instead of "she," etc.). All twenty-four scenarios are reported in Appendix A.

Chapter 4

Rating of Hypothetical Scenarios (Study 2)

Introduction

Study 2 served to clarify which of the hypothetical scenarios developed from the in Study 1 would be the most salient for this population - - specifically: (1) which scenario was most typical and relationally important for college-aged individuals and (2) whether order of scenarios would affect the participants' ratings of typicality and relational importance. In particular, repeated measures mixed design was employed. Each participant reviewed six different scenarios from the pool of the twenty-four generated (see Appendix A). The scenario rated highest on scores of typicality and relational importance was to be used to test the hypotheses in the third and main study of this dissertation. Order effects were also assessed to determine whether the sequence of scenarios had any impact on assessments of typicality and relational importance.

Methodology

Participants

Two-hundred thirteen undergraduate students ($N = 213$) reviewed, rated, and responded to the hypothetical scenarios generated from the data obtained in Study 1. The age of the participants ranged from 18 to 28, with an average age of 19.91 ($SD = 1.26$). Of the participants, 61% reported being female ($n = 130$), and 39% reported being male ($n = 83$). The majority classified themselves as Caucasian ($n = 189$; 88.7%) and heterosexual ($n = 205$; 96.2%). Nearly half indicated being single ($n = 105$; 49.3%), with

others noting that they were dating casually ($n = 28$; 13.1%) or seriously ($n = 76$; 35.7%). Finally, the participants reported their sexual experience by indicating one of the following: (1) never been sexually intimate with another person ($n = 20$; 9.4%), (2) never had sexual intercourse, but have been sexually intimate (no oral sex) with another person ($n = 23$; 10.8%); (3) never had sexual intercourse, but have been sexually intimate (with oral sex) ($n = 14$; 6.6%); or, (4) have had sexual intercourse one or more times ($n = 155$; 72.8%).

Procedure

The participants completed a questionnaire (see Appendix C) for which they rated six different hypothetical scenarios for typicality and relational importance. Ratings were used to determine the most typical and relationally important one. In addition to rating the scenarios, the participants addressed items relating to demographic characteristics, sexual behavior, closeness, and social control (not all of which were used in the current study). Recruitment was via two venues: (1) the research pool via the basic public speaking course (CAS 100a) and (2) announcements made in Communication classes. Individuals from the research pool received a 2% course-credit compensation for their participation, and the individuals from other classes received a 1% extra-credit compensation for participation.

The researcher scheduled research appointments online to take place in empty classrooms on campus. The researcher greeted participants as they arrived and participants signed in, which assured receipt of credit. All participants received consent forms with information about the study so that they could determine whether they wanted to complete the questionnaire or an alternative assignment. Each participant received two

copies of the consent form: one to sign and turn into the researcher and the second to keep for his or her records. The researcher or research assistant provided instructions indicating that: (1) the participants were not to write their names anywhere on the questionnaire to ensure that their responses could be kept confidential; (2) because the survey topic was private and sensitive, participants should skip any questions with which they were uncomfortable answering or to write “not applicable (NA)” for any items not relevant to their experience; and (3) they were to reflect on the same-sex friend with whom they had sex-related conversations. At various points in the survey, the participants were to write the initials of their friend on the page to help them envision and to serve as a reminder of this friend. The questionnaire required approximately 30 to 45 minutes to complete. To provide further assurance of confidentiality, each participant placed his or her completed questionnaire in a covered box before exiting the room.

As in Study 1, the participants verified that they were reflecting on a same-sex friend (female friend, $n = 130$, 61%; male friend, $n = 83$, 39%) and 91% of the sample ($n = 192$) and described the person as their “best” friend. The reported friendship length ranged from 2 months to 240 months (or 20 years), with an average length of 74.16 months or 6.18 years ($SD = 54.44$ months or 4.54 years). The participants reported an average of 5.81 ($SD = 3.32$) close friends in addition to the same-sex friend on whom they reflected for the questionnaire.

Preliminary Analyses

Once the data were in, they were subjected to several preliminary analyses.

Data Distribution

Each scenario had six response items relating to (a) typicality (4 items) and (b) relational importance (2 items). Descriptive analyses indicated that two typicality items were negatively skewed, including: “This event is realistic” (realistic) and “This event is typical” (typical). Given the goal of the study (to identify the most appropriate scenarios), it was not surprising for the data to be skewed to the right; if the scenario were realistic for the participants, then they would report disproportionately high ratings. From a review of the descriptive analyses, it appears that the participants viewed all the scenarios as realistic and typical. In addition, the two typicality items, “This is a believable event” (believable) and “Events like this have happened often in my best or closest friendship” (happens often), had distributions that were bi-modal. Similarly, both of the relational importance items, “This would make me think of my friendship” (think friend), and “This would be an important event in my closest or best friendship” (important), were bi-modal.

Handling Missing Data

The questionnaires were examined for missing data. For the items of interest, the largest amount of missing data was five non-responses for one variable (or less than 3%). The data missing were completely random (MCAR), as indicated by Little’s test (McKnight, McKnight, Sidani, & Figueredo, 2007). The chi-square was not significant, $\chi^2 = 13347.64$ (df = 13527), $p = .86$, which indicated that the missing data were independent of the other variables in the study. Determining whether or not pairwise deletion was the most appropriate method for handling the MCAR data entailed use of a sensitivity analysis (Harel et al, 2008). This involved use of a data set in which estimation

method, based on maximum likelihood, was employed to account for missing data. Then the analyses were implemented with the original data set with missing data. The results were compared and the sensitivity analysis showed no significant differences between the two data sets; therefore, the original data set was retained for the current study and pairwise deletion was used.

Prior to doing the analyses of scenario ratings and order effects, a series of other preliminary analyses were conducted for developing a more complete understanding of the data and to determine whether any adjustments were necessary.

Evaluating Group Differences: Chi-Square Tests of Independence

Chi-square was the index of any group differences that existed in the data across version of the survey. In respect to gender, a chi-square test for independence indicated there were no significant associations between the gender of the participant and the version of the survey completed, $\chi^2 (7, n = 213) = 0.72, p = 0.99$, $\phi = 0.06$. Therefore, there were similar amounts of females across each version as well as similar amounts of males yet, overall, there were more females than males who completed the survey.

Frequencies of the “year in school” variable showed that a large number of juniors ($n = 101$; 47.4%) completed the questionnaire as compared to freshmen, sophomores, seniors, and others ($n = 112$; 52.6%). A chi-square test for independence for two groups (juniors vs. non-juniors) indicated no significant association between participants’ year in school and versions of the survey, $\chi^2 (7, n = 213) = 4.21, p = 0.76$, $\phi = 0.14$. Therefore, overall, there were similar amounts of juniors completing each version of the survey as compared to non-juniors.

Since individuals with differing levels of sexual experience participated in this study, a chi-square test of independence served to reveal any differences across versions of the survey. There was no significant association between sexual experience and version of the survey, $\chi^2 (7, n = 212) = 19.56, p = 0.55, \phi = 0.30$. These results indicated that no one version had higher amounts of individuals with sexual experience or without sexual experience. The assumption of minimum expected cell frequency was violated, with 75% of the cells having less than five observations and two cells having zero observations. However, a review of the data showed no particular pattern about which to be concerned.

Finally, two groups of participants completed the survey: single and non-single college-aged individuals. To determine whether there were group differences across versions, a square test of independence was again used. The results, $\chi^2 (7, n = 213) = 15.29, p = 0.03, \phi = 0.27$, indicated a group difference in dating status (single or non-single). The distribution of single and non-singles was not consistent across versions. This difference receives attention at later point.

Evaluating Group Differences: Independent-Samples t-Tests

T-tests for independent samples were conducted to identify any differences for various demographic variables and the outcome measures. The results indicated significant differences between males and females for four items: realistic, $t(202) = 3.06, p < .01$; believable, $t(202) = 3.65, p < .01$; happens often, $t(200) = 2.39, p < .05$; and important, $t(203) = 4.36, p < .01$. In every case, the female scores for the items were higher than those of the males, which suggests that females viewed the scenarios as more realistic and more frequent in their experience than did the male participants. There were

no significant differences between females and males on the typical, $t(202) = 1.60, p = .11$, and think friend items, $t(200) = 0.82, p = .41$. Table 6 reports the means and standard deviations for typicality and relational importance items.

Table 6

Means and Standard Deviations for Typicality and Relational Importance Items

Scale Items	Female		Male	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Typicality				
Realistic*	3.82	1.06	3.47	1.22
Believable*	3.99	0.86	3.63	1.07
Typical	3.22	1.20	2.97	1.24
Happens Often**	2.98	1.34	2.64	1.23
Relational Importance				
Important*	3.40	1.13	2.84	1.13
Think Friend	2.72	1.19	2.59	1.14

Note. * $p < .01$. ** $p < .05$.

For juniors versus non-juniors, the results indicated there were no significant differences for the typicality and relational importance items: important, $t(203) = 0.25, p = .80$; think friend, $t(200) = 0.42, p = .68$; realistic, $t(202) = -1.11, p = .27$; typical, $t(202) = -1.33, p = .19$; happens often, $t(200) = 0.26, p = .80$; and believable, $t(202) = -0.78, p = .44$.

For single versus non-single dating status, the results showed one significant difference for the “makes me think of friend” item, $t(197) = -1.98, p < .05$. Non-single participants scores for the “think friend” item were higher ($M = 2.86, SD = 0.89$) than single participants ($M = 2.58, SD = 0.98$). There were no other significant group differences: important, $t(201) = 0.24, p = .81$; realistic, $t(199) = -0.31, p = .76$; typical, $t(199) = -0.28, p = .78$; happens often, $t(198) = 1.19, p = .24$; and believable, $t(200) = -0.40, p = .69$.

In respect to level of anticipated regret, there were no significant group (high versus low) differences: important, $t(1265) = -0.89, p = .37$; think friend, $t(1263) = 0.24, p = -0.03$; realistic, $t(1265) = 0.24, p = .81$; typical, $t(1263) = 0.22, p = .83$; happens often, $t(1256) = 0.32, p = .75$; and believable, $t(1267) = -0.71, p = .48$. Therefore, the scores for both low and high anticipated regret were not significantly different.

For type of social support (positive versus negative), five significant different emerged (see Table 7): realistic, $t(1265) = -3.05, p < .01$; believable, $t(1267) = -2.46, p < .05$; think friend, $t(1263) = -2.14, p < .05$; typical, $t(1263) = -2.95, p < .01$; and happens often, $t(1256) = -2.65, p < .01$. There was no significant difference for important, $t(1265) = 0.56, p = .58$. Overall, participants reviewing scenarios with positive social support reported significantly higher scores on items of typicality and relational importance.

Table 7

Means and Standard Deviations for Typicality and Relational Importance Items by Social Support Conditions

Scale Items	Positive Support		Negative Support	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Typicality				
Realistic*	3.78	1.13	3.59	1.15
Believable**	3.92	0.96	3.79	0.96
Typical*	3.23	1.21	3.02	1.22
Happens Often*	2.95	1.34	2.75	1.27
Relational Importance				
Important	3.17	1.16	3.20	1.16
Think Friend**	2.74	1.18	2.60	1.15

Note. * $p < .01$. ** $p < .05$.

Substantive Analyses

Measures

To determine which hypothetical scenario was the most realistic and relevant to the main study, participants rated each scenario on measures of typicality and relational importance (Knobloch & Solomon, 2002). Based on the participants' ratings, the most typical and relationally important scenario set, including four scenarios with each one representing a different combination of the two types of social support (positive vs. negative) and two levels of anticipated regret (low and high).

Typicality. Items relating to perceptions of typicality were included to determine if the hypothetical scenarios were common and realistic for the college-aged individuals. The participants responded to pertinent items on 5-point scales ranging from 1 (strongly disagree) to 5 (strongly agree), including: “This event is realistic,” “This event is typical,” “This event is believable,” and “Events like this have happened often in my best or close friendship.” Because the participants reviewed and rated six scenarios, there are six typicality scales for which Cronbach’s alpha ranged from .79 to .89 (see Table 8).

Table 8

Means, Standard Deviations, and Cronbach’s Alpha for Typicality Scales

Scales	<i>M</i>	<i>SD</i>	α
Typicality 1	3.50	0.95	0.79
Typicality 2	3.51	0.91	0.83
Typicality 3	3.41	0.95	0.84
Typicality 4	3.44	0.94	0.86
Typicality 5	3.38	0.94	0.86
Typicality 6	3.44	1.00	0.89

Relational importance. Relational importance was included to determine if the scenarios represented events of significance to college-aged friendships. Again, the participants responded on 5-point scales ranging from 1 (strongly disagree) to 5 (strongly agree) for two items: “This would be an important event in my friendship,” and “This would make me think about my friendship.” The six relational importance scales (one from each scenario) showed unacceptable levels of reliability and were dropped from further analyses (see Table 9).

Table 9

Means, Standard Deviations, and Cronbach's Alpha for Relational Importance Scales

Scales	<i>M</i>	<i>SD</i>	α
Relational Importance 1	2.82	0.90	0.38
Relational Importance 2	2.70	0.98	0.64
Relational Importance 3	3.05	0.92	0.45
Relational Importance 4	3.10	0.96	0.54
Relational Importance 5	3.01	0.97	0.55
Relational Importance 6	2.88	0.98	0.65

Linear Mixed-Effects Model

A linear mixed-effects model (mixed model) procedure was employed in assessing both the effects of the scenario order on perceptions of typicality and relational importance scores and the most favorably rated set of scenarios. There are several reasons to use a mixed model procedure with the data instead of the general linear model (GLM). First, a mixed model procedure accommodates detection of both fixed and random effects (SPSS technical report, 2005). A factor is considered fixed if the levels of the variable are the purpose of the study (Keppel & Wickens, 2004), or are the only levels of interest in the study (Dallal, 2001). Treatment variables, such as the ones manipulated in the current study, are most often considered fixed factors (Myers & Wells, 1995; Yaffee, n.d.). The fixed factors in this model, or the between-subjects factors, were context and scenario (anticipated regret and social support). A factor is considered random if the variable is representative of a larger population (Dallal, 2001; Keppel & Wickens, 2004). Repeated

measures are often considered random; the random factor (within-subjects) effect was version, or the order in which participants encountered the scenarios.

Second, the mixed model design can accommodate both balanced and unbalanced numbers of cases (SPSS, 2005). According to Garson (2008) and SPSS (2005), the GLM requires that the participants have equal observations for the repeated measures, whereas the mixed model does not restrict the number of observations. The mixed model incorporates maximum likelihood (ML) and restricted maximum likelihood (REML) estimations, appropriate for balanced or unbalanced designs (SPSS, 2005). In this study, the eight versions of the surveys were not balanced (see Table 10 for sample sizes of the survey versions and total observation counts); consequently, the mixed model was more well suited for the data than GLM.

Table 10

Sample Sizes by Survey Versions

Version	<i>N</i>	Total Observations
A	27	54
B	26	52
C	28	56
D	25	50
E	26	52
F	27	54
G	26	52
H	28	56

Note. *N* = 213; each scenario was included in two versions of the survey.

Finally, unlike the repeated measures GLM, the mixed-model procedure allows for missing data (Yaffee, n.d.). For example, in GLM, listwise deletion will be applied, but in the mixed model procedure cases with incomplete observations will be included (Garson, 2008). The current study did not have a large amount of missing data (less than 3% on response items), but the mixed-model procedure nevertheless ensured that participants with incomplete data did not have to be dropped from analyses.

To run a mixed model, the data set for repeated measures should be set-up so that each repeated observation has its own row in SPSS (SPSS, 2005). Typically, repeated measures are located in one row; to achieve the appropriate number of rows for observations, the original data set for this study required restructuring. The variables of interest were organized into a new data file, including: demographic items (e.g., age, dating status, and gender), typicality items, and relational importance items.

Assumptions for Linear Mixed-Effects Model

Prior to interpreting the results of the mixed-effects linear model, the assumptions of the test had to be verified. The data set encompassed every participant's six observations leading to a larger sample size ($N = 1278$) and achieving the first assumption of having an adequate sample size. Next, residual plots were checked to assess the fit of the model. The first plot indicated no violation of constant variance and a linear relationship between typicality scores and the factors (see Figure 1). The second plot, the Normal Q-Q Plot of Residuals (see Figure 2), suggested that the typicality variable was not normally distributed which was also suggested by the histogram (see Figure 3). However, given a large sample size, the assumption of normality is not as strict and can be violated with less concern (Myers & Well, 1995). Because the data achieves

the necessary assumptions, the order effects and assessment of scenario ratings can be implemented using the linear mixed-effects model.

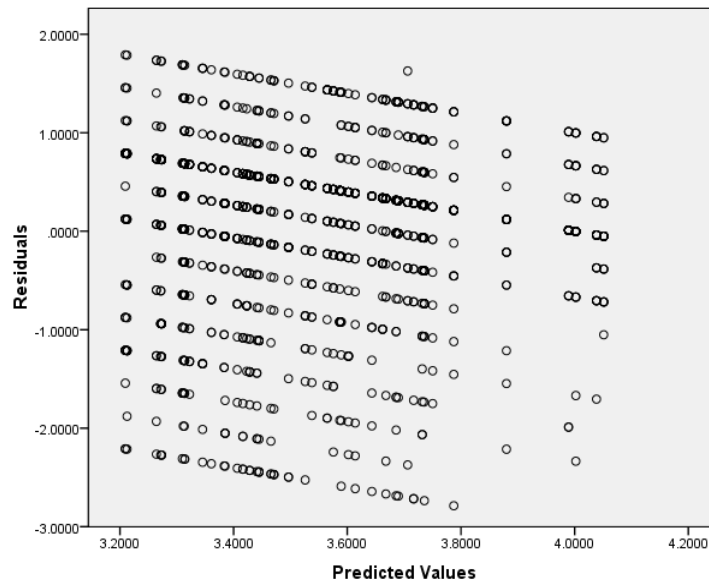


Figure 1. Residual plot of typicality variable.

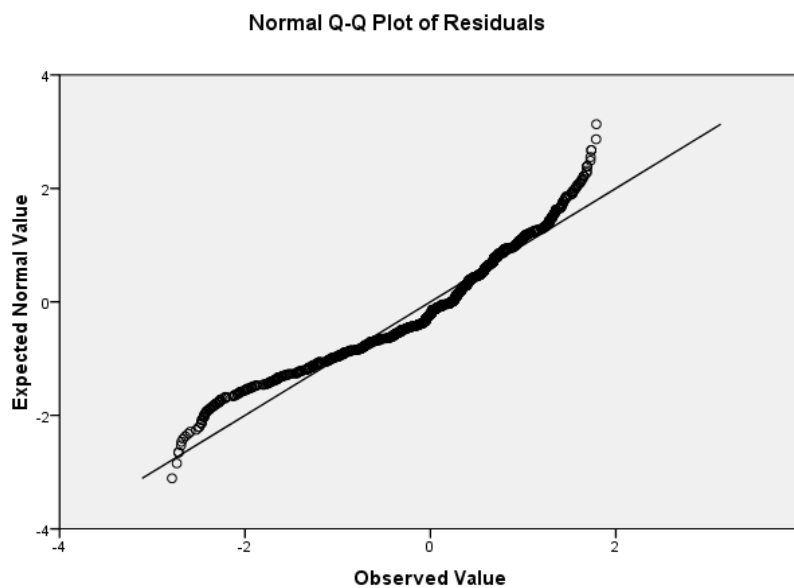


Figure 2. Normal Q-Q plot of typicality variable.

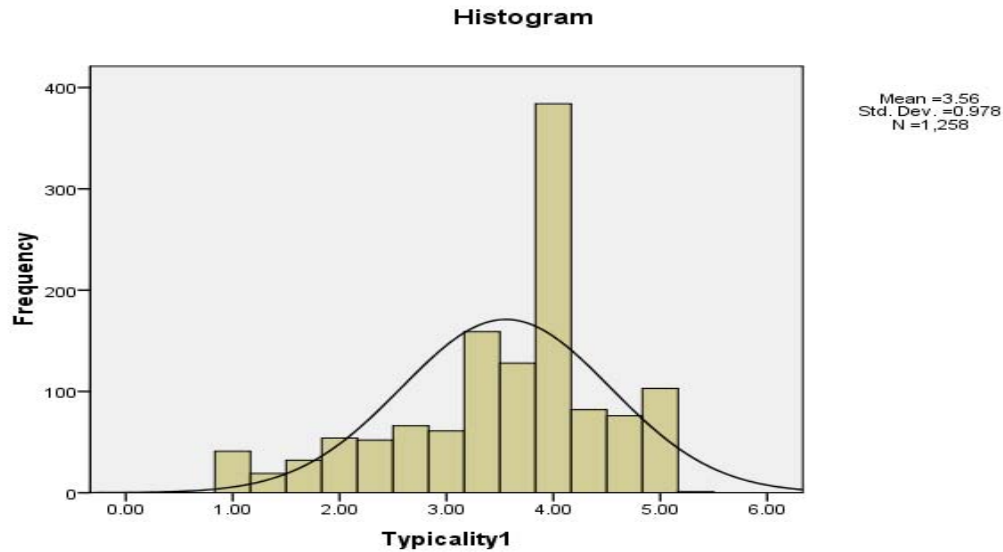


Figure 3. Histogram plot of typicality variable.

Results

Order Effect

For this study, the repeated measures variable of version was the random factor and served to detect any order effect. The null hypothesis in this context was that the population means across survey version would be equal, that is, show no evidence of an order effect. A significant result would indicate that the version did affect typicality scores (an order effect). Given the estimates of the covariance parameters, the random effect was not significant, $p = .44$. Therefore, the null hypothesis could be rejected. The order in which participants reviewed and rated the hypothetical scenarios did not appear to affect their assessments of typicality. As noted earlier, assessments of relational importance were eliminated as a result of low reliability of measures.

Typicality

A mixed-effects linear model was again employed in identifying the highest rated scenario for typicality. The results showed a significant main effect of context, $F(5, 1016.70) = 6.61, p < .01$. Participants rated the Friday night/hook-up context as typical (M range = 3.68 to 4.03) than the other contexts including: Party/ONS (M range = 3.34 to 3.57), Over the phone/sex for the first time (M range = 3.28 to 4.01), Dorm/lose virginity (M range = 3.32 to 3.81), Out to eat/sex with ex (M range = 3.34 to 3.73), and Online/random hook-up (M range = 3.31 to 3.58). There was also a significant main effect for scenario, $F(3, 38.23) = 6.45, p < .01$. The participants rated the positive social support scenarios ($M_{\text{lowAR}} = 3.63; M_{\text{highAR}} = 3.65$) higher on typicality than the negative social support scenarios ($M_{\text{lowAR}} = 3.48; M_{\text{highAR}} = 3.46$). There was, however, a significant interaction for context and scenario, $F(15, 15.83) = 2.62, p < .05$. The magnitude of the difference in ratings of typicality for varying contexts was not the same for each scenario and vice versa.

Additional Analyses

With the significant interaction effect, it was critical to carry out additional analyses to understand the relationship between category and scenario. Therefore, a series of simple effects analyses were conducted.

First, the data set was split by the grouping of level of anticipated regret (0 = low, 1 = high) and the analyses were repeated. The results indicated a significant simple main effect for scenario in the low anticipated regret group ($n = 210$), $F(1, 67.47) = 4.99, p < .05$. Participants were more likely to rate positive social support scenarios higher on typicality ($M = 3.62$) than negative social support scenarios ($M = 3.47$). For the high

anticipated regret group ($n = 211$), a significant simple main effect for scenario resulted, $F(1, 45.40) = 10.51, p < .01$. Participants rated positive social support scenarios ($M = 3.65$) as more typical than the negative social support scenarios ($M = 3.45$). In addition, the results also indicated a significant simple main effect for context, $F(5, 12.82) = 6.17, p < .01$. Participants in this group rated Friday night/hook-up as most typical ($M = 3.85$) as compared to the other contexts, including: Party/ONS ($M = 3.45$), Over the phone/sex for first time ($M = 3.62$), Dorm/lose virginity ($M = 3.37$), Out to eat/sex with ex ($M = 3.62$), and Online/Random hook-up ($M = 3.40$).

Second, the data set was split by the grouping level of social support (0 = negative, 1 = positive), and the analyses were repeated. In the negative social support group ($n = 211$), the results revealed no significant main effect for context, $F(5, 18.62) = 2.29, p = .09$, or for scenario, $F(2, 29.66) = 0.10, p = .90$; nor was the interaction effect significant, $F(5, 8.14) = 1.16, p = .40$. The means indicated that the highest rated scenario on typicality was Friday night/hook-up ($M = 3.68$). The analyses for the positive social support group ($n = 210$) showed a significant main effect for context, $F(5, 19.12) = 5.69, p < .01$. Participants in this grouping were more likely to rate the Over the phone/sex for the first time ($M = 3.86$) and Friday night/hook-up ($M = 3.85$) contexts as higher on typicality than the other contexts.

Third, splitting the data set by gender (0 = female, 1 = male) and running the analyses again showed a significant context main effect for females ($n = 128$), $F(5, 607.07) = 7.67, p < .05$, and a significant interaction effect for males, $F(15, 17.39) = 2.42, p < .05$. Because of the significant context main effect for females, the typicality scores across the different contexts could be compared. The *post hoc* comparisons using

the Bonferroni test indicated that the Friday night/hook-up ($M = 3.85$) context received significantly higher ratings for typicality than Party/ONS ($M = 3.42$) and Online/random hook-up ($M = 3.57$), but not Over the phone/sex first time ($M = 3.82$), Dorm/lose virginity ($M = 3.68$), and Out to eat/sex with ex ($M = 3.69$). Among the means of males' contexts ($n = 83$), Friday night/hook-up was the highest rated scenario in respect to typicality ($M = 3.62$). In addition, among the means for the four different scenarios, females rated them similarly (M positive/low = 3.62; M positive/high = 3.70; M negative/low = 3.65; and M negative/high = 3.72), whereas males assigned higher ratings to positive scenarios (M positive/low = 3.63; M positive/high = 3.58; M negative/low = 3.20; and M negative/high = 3.03). Tables 11 and 12 report these post hoc comparisons.

Table 11

Typicality Ratings: Gender X Context

		Context					
		<i>Friday Night Hook-up</i>	<i>Party ONS</i>	<i>Phone First Sex</i>	<i>Dorm Virginity</i>	<i>Out to Eat Sex w/ Ex</i>	<i>Online Random Hook-up</i>
Females							
	<i>M</i>	3.85 _a	3.42 _b	3.82 _a	3.68 _a	3.69 _a	3.57 _b
	<i>SE</i>	.09	.09	.09	.09	.09	.09
Males							
	<i>M</i>	3.62 _a	3.49 _a	3.36 _a	3.22 _b	3.31 _a	3.17 _b
	<i>SE</i>	.12	.12	.12	.12	.12	.12

Note. Using Bonferroni post hoc analyses, within rows, means with no lower case subscript in common differ at $p < .01$. Females ($n = 128$), Males ($n = 83$).

Table 12

Typicality Ratings: Gender X Scenario

		Scenario			
		<i>Scenario 1</i> High AR + Support	<i>Scenario 2</i> Low AR - Support	<i>Scenario 3</i> Low AR + Support	<i>Scenario 4</i> High AR - Support
Males					
	<i>M</i>	3.58 _a	3.20 _b	3.63 _a	3.03 _b
	<i>SE</i>	.12	.12	.12	.12
Females					
	<i>M</i>	3.70 _a	3.65 _a	3.62 _a	3.72 _a
	<i>SE</i>	.08	.08	.08	.08

Note. Using Bonferroni post hoc analyses, within rows, means with no lower case subscript in common differ at $p < .01$. Females ($n = 128$), Males ($n = 83$).

Splitting the data set by dating status (0 = single, 1 = non-single) and running the analyses again revealed significant main effects for both context, $F(5, 647.40) = 5.69$, $p < .01$, and scenario, $F(3, 50.76) = 5.74$, $p < .01$, for the single group ($n = 135$). The *post hoc* comparisons using Bonferroni showed that Friday night/hook-up received higher ratings for typicality ($M = 3.82$) than any other context (see Table 13).

In addition, the participants rated the positive scenarios ($M_{\text{lowAR}} = 3.60$; $M_{\text{highAR}} = 3.68$) as more typical than negative scenarios ($M_{\text{lowAR}} = 3.44$; $M_{\text{highAR}} = 3.42$) in the non-single group. Results for the non-single group ($n = 76$). There was a significant main effect for context, $F(5, 349.21) = 3.46$, $p < .01$. Application of the Bonferroni test indicated that non-single participants were more likely to rate Over the phone/sex for the

first time ($M = 3.76$) and Friday night/hook-up ($M = 3.61$) as more typical than the other contexts (see Table 12 for *post hoc* comparisons).

Table 13

Typicality Ratings: Dating Status X Context

		Context					
		<i>Friday Night Hook-up</i>	<i>Party ONS</i>	<i>Phone First Sex</i>	<i>Dorm Virginity</i>	<i>Out to Eat Sex w/ Ex</i>	<i>Online Random Hook-up</i>
Singles							
	<i>M</i>	3.82 _a	3.49 _b	3.54 _b	3.47 _b	3.48 _b	3.39 _b
	<i>SE</i>	.10	.10	.10	.10	.10	.10
Nonsingles							
	<i>M</i>	3.61 _a	3.33 _b	3.76 _a	3.51 _a	3.60 _a	3.39 _b
	<i>SE</i>	.12	.12	.12	.12	.12	.12

Note. Using Bonferroni post hoc analyses, within rows, means with no lower case subscript in common differ at $p < .01$. Singles ($n = 135$), Nonsingles ($n = 76$).

Final Scenarios

In light of the analyses, the final set of scenarios selected for Study 3 were those referencing the Friday night/hook-up context (see Table 14 for the final four scenarios). The mixed-model design revealed a significant interaction effect between context and scenario, meaning the rating of typicality depended on the context and the scenario (with combination of anticipated regret levels and social support levels). However, splitting the data set across the independent variables and demographic features of the sample

permitted more refined analyses that resulted in choosing the analyses the Friday night/hook-up as best suited for the main study.

Table 14

Final Hypothetical Scenarios for Study 3

Positive Social Support/High Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person and it seems like a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

Negative Social Support/Low Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person and it seems like a good idea. You ask your friend whether you should hook up and she does not respond enthusiastically discouraging you to do something so risky!

Positive Social Support/Low Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

Negative Social Support/High Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she does not respond enthusiastically discouraging you to do something so risky!

Note. Examples reflect scenarios for female participants in final four conditions.

Summary

The goal of Study 2 was to determine which scenarios for the participants were the most typical and relationally important. The participants rated six scenarios and; in turn, generated six sets of observations. A linear mixed-effects model and additional analyses provided evidence which scenario, overall, was the most typical. Measures of relational importance were not reliable and; therefore, excluded in making the selection. Additionally, a test of order effects revealed that the sequence of scenarios apparently did not affect the ratings of typicality. In Study 3, the main study of this dissertation, each participant reviewed, rated, and responded to one of the four hypothetical scenarios.

Chapter 5

Testing the Regret Regulation Theory (Study 3)

Introduction

Study 3 was an initial test of the regret regulation theory as related to the research questions and hypotheses. In particular, the study examined college-aged individuals' behavioral intentions in situations in which they experienced anticipated regret and a friend provided social support. Study 3 involved use of a 2 (low vs. high anticipated regret) x 2 (positive vs. negative social support) between-subjects design. The goal was to assess the impact that anticipated regret and social support have on college-aged participants' intentions to engage in risky sexual behavior and on their intentions to seek a friend's advice in the future.

Methodology

Participants

The study involved 274 participants recruited from Communication courses. Ages ranged from 18 to 25, with an average of 20.18 ($SD = 1.25$). Of the 274 participants, 51.1% reported being female ($n = 140$), and 48.9% reported being male ($n = 134$). The majority described themselves as Caucasian ($n = 230$; 83.9%) and heterosexual ($n = 267$; 97.4%). A large percentage reported being single (or not actively dating) ($n = 132$; 48.2%). Others reported dating casually ($n = 34$; 12.4%) or seriously ($n = 102$; 37.2%). The participants indicated their sexual experience as: (1) never been sexually intimate with another person ($n = 2$; 0.7%); (2) never had sexual intercourse, but have been

sexually intimate (no oral sex) with another person ($n = 11$; 4.0%); (3) never had sexual intercourse, but have been sexually intimate (with oral sex) with another person ($n = 15$; 5.5%); or (4) have had sexual intercourse one or more times ($n = 246$; 89.8%).

Procedure

The participants completed a questionnaire (see Appendix D) in which they responded to a hypothetical scenario reflecting positive or negative social support and low or high anticipated regret design as well as to a series of items relating to the friendship involved, sex-related conversations, social support, sexual behavior, social control, sexual sensation-seeking, demographics, and social desirability. Not all measures were relevant to the current study. Recruitment involved use of: (1) the research pool via the basic public speaking course (CAS 100a) and (2) announcements in other Communication classes. Those from the research pool received a 2% course-credit for their participation. Those from other classes received a 1% extra-credit compensation for participation. The conditions under which the participants completed the questionnaires were identical to those in Study 2.

As with the two previous studies, these participants verified that they were reflecting on a same-sex friend (female friend, $n = 140$, 51.1%; male friend, $n = 134$, 48.9%). Nearly 91% of the sample (249) described the person as their “best” friend. The reported length of friendship ranged from 3 months to 240 months (or 20 years), with an average of 78.65 months, or 6.55 years ($SD = 54.02$ months or 4.50 years). The participants reported having an average of 5.81 ($SD = 3.32$) close friends in addition to the same-sex friend they had in mind for the questionnaire.

Experimental Design

The study incorporated a 2 (anticipated regret: low vs. high) x 2 (social support: positive (encouraging) vs. negative (discouraging)) completely randomized factorial design. The two dependent variables of interest were (a) intention to engage in risky sexual behavior and (b) intention to seek a friend's advice in the future. The context (getting ready for a party on a Friday night) and sexual decision (whether or not to hook-up with a person whom the participant liked) remained the same in all four scenarios.

The questionnaire began with demographic items that included sexual experience, followed by questions relating to quality of friendship measures, sexual conversations, and frequency of sex-related decision-making. Next came a hypothetical scenario followed by items relating to responses to the scenario (e.g., negative emotion, social support, intention to engage in the sexual behavior, intention to seek friend for advice in the future, etc.). Finally, there were items relating to sexual behavior, sexual sensation-seeking, social control, and social desirability (not all of which were relevant to the current study). The only difference in versions of the questionnaire to which participants responded was the scenario (varying levels of anticipated regret and social support). Table 15 shows the four versions of the scenario.

Table 15

Survey Versions with Conditions

Version	Conditions	
	Social Support	Anticipated Regret
A	Positive	High
B	Negative	Low
C	Positive	Low
D	Negative	High

Note. N = 274; each participant reviewed one scenario.

When the participants reached the hypothetical scenario in the questionnaire, they were encountered the following instructions as adapted from ones Umphrey and Sherbolm (2007) had developed:

“I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend’s initials here: _____”

Approximately one quarter of the sample completed each version of the questionnaire:

Version A (positive support/high anticipated regret scenario) (25.2%), Version B (negative support/low anticipated regret scenario) (24.5%), Version C (positive support/low anticipated regret scenario) (25.2%), and Version D (negative support/high anticipated regret scenario) (25.2%). Table 16 shows the numbers of cases in each experimental condition across versions of the survey.

Table 16

Sample Sizes by Survey Versions for Study 2

Version	Total <i>N</i>	Female <i>N</i>	Male <i>N</i>
A	69	36	33
B	67	34	33
C	69	35	34
D	69	35	34

Note. *N* = 274; each participant reviewed one scenario.

Preliminary Analyses

Item-level analyses involving the distribution of the data and missing data.

Data Distribution

The questionnaire in each version contained items relating to perceptions of anticipated regret (4), social support (6), intention to engage in risky sexual behavior (4), intention to seek friend's advice in the future (4), typicality (4), and relational importance (2). The items of the intention to engage in risky sexual behavior were fairly normally distributed; those for social support, intentions to seek advice, and typicality were moderately negatively skewed; and perceptions of anticipated regret and relational importance exhibited bimodality. Participants appeared to view all the scenarios as typical, perceived friends as supportive, and were like to seek their friends' advice on future occasions. The bi-modality of anticipated regret and relational importance suggested group differences. The items were not dropped from the analyses, but warranted further examination.

Handling Missing Data

The data were examined to determine the impact of missing data. Following the correction of data entry errors, examination revealed approximately 1% or less missing data for the variables central to the study. Little's test revealed missing values were completely random and could be ignored (McKnight et al., 2007). A chi-square test, $\chi^2 = 298.83$ (df = 225), $p < .01$, indicated that the missing data was largely dependent on other variables in the study and that there did not appear to be any specific pattern. However, a small number of participants had more than one missing piece of data for the central items.

Seven participants had missing data for the social desirability scale. In two meetings, time was short and these seven individuals were unable to respond to the items comprising the measure. Because of analyses determining whether social desirability had an impact on responses, the missing data needed to be managed in the most appropriate way. The missing values were considered MCAR, as the cause of the missing data was known.

Finally, a sizable percentage of data were missing for items related to contraceptive use, sexual behavior, sexual sensation-seeking, and sexual self-disclosure. Although these variables were not central to the study, the possible impact of missing data was assessed in case any of these variables was a potential covariate.

A sensitivity analysis (Harel et al., 2008) was used to assess the impact of missing data. Using the EM (Estimation Maximization) method (via SPSS) was applied to the original data set with missing data, creating a new data set in which missing values were estimated and imputed. Tests of the two data sets showed no significant differences

between the two and, therefore, the original data set was utilized in the current study.

Pairwise deletion was used for analyses and, in the results, each analysis reports the final sample size used for each test.

Social Desirability

Given the sensitive nature of this study's focus, social desirability as a personal quality of the participants was a potential threat to internal validity. A modified version of Marlowe-Crowne's (Crowne & Marlowe, 1960; Reynolds, 1982) Social Desirability Scale was the measure of social desirability. The participants responded to items on 7-point scales with 1 indicating "strongly disagree" and 7 "strongly agree." The items included: "Before voting I thoroughly investigate the qualifications of all the candidates," "I never hesitate to go out of my way to help someone in trouble," "I am always careful about my manner of dress," "I like to gossip," "No matter who I'm talking to, I'm always a good listener," "I'm always willing to admit it when I make a mistake," "I sometimes think when people have misfortune they only got what they deserved," and "I have never deliberately said something that hurt someone's feelings." Tests of internal consistency and parallelism suggested inadequacy of the measure. The reliability of the items was poor ($\alpha = 0.48$), which indicated that these eight items would not constitute a unidimensional scale. Therefore, the measure of social desirability was not employed for use in further analyses in this study.

To further explore the potential threat of social desirability to internal validity, a different index of social desirability was created. First, the eight Marlowe-Crowne items were evaluated to determine if two subscales could be computed - one with positively reflected items and one with negatively reflected items. If the participants responded in a

socially desirable way, there would be a significant difference between the two subscales. The results showed ($\alpha = 0.52$ for the positive items) and ($\alpha = 0.19$ for the negative items) showed low reliability. Hence the subscales were not used in any analyses.

Second, the Marlowe-Crowne items were used to create an index of social desirability that represented the presence or absence of responses for each participant. The index was summed for the eight items relating to social desirability. Participants with high scores perceived themselves as more socially desirable than participants with lower scores. The minimum and maximum total values that could result were 8 and 56 ($M = 36.12$, $SD = 5.43$). A group split was calculated based on the mean index, with those below the mean constituting the low socially desirable group ($n = 140$, 51.1%) and those above the mean generating the high socially desirable group ($n = 127$, 46.4%). A series of independent-samples t -tests served to reveal any differences for the variables of interest (dependent variables, etc.) or measures that might produce socially desirable responses (condom use, sexual sensation-seeking, and sexual self-disclosure). There were significant differences only for condom use, $t(250) = -2.98$, $p < .01$, and sexual self-disclosure, $t(265) = -2.13$, $p < .01$. Participants in the high social desirability group had greater scores for using condoms¹ ($M = 4.51$, $SD = 0.65$) and sexual self-disclosure² more frequently ($M = 172.41$, $SD = 55.61$) than participants in the low social desirability group (condom use, $M = 4.23$, $SD = 0.81$; sexual self-disclosure, $M = 158.50$, $SD = 50.88$). It appears social desirability was not contaminant, as both groups reported similar scores

¹ Condom use was measured with five items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicated greater likelihood of using condoms.

² Sexual self-disclosure was measured using the Sexual Self-Disclosure Scale (Snell, Belk, Papini, & Clark, 1989). Scores across the 60 items were summed with potential final scores ranging from 60 to 300. Higher scores indicated more frequent sexual self-disclosures with a same-sex friend.

for nearly all of the variables (see Table 17 for the means and standard deviations for social desirability groups).

Table 17

Means and Standard Deviations for Social Desirability

Group	<i>N</i>	<i>M</i>	<i>SD</i>
Low Desirability	140	32.00	3.00
High Desirability	127	41.00	3.00

Note. *n* = 267; Scores summed across eight social desirability items with a possible range of 8.00 to 56.00.

Selection Bias

The survey had items relating to sexual behavior, contraceptives, conversation topics, and sensation-seeking. A review of the responses showed missing data for these, which lead to examination of the role of selection bias. Did the participants who responded differ from those who did not? To answer this question, a new variable, “respond,” was created to recode participants into responders (*n* = 228, 83.2%) or nonresponders (*n* = 46, 16.8%). These demographics were analyzed using the new variable: gender, age, year, dating status, sexual experience, sexuality, and frequency of talking to friend about sex decision.

A chi-square test for independence was conducted to determine if there were differences across responders and nonresponders based on gender of participant. The results indicated no significant association between gender and response group, $\chi^2(1, n =$

274) = .03, $p = .87$, $\phi = .01$. There were similar proportions of females and males in both response groups.

For age, an independent samples t -test indicated no significant association between age and response group, $t(268) = -.05$, $p = 0.96$. Participants who did not respond to items ($M = 20.11$, $SD = 1.30$) were not different in age from those participants who did respond ($M = 20.12$, $SD = 1.74$).

To test the association between response group and year, two chi-square tests of independence were employed. The first examined year by four groups (freshman, sophomore, junior, and senior). The results showed no significant association between year and response group, $\chi^2(3, n = 274) = 0.49$, $p = .48$, $\phi = .10$. The second test examined year in groups (junior and non-junior). Again, the results indicated no significant association between year and response group, $\chi^2(1, n = 274) = 2.49$, $p = .48$, $\phi = -.04$. Responses to sex-related items were not dependent on year in school.

A chi-square test of independence showed no significant association between the dating status (single or non-single) of the participants and whether or not they responded to the survey items, $\chi^2(1, n = 274) = 0.42$, $p = .52$, $\phi = .04$. Therefore, there are similar amounts of single and non-single participants in each response group.

A chi-square test of independence indicated that 50% of the cells did not have more than five observations in assessing the association between response category and sexual experience, which violated the minimum expected cell frequency assumption. Overall, the majority of the sample had sexual intercourse ($n = 246$), a finding that may not provide enough information to warrant confident interpretations. However, counts of nonresponders (NR) and responders (R) were determined for each group: never been

sexually intimate (NR = 1, R = 1), sexually intimate/no oral sex (NR = 8, R = 3), sexually intimate/with oral sex (NR = 10, R = 5), and have had sexual intercourse (NR = 27, R = 219).

A chi-square test of independence was used to assess the differences between response groups for participant reported sexual orientation. Similar to the test of sexual experience, the results indicated that 75% of the cells did not have at least 5 observations which violated the minimum expected cell frequency. Counts of nonresponders (NR) and responders (R) were provided for each category of sexual orientation: bisexual (NR = 0, R = 3), lesbian (NR = 1, R = 0), uncertain (NR = 0, R = 3), and heterosexual (NR = 45, R = 222).

Testing the differences between response groups and the frequency with which the participants reportedly discussed sexual decisions with their friends entailed use of a chi-square independence test. The results showed no significant association between frequency of sexual decisions and response groups, $\chi^2(4, n = 274) = 0.81, p = .94, \phi = .05$. There appeared to be similar amounts of responders and nonresponders in each grouping of sexual decision frequency.

In sum, all the tests conducted to determine whether or not differences existed between those who responded to items and those who did not showed no significant associations. A significant association between response group and sexual experience has been predicted; however, there were not enough observations in some cells in some analyses to interpret the chi-square results.

Group Differences

Prior to testing the hypotheses, a series of preliminary tests related to group differences were conducted. First, a series of chi-square tests of independence were conducted to evaluate the distribution of participants across the four design survey groups. These revealed whether or not participants were randomly distributed across survey groups or if membership was confounded with demographic variables (e.g., gender, year, dating status, sexuality, etc.).

The chi-square test of independence results indicated no significant association between gender and survey version, $\chi^2(3, n = 274) = 0.04, p = .99, \phi = .01$. Nor was there a significant association between participants' year in school and version of survey, $\chi^2(3, n = 274) = 6.75, p = .08, \phi = .16$. The same was true for dating status, $\chi^2(3, n = 274) = 1.80, p = .61, \phi = .08$. There were not enough observations of sexuality and sexual experience beyond the majority of participants who were heterosexual ($n = 267$) and had sexual intercourse ($n = 246$) to make appropriate interpretations. Finally, a chi-square test of independence showed no significant association between the version of the survey and the frequency of sexual decision-making with the assistance of one's friend, $\chi^2(12, n = 274) = 10.09, p = .61, \phi = .19$. Overall, it appears that the version of the survey is not confounded by any demographic variables.

A series of one-way ANOVA tests focused on difference the four scenarios might reveal for anticipated regret, social support, intentions to seek friend, intentions to engage in risky sexual behavior, and sexual self-disclosure. The results showed significant differences for intentions to engage in risky sexual behavior and anticipated regret (see Table 18). *Post hoc* comparisons via Tukey's HSD test for intentions to engage in risky

sexual behavior revealed a significant mean difference in the case of Version D ($M = 2.92$, $SD = 0.79$) versus Version A ($M = 3.37$, $SD = 1.03$) and Version C ($M = 3.60$, $SD = 1.00$). This indicated that for both the low and high anticipated regret versions of the scenario, positive social support was productive of stronger inclinations to engage in the behavior of interest. There was also a significant mean difference between Version C ($M = 3.60$, $SD = 1.00$) and both Version B ($M = 3.01$, $SD = 0.79$) and Version D ($M = 2.92$, $SD = 0.79$).

Table 18

Group Differences by Versions

	Version			
	A High AR +Support	B Low AR -Support	C Low AR +Support	D High AR -Support
Anticipated Regret*	2.72 (1.04) n = 67	3.03 (0.88) n = 65	2.40 (1.09) n = 68	3.03 (0.94) n = 67
Friend's Social Support	3.63 (0.95) n = 69	3.54 (0.79) n = 66	3.78 (0.95) n = 68	3.48 (0.83) n = 68
Participate in Behavior**	3.37 (1.03) n = 69	3.01 (0.79) n = 67	3.60 (1.00) n = 68	2.92 (0.79) n = 69
Seek Friend's Advice	3.81 (0.76) n = 69	4.03 (0.79) n = 67	3.82 (0.96) n = 69	4.02 (0.63) n = 69

Note. Values are means with standard deviations in parentheses. * $F(3, 263) = 6.15$, $p < .01$, $\eta^2 = 0.07$; ** $F(3, 269) = 8.33$, $p < .01$, $\eta^2 = 0.09$.

In addition, *post hoc* comparisons via the Tukey HSD test for anticipated regret showed a significant mean difference between Version C ($M = 2.40$, $SD = 1.09$) and both

Version B ($M = 3.14$, $SD = 1.30$) and Version D ($M = 3.03$, $SD = 0.94$). The ratings of anticipated regret were lower in the case of Version C (low anticipated regret) than in either the low or high anticipated regret versions.

A series of independent sample t -tests to assess sex differences for the measures of typicality, anticipated regret, social support, intentions to seek friend, intentions to engage in risky sexual behavior, and sexual self-disclosure revealed four that were significant (see Table 19). Females reported higher experiences of anticipated regret, higher intentions to seek a friend in the future, and more discussion of sexual topics. On the other hand, males reported higher intentions to enact the behavior in the hypothetical scenario. Gender was treated as a *covariate* in the analyses testing the hypotheses.

Table 19

Sex Differences by Measures

Measures	Females	Males	<i>t</i>
Typicality	3.64 (1.04) n = 140	3.67 (0.96) n = 133	-0.13 n = 271
Anticipated Regret	3.16 (0.98) n = 136	2.41 (0.92) n = 131	6.45** n = 265
Friend's Support	3.59 (0.87) n = 138	3.63 (0.91) n = 133	-0.44 n = 269
Participate in Behavior	2.91 (0.93) n = 139	3.55 (0.85) n = 134	-5.89** n = 271
Seek Friend's Advice	4.02 (0.77) n = 140	3.81 (0.72) n = 134	2.36* n = 272
Sexual Self-Disclosure	173.72 (54.17) n = 140	154.81 (52.73) n = 134	2.93** n = 272
Social Desirability	35.37 (7.18) n = 140	34.89 (8.15) n = 134	0.52 n = 272

Note. Values are means with standard deviations in parentheses. * $p < .05$. ** $p < .01$.

*Measures**Dependent Variables*

Intentions to engage in behavior. Four scale items constituted the measure of the participants' intentions to engage in the sexual behavior described in the hypothetical scenario. They responded to the items using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The items included: "I would be likely to participate in the behavior," "After talking with my friend, I would not participate in this

behavior,” “It is unlikely that I would participate in this behavior after speaking with my friend,” and “It is unlikely that I would follow through with this behavior.” The measure showed internal consistency, parallelism, and unidimensionality. The estimated reliability of the measure of intentions to participate was good, $\alpha = 0.88$. At core of this measure was the average of the four items, with higher scores indicating greater intention to engage in the behavior ($M = 3.23$, $SD = 0.94$).

Intentions to seek friend's advice. The measure of intention to seek advice from friend in the future comprised four items, to which participants responded on a 5-point scales ranging from 1 (strongly disagree) to 5 (strongly agree): “In the future, I would seek out my friend to discuss sex-related topics,” “It is unlikely that I would turn to my friend to help with future sexual decisions,” “I would not ask my friend for advice again regarding sexual topics,” and “I know I will talk to my friend again about the sexual decisions I am faced with in the future.” The tests of internal consistency, parallelism, and unidimensionality were acceptable, with $\alpha = 0.75$. One's score was the average of the four items, with higher scores indicating a greater likelihood they would seek a friend in the future for discussion of sexual decisions ($M = 3.92$, $SD = 0.75$).

Typicality and Relational Importance

After indicating the intentions noted, the participants were asked to read the scenario a second time and then answer items related to the typicality of the event and how important the event might be to the friendship.

Typicality. This measure involved four items from Knobloch and Solomon (2002) developed, for which one responded on 5-point scales ranging from 1 (strongly disagree) to 5 (strongly agree): “This event is realistic” (realistic), “This event is believable”

(believable), “This event is typical” (typical), and “Events like this have happened in my best or closest friendship” (events happen). The measure satisfied criteria of internal consistency, parallelism, and unidimensionality. Cronbach’s alpha was 0.84. One’s score was the average of the four items. Higher scores indicated that one saw the scenario as more typical than lower scores, ($M = 3.64$, $SD = 0.97$). Overall, the sample reported the scenarios as fairly typical.

A one-way between-groups ANOVA for -- A (positive social support/low anticipated regret), B (negative social support/low anticipated regret), C (positive social support/high anticipated regret), and D (negative social support/high anticipated regret) -- yielded a significant F-ratio, $F(3, 267) = 4.32$, $p < .01$. Eta squared was .05, or a medium effect (Cohen, 1988). The Tukey HSD test indicated that Version D ($M = 3.39$, $SD = 0.97$) was significantly different from Version C ($M = 3.90$, $SD = 0.97$) on this measure. Version A ($M = 3.78$, $SD = 0.99$) and Version B ($M = 3.48$, $SD = 0.95$) did not differ significantly from each other or from the other versions.

Relational Importance. The index of relational importance was the average score for two items from a study by Knobloch and Solomon (2002). The items: “This would be an important event in my best or closes friendship” (important) and “This would make me think of my friendship” (think friend). Respondents indicated their level of agreement on 5-point scales ranging from 1 (strongly disagree) to 5 (strongly agree). Although the “important” ($M = 2.61$, $SD = 1.12$) and “think friend” ($M = 2.25$, $SD = 1.12$) items appeared to be fairly internally consistent, they were lacking in parallelism. In addition, the reliability of the relational importance measure was poor, $\alpha = 0.47$. Therefore, the summated measure of relational importance was dropped.

One-way between-subjects ANOVAs were conducted for the relational importance items separately to determine if there were differences across versions associated with either. Analyses indicated that version did not appear to influence scores on “important,” $F(3, 270) = 0.36, p = .78$, or “think friend,” $F(3, 270) = 1.46, p = .23$, differentially. College-aged participants rated the scenarios similarly for “important” ($M = 2.51$ to $2.70, SD = 1.09$ to 1.18) and “think friend” ($M = 2.10$ to $2.45, SD = 1.06$ to 1.25).

Scenario Manipulations

To allow for testing the hypotheses derived from the regret regulation theory and social support research, each hypothetical scenario reflected a unique combination of anticipated regret (low or high) and social support (positive or negative). After reviewing the hypothetical scenario, participants responded to items capturing perceptions of anticipated regret and valence of friend’s social support. The data served to reveal whether or not the manipulations were effective. For example, the expectation for Version A (high anticipated regret and positive social support) was that for participants reviewing would have higher scores for anticipated regret and positive scores for social support than those participants assigned to review a low anticipated regret and/or negative social support scenarios.

Anticipated regret. Five items represented the measure of the anticipated regret: “If I follow through with this behavior I would experience negative consequences,” “I think I would feel bad if I participated in this behavior,” “I would not feel remorse for following through with this behavior,” “I would experience regret if this event occurred,” and “There are no foreseeable consequences for participating in this behavior.” The

participants recorded responses on 5-point scales ranging from 1 (strongly disagree) to 5 (strongly agree). Tests of internal consistency and parallelism indicated that “There are no foreseeable consequences for participating in this behavior” should not be included in the measure of anticipated regret. A score was the average for the other four items, with higher scores indicating higher levels of anticipated regret ($M = 2.82$, $SD = 1.13$). For this measure, Cronbach’s alpha was 0.89.

An independent-samples t -test involving the mean scores for anticipated regret revealed no significant differences attributable to level of anticipated regret, (M for low anticipated regret = 2.76, $SD = 1.25$) and high anticipated regret (M for high anticipated regret = 2.88, $SD = 1.00$) conditions, $t(265) = -0.82$, $p = .41$. Because the expected difference did not surface, there was no further analysis involving level of regret. Instead there were efforts to account for the absence of these effects.

Friend’s support. The measure of social support included six items to which participants responded on 5-point scales ranging from 1 (strongly disagree) to 5 (strongly agree): “I would be satisfied with the support my friend provided,” “My friend communicated negatively,” “My friend communicated positively,” “My friend did not provide the support I’d expect from a friend,” “The social support provided by my friend was not helpful,” and “My friend was very supportive in this scenario.” Tests of internal consistency, parallelism, and unidimensionality were positive, which warranted use of the average score. A higher score indicated that one viewed the friend’s support as positive. Cronbach’s alpha was 0.91.

An independent-samples t -test showed no significant difference in scores of social support for those participants in the positive social support ($M = 3.70$, $SD = 0.95$) and

those in the negative social support ($M = 3.51$, $SD = 0.81$) conditions, $t(269) = -1.78$, $p = .08$. As in the case of anticipated regret, the outcome did not produce the intended effects and there was no further analysis involving level of support. Instead, energy was directed to accounting for the absence of effect.

New Conditions

Each participant had been randomly placed into one of four survey conditions in which levels of anticipated regret and valence of friend's support were manipulated. Independent-samples t -tests revealed no significant differences between the social support conditions (positive and negative social support) ($p = .08$) or for the anticipated regret conditions (low and high anticipated regret) ($p = .41$). Although assignment to the conditions did not result in significant differences in means for anticipated regret ($M_{\text{low}} = 2.76$; $M_{\text{high}} = 2.88$) and social support ($M_{\text{positive}} = 3.70$, $M_{\text{negative}} = 3.51$), the measures could still be used to establish new conditions in *post hoc* fashion for testing the research hypotheses. Accordingly, a median split was applied to both the measure of perceptions of anticipated regret and perception of social support to create the four combinations of the independent variables, but from responses as opposed to manipulations (see Table 20 for the new conditions). Additional analyses involving the reconfigured combinations were subsequently performed to explore the relationship of anticipated regret and social support to the dependent variables.

Table 20

Medians and Sample Sizes for New Conditions

	Median	High (<i>N</i>)	Low (<i>N</i>)
Perceptions of Anticipated Regret	2.50	162	112
Perceptions of Friend's Support	3.83	151	123

First, independent-samples *t*-tests were conducted to determine if the mean scores (above and below the medians) differed by level of anticipated regret and social support. Although the manipulations in the hypothetical scenarios did not produce the intended differences, these tests were conducted to assess the effectiveness of the newly created grouping variables. The results revealed a significant difference for anticipated regret, $t(265) = -20.39, p < .01$. Those participants in the low anticipated regret grouping ($M = 1.86, SD = 0.40$) had significantly lower expectations of anticipated regret than those in the high anticipated regret grouping ($M = 3.47, SD = 0.76$). The results also revealed a significant difference for the social support groups, $t(265) = -20.39, p < .01$. Participants in the positive social support grouping ($M = 4.24, SD = 0.36$) had higher scores for social support than those participants in the negative social support grouping ($M = 2.85, SD = 0.72$).

Second, Pearson correlations were calculated to reveal the relationship between perceptions of anticipated regret and the dependent variables as well as perceptions of friend's support and the dependent variables. The data revealed significant correlations (see Table 21). There was a strong, negative correlation between perceptions of

anticipated regret and intentions to engage in the behavior in the scenario, $r = -.81$, $n = 267$, $p < .001$. The coefficient of determination was 0.66, which indicated that roughly two-thirds of the variance was common to the variables. In line with the regret regulation theory, the participants reported relatively little inclinations to participate in the hook-up when they perceived themselves as experiencing high levels of anticipated regret.

Additionally, a small, negative correlation surfaced for perceptions of anticipated regret and intentions to seek friend's advice, $r = -.19$, $n = 267$, $p < .001$. Participants reporting high levels of anticipated regret were more likely to seek a friend's advice. However, the coefficient of determination indicated little overlap between these two variables, with only 4% shared variance.

There were moderate, positive correlations between social support and the dependent variables, intentions to participate in behavior, $r = .43$, $n = 270$, $p < .001$ (18% shared variance), and intentions to seek friend's advice, $r = .58$, $n = 271$, $p < .001$ (34% shared variance). Participants reporting more positive perceptions of friend's support also reported greater inclination to engage in the behavior in the scenario and to seek the friend's advice.

Table 21

Correlations Between Independent and Dependent Variables

Measure	1	2	3	4
1. Perceptions of Anticipated Regret	-	-.45**	-.19**	-.81**
2. Perceptions of Friend's Support		-	.58**	.43**
3. Intentions to Seek Friend's Advice			-	.20**
4. Intentions to Participate in Behavior				-

Note: ** $p < .01$

Intercoder Reliability: Unitizing and Coding

In addition to responding to the measures and hypothetical scenarios, participants also answered an open-ended question concerning social support. Specifically, they provided specific examples of the types of social support their friends communicated during conversations about sexual decisions. First, the reports were unitized into single thought units, via a procedure similar to that in Study 1. The coders identified thought units by underlining or highlighting the text, from which a simple percentage of agreement constituted the index of intercoder reliability, which in this instance was 85.3%.

Second, the codebook from Study 1 was used to categorize the behavior. Six themes emerged: no support, poor support, esteem support, emotional support, informational support, and instrumental support. Two independent coders trained in use of the codebook, once comfortable with the themes, coded 20% of the open-ended responses. Cohen's kappa was 0.86 and; therefore, the two coders independently

completed the coding of the remaining surveys. They discussed and resolved discrepancies after the fact.

Substantive Analyses

Assumptions for ANOVA

Before testing the hypotheses, an effort to determine whether or not the assumptions of factorial ANOVA were satisfied. First, the level of measurement for the dependent variables should be continuous and categorical for the independent variables. The dependent variables were both measured on a 5-point scales and the independent variables are categorical; both had two levels.

Second, the participants should be randomly sampled from the population. The participants were sampled from a research pool and from CAS classes, the population of college-aged individuals. However, the recruited participants were randomly assigned to the experimental conditions.

Third, the observations must be independent. Random assignment to conditions and taking account of nonindependence by including variables in the model helps one to satisfy this assumption (Cardinal & Aitken, 2006).

Fourth, the dependent variables should be normally distributed. Viewing the histograms of the dependent variables, intentions to participate and intentions to seek the friend for future advice, were both moderately skewed to the left; however larger sample sizes and cells with relatively equal sizes show less distortion resulting from a violation of this assumption (Hayes, 2005; Pallant, 2007). The current study has a total of 274 participants.

Fifth, homogeneity of variance, or the assumption that the population variances are equal, should not be violated if possible. Levene's test of equality of variances yielded significant results for intentions to engage, $p = .000$, and intentions to seek friend, $p = .003$. Significant results indicate the variances are not equal and that the assumption had been violated. Before proceeding, a few tests were completed to ensure the violation of homogeneity was not an issue. The cell sizes were checked to determine if they were relatively balanced. The cell sizes are 31, 81, 91, and 70. Three of the cells were of similar size with one fairly smaller cell. The ratio of the cell sizes' however did not exceed 4 to 1. Also, the Fmax showed a value of 2.32 for intentions to engage in behavior and 1.88 for intentions to seek friend's advice. Because these values are less than 10, the planned ANOVAs were warranted. In addition, a more stringent p-value was used. Only significant effects at $p < .01$ were considered as warranting rejection of the null hypothesis.

Finally, gender was treated as a covariate. The same assumptions for ANOVA need to be met in the case of ANCOVA, but in addition the covariate(s) need to be measured prior to the treatment. Since treatment (or version of the scenario) would not affect one's gender, this assumption was satisfied. Overall, the assumptions for ANOVA had been met or adjusted for and the substantive analyses could, therefore, be conducted.

Intentions to Engage in Behavior

The first set of hypotheses focused on the dependent variable of intentions to engage in the behavior in the scenario. Hypothesis 1a posited a main effect for anticipated regret, Hypothesis 2a one for social support, and Hypothesis 3 an interaction effect between the two. A 2 (low and high anticipated regret) x 2 (positive and negative

social support) ANCOVA, with gender treated as the covariate, revealed a nonsignificant interaction effect, $F(3, 269) = 0.39, p = 0.53$, as well as significant main effects (see Figure 4) for anticipated regret, $F(3, 269) = 72.37, p < .01$, partial $\eta^2 = .21$, and friend's social support, $F(3, 269) = 8.46, p < .01$, partial $\eta^2 = .03$. Hypothesis 1a and 2a were supported, but Hypothesis 3 was not. The participants reported greater inclinations to engage in the behavior in the scenario if they perceived lower levels of anticipated regret and more positive friend support. Table 22 reports the means and standard deviations. In addition, gender proved to be a significant covariate, $F(3, 269) = 16.88, p < .01$, partial $\eta^2 = .06$. Males and females differed in intentions to engage in the behavior, with male participants showing greater inclination to do so than the female participants.

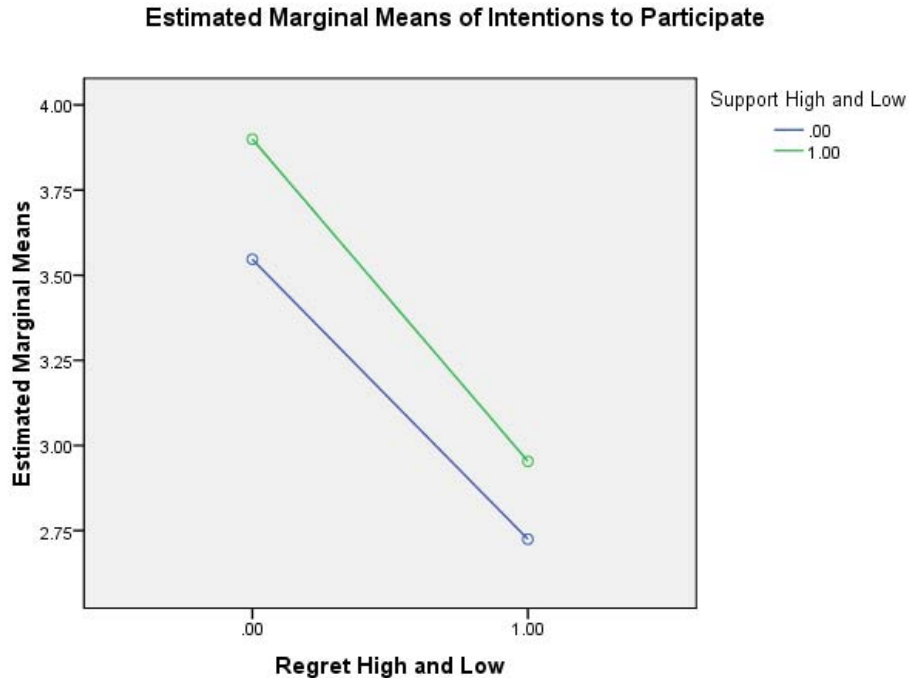


Figure 4. Anticipated regret and social support main effects for intentions to engage in behavior.

Table 22

Means and Standard Deviations for Intentions to Engage in Behavior

Grouping	<i>M</i>	<i>SD</i>
Perceptions of Anticipated Regret		
Low Anticipated Regret	3.87	0.61
High Anticipated Regret	2.78	0.88
Perceptions of Social Support		
Positive Support	3.46	0.90
Negative Support	2.94	0.92

Intentions to Seek Friend's Advice

The second set of hypotheses focused on the intentions to seek advice from the friend in the future. Hypothesis 1b posited a main effect for anticipated regret, Hypothesis 2b a main effect for social support, and Hypothesis 4 an interaction effect between anticipated regret and social support. A 2 (low and high anticipated regret) x 2 (positive and negative social support) ANCOVA with gender as a covariate revealed no significant interaction, $F(3, 270) = 1.27, p = 0.26$, or main effect for anticipated regret, $F(3, 270) = 1.21, p = 0.27$. The main effect for social support, however, was significant (see Figure 5), $F(3, 270) = 48.67, p < .01$, partial $\eta^2 = .15$. Participants reported greater likelihood of seeking friend's advice in the future if they perceive his or her support as positive. The gender covariate was also significant, $F(3, 270) = 6.94, p < .01$, partial $\eta^2 =$

.02, with females showing greater inclination to seek the friend than males. Table 23 shows the pertinent means and standard deviations.

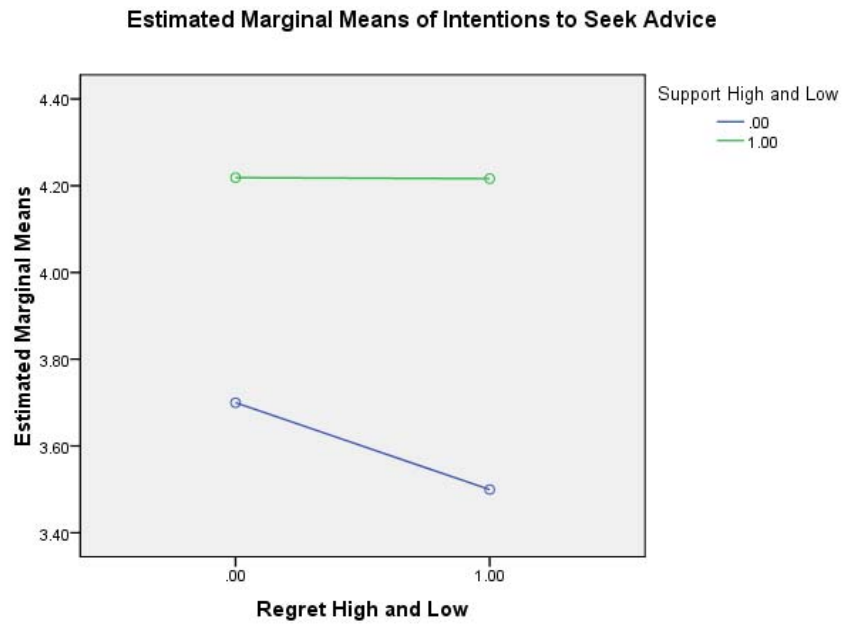


Figure 5. Social support main effect for intentions to seek friend's advice.

Table 23

Means and Standard Deviations for Intentions to Seek Friend's Advice

Grouping	<i>M</i>	<i>SD</i>
Perceptions of Anticipated Regret		
Low Anticipated Regret	4.04	0.65
High Anticipated Regret	3.83	0.80
Perceptions of Social Support		
Positive Support	4.22	0.58
Negative Support	3.55	0.77

Additional Analyses: Regression

Assumptions for regression. Running regression analyses required examination of a number of assumptions. First, the level of measurement for the dependent variables should be continuous and continuous or categorical for the independent variables. The dependent variables involved use of 5-point scales and the independent variables were continuous (pre-new conditions).

Second, the sample size should be large. Tabachnick and Fidell (2001) provide a formula for determining sample size: $N \geq 50 + 8m$ (where m equals independent variables). Since this study had two independent variables, the sample size needed at least 66 participants. The study had 274 participants was well beyond this number and was sufficient, especially if the dependent variables were skewed (Tabachnick & Fidell, 2001).

Third, there should be no outliers. By checking mahalanobis distance, the presence or absence of outliers can be determined. With two independent variables, the value for mahalanobis distance should not exceed 13.82 (Tabachnick & Fidell, 1996 cited in Pallant, 2007). The values for both intentions to engage in behavior and intentions to seek friend's advice was 12.87; thus, this assumption was not violated.

Fourth, the assumption of normality, linearity, homoscedasticity, and independence of residuals should be met. The Normal Q-Q Plots, in general, showed the data points in a fairly linear line and histograms for the dependent variables showed data that was moderately and negatively skewed. In general, this fourth assumption was sufficiently well satisfied, especially for the sample size.

Finally, there should be a lack of multicollinearity or the independent variables should not be strongly correlated with each other. Pallant (2007) suggests that the correlations between independent variables should not exceed 0.70. The correlation between perceptions of anticipated regret and perceptions of friend's support was -0.45, which indicated an acceptable level of collinearity. The collinearity assumption was also supported by the Tolerance value. A tolerance value of less than 0.10 would indicate collinearity exists (Pallant, 2007). The values for both intentions to participate in behavior (0.35) and intentions to seek friend's advice (0.67) indicate a lack of multicollinearity. Overall, the assumptions of regression analysis were satisfied and analyses could be performed.

Intentions to engage in behavior. Hierarchical regression analysis served to reveal whether perceptions of anticipated regret and perceptions of friend's support were predictive of intentions to participate in behavior after controlling for gender. Gender,

which was entered into Step 1, explained 11% of the variance in the intention to engage in behavior measure. Next, perceptions of anticipated regret and friend's support were entered as Step 2. The total variance explained by the model was 66%, $F(3, 261) = 164.91, p < .001$. The two independent variables explained an additional 55% of the variance. The change in R-square was 0.55, $F \text{ change}(2, 261) = 207.14, p < .001$. Both independent variables were significant predictors (see Table 24 for significant predictors) of intention to engage in the behavior of interest with perceptions of anticipated regret a much higher beta value ($\beta = -0.75, p < .001$) than perceptions of friend's social support ($\beta = 0.09, p < .05$).

Table 24

Predictors of Intention to Engage in Behavior

	β
Step 1	
Gender	.06
Step 2	
Anticipated Regret	-.75*
Friend's Social Support	.09**

Note. $F(3, 261) = 164.91$, Adjusted $R^2 = 0.65, p < .001$

* $p < .001$

** $p < .05$

Intention to seek friend's advice. For intention to seek friend's advice in the future, hierarchical regression analysis revealed that gender accounted for 3% of the variance. Perceptions of anticipated regret and friend's support were entered as Step 2.

The total variance explained by the model was 36%, $F(3, 261) = 48.78, p < .001$. The two independent variables accounted for an additional 33% of the variance in the criterion measure. Change in R-square resulting from these two variables was 0.33, F change $(2, 261) = 67.54, p < .001$. In the final model, gender was a significant predictor ($\beta = -0.17, p < .005$), as was social support ($\beta = 0.58, p < .001$) (see Table 25 for significant predictors).

Table 25

Predictors of Intention to Seek Friend's Advice

	β
Step 1	
Gender	-.17**
Step 2	
Anticipated Regret	.01
Friend's Social Support	.58*
<i>Note.</i> $F(2, 261) = 48.78$, Adjusted $R^2 = 0.35, p < .001$ * $p < .001$ ** $p < .005$	

*Research Question**Types of Social Support*

As noted earlier, the participants provided specific examples of the type of social support friends offer during conversations related to sexual decisions. Twenty-four participants skipped or failed to provide responses for the open-ended question which could have been for a number of reasons, including not being comfortable with the

question, the questions not being relevant to their own experiences, missing the question, or not having time to complete the question. Seven participants ran out of time and skipped the open-ended items to complete the rest of the measurement. The final sample size for the social support question, therefore, was 250.

Using the codebook generated from data in Study 1, coders categorized the participants' responses according to six themes (in Table 26). Similar to Study 1, there were a number of participants who shared experiences in which they received *no support* ($n = 28$, 11.2%; females = 11, males = 17) from the friend. However, even though 19 of these individuals listed no support, they nevertheless described types of support received from friends. For example, one participant indicated their friend did not provide support, but went on to note that he received praise from the friend for the behaviors in which he engaged.

Table 26

Types of Social Support for Study 3

Support Types	Total %	Female %	Male %
Informational	56.0	32.4	23.6
Ego	51.6	26.0	25.6
Emotional	25.2	19.2	6.0
No support	11.2	4.4	6.8
Instrumental	10.0	8.8	5.6
Poor	8.8	4.4	4.4

Note. $n = 250$

The most commonly reported type was *informational social support* ($n = 140$, 56.0%; females = 81, males = 59). Statements consistent with friends providing

information and advice that could help the participants become independent decision-makers were assigned into this thematic category. Participants described their friends' informational support, as offering "great advice," offering "honest opinions" about whether or not to pursue an individual (including approval and disapproval), providing advice about what the "smart" thing to do is, and sharing details about how to make sex more exciting. In some cases, participants even discussed the specific information the friend provided to assist with the management of sexual protection situations. For example:

My friend has told me how he and his girlfriend have always had sex without a condom because she is on birth control. He told me how it's much better and not to worry because it is safer than using a condom without birth control (#160, Male).

There was a time when my girlfriend and I didn't use a condom and was scared she was pregnant. I asked him for advice and he said 3 birth control pills are sufficient for a morning after pill (#168, Male).

The information shared between friends was viewed as helpful in making decisions related to having sex or handling with the events occurring in the aftermath. Participants often sought approval and/or disapproval from their friends to assist with their decision-making. Some also noted appreciating that their friends could be positive, but also be honest, which might have included being negative.

Next, *esteem (or ego) social support* was identified as a frequent form of social support friends provided during sexual conversations ($n = 129$, 52.0%; females = 65, males = 64). Support that was described as making the participants feel good about themselves, their sexual behaviors, or their sexual decisions fell into this category. Esteem support was portrayed as positive, encouraging the participants to engage in

certain kinds of behavior, and including praise and congratulations for behavior or pursuing a particular individual. Some participants described needing reassurance from their friends to engage in sexual behavior, including:

My friend has helped convince me to hook up with girls at parties when I was nervous about doing so. He just would give me reinforcement that I should do it...Then I would realize there was no problem with doing it so I would go ahead and do it (#025, Male).

Similarly, other participants noted talking to their friends before taking certain actions to gauge their approval:

We give each other approving signs if we like the guy. For example, thumbs up or, “go for it!” (#100, Female).

Any advice I got from her has mostly been to see if she agrees with my thoughts on a guy. If she does, I go through with my plans. If she doesn’t then I feel the need to reconsider (#115, Female).

Many participants described support in which the friend was encouraging:

She encourages me to meet other boys even though I am in a relationship because we are young (#031, Female).

He has usually encouraged me to hook up with as many girls as possible as many times as possible (#044, Male).

Friends almost always encourage the sexual encounter and/or hook up unless it is with an ex-boyfriend (#095, Female).

In general, the friends provide esteem support by showing interest in the participants’ behavior during discussions:

[My friend] and I always discuss hooking up with a guy either before it occurs or afterwards. She always asks for every detail and is usually enthusiastic about it. Since she and I are both single, we get excited for the other if one of us hooks up with someone...she is always supportive by asking me how I feel about a situation and asking me what I’m going to do next (#131, Female).

Overall, through esteem support friends appeared to give the participants the confidence and, in some cases, the “push” they needed to engage in sexual behavior. Showing excitement, interest, and a simple “thumbs up” signals to the participant that their behavior is acceptable, appropriate, and, perhaps even, expected by the friend.

Emotional social support (n = 63, 25.2%; females = 48, males = 15) was another way friends communicated support to the participants. Statements referring to the intangible support a friend provided that helped the participant in making decisions fell into this category of social support. Participants described their friends’ emotional support as including listening, “being there,” being non-judgmental, and understanding their feelings and experiences.

My best friend is such a good listener. I have told her about every sexual experience I have ever had and she is very understanding (#036, Female).

She’s always supporting me. When I’m happy or unhappy, sad, mad – she always helps me and puts me first. Whenever a guy uses me or has had sex with me and then stopped calling (he got what he wanted), she makes me feel better and convinces me that I deserve better. Sometimes it’s hard not to think, ‘I’m not good enough’ [because] so many guys just want sex but no relationship. She let’s me know I deserve everything and the importance of waiting for the right guy (#087, Female).

She has provided a great deal of social support by simply listening to me explain my feelings toward the situation. Her distinct ability to compare to my experiences and understand how I feel provides a great deal of support for the situation. Knowing that I’m not the one feeling a certain way helps to understand the situation (#067, Female).

Intangible support provided by friends helped participants feel cared for and, no matter their sexual decision, listened to and understood.

In some cases, friends reportedly provided support by doing things for the participant, or *instrumental support* (n = 25, 10%; females = 10, males = 15). As a

contrast to emotional support, statements consistent with the tangible support friends provided was considered as “instrumental.” In these instances, participants described their friends performing such actions as providing them with condoms and taking them to Planned Parenthood or to get a pregnancy test. Other participants described their friend as creating the situation in which the participant could pursue another individual which was often referred to as acting as a “wingman.” One participant described the instrumental support his friend provided:

...support has been “setting” me up. If I’m talking to a girl he will let us be alone and talk. One time he brought a girl over to me and started a conversation between us and then walked away (#048, Male).

Some participants described their friends as taking actions that not only created potential relational or sexual situations, but also assisted in the aftermath of these events. Then college-aged friends appeared to be willing to participate in actions to assist the participants no matter at what point they were in sexual situations.

Finally, some participants noted their friends tried to be supportive, but that it was *poor support* (n = 22, 8.8%; females = 11, males = 11). Support described as unwanted and unhelpful fit this theme. Participants indicated they sometimes received responses from their friends regarding their behavior, but that it was not the response that was helpful given their sexual situation or decision. Overall, it appears that one believes her or she receives poor support when there is a difference in beliefs about sex and/or dating as described by the following participants:

My friend was very unsupportive of my decisions to casually date because her dating beliefs center around very committed relationships. We got into an argument when she believed I was ‘messing around’ (#011, Female).

She tells me not to engage in most sexual situations and I get angry because I feel she doesn't understand. She has a boyfriend and gets this sexual attention all the time. I feel it's unfair for her to discourage my sexual behavior (#121, Female).

I wish he would provide more support and try to look out for me. Instead, he tries to get me to hook up with random girls and end my relationship. He usually says, 'she won't find out or it's not really a concern' (#170, Male).

As with Study 1, participants described support that was the opposite of what they wanted or expected; however, unlike the earlier participants these were more detailed about how the support made them feel. They expressed negative emotions in response to the social support communicated by their friend, but also a desire to receive more helpful support in the future.

Summary

The participants in Study 3 completed a survey in which they reviewed and responded to a hypothetical scenario exploring behavioral intentions under varying conditions of anticipated regret and social support. Although the scenarios were rated as typical events, the manipulations of anticipated regret and social support were unsuccessful. As a result, the new conditions of anticipated regret (low and high) and social support (positive and negative) were reconfigured on the basis of the participants' perceptions of anticipated regret and social support. Anticipated regret proved to be a strong predictor of intention to engage in the behavior in the scenario whereas social support was a strong predictor of intention to seek friend's advice in the future. Gender was treated as a covariate that had a small effect on either dependent variable. The participants identified different types of social support their friends provided during conversations about sexual decisions. As in the case of Study 1, the data provided

evidence that friends tend to communicate about sex, with informational and esteem support being the most frequent forms their friends give.

Chapter 6

Discussion

Introduction

The overall purpose of this dissertation was to explore the role of sexual communication in college-aged friendships by initially testing parts of Zeelenberg & Pieters' (2007) regret regulation theory. Specifically, the dissertation focused on how the social support friends convey during conversations about sexual decisions may, in conjunction with experience of anticipated regret, influence one's decision to engage in risky sexual behavior. To gain a more nuanced understanding of sexual communication between friends, three self-report survey studies were designed and implemented.

Self-reports, with a focus on hypothetical scenarios, allow a researcher to obtain a large amount of information concerning a topic (in this case, sexual decision-making) that most consider private (Sprecher & McKinney, 1993) and that may surface infrequently (D.H. Solomon, personal communication, November 18th, 2004). In the present studies, a goal was to identify the most typical and relationally important hypothetical scenarios (Knobloch & Solomon, 2002); therefore, the first two foundational studies focused on generating and rating scenarios derived from the information shared by college-aged individuals about sexual decision conversations they have with their friends. The third and principal study tested hypotheses derived from the regret regulation theory and research involving social support, by including the most typical hypothetical scenarios (derived from Study 1 and 2) that manipulated levels of anticipated regret and

social support. The results of these three studies will be discussed in detail with an additional focus on their limitations, implications, and further directions for this line of research.

Study 1: Development of Hypothetical Scenarios

Study 1 focused on answering four research questions with the primary goal of gathering data about the experiences college-aged individuals had when communicating with their same-sex friends about sexual decisions. Participants answered questions about (a) the reasons for/against talking about sexual decisions, (b) the decisions in which they sought out their friend's assistance, (c) the locations where these conversations took place, and (d) the types of social support their friends provided in response. The open-ended responses were used to generate a collection of hypothetical scenarios that reflect the population and phenomena of interest.

Previous research concerning sexual communication among friends has focused on the patterns of sexual communication, such as the frequency of conversations (Herold & Way, 1988; Papini et al., 1988), the sexual topics discussed (Lucas, 2007; Lucas & Afifi, 2006; Papini, Farmer, Clark, Micka, & Barnett, 1990), and the quality of those conversations (Lefkowitz et al., 2004). From these studies, it is clear that many college-aged individuals talk about sex, yet, little is known about how these conversations relate to sexual decision-making (e.g., Halpern-Felsher et al., 2004). Study 1, was an attempt, to gain a more nuanced understanding of sexual conversations. The open-ended responses provided rich data for each of the four research questions. The following section first reviews the frequency of conversations concerning sexual decisions and then the findings for each research question.

Frequency of Sexual Decision Conversations

According to Papini et al. (1988), sexual conversations are more likely in friendships than in any other relationship and occur frequently, with college-aged participants able to identify, on average, at least three sexual topics they frequently discuss with their friends (Lucas, 2007; Lucas & Afifi, 2006). Finken (2005) noted it is likely that a young person will turn to a friend for assistance when making decisions concerning his or her own sexual conduct. Responsible decision-making in this sphere may be the best way to maintain a healthy (sexual) life, but research has suggested that friends often influence the sexual behavior of young people (Billy & Udry, 1985; Christopher & Roosa, 1991) in what ways that put them more at risk for STIs and unintended pregnancies (Brooks-Gunn & Furstenberg, 1989; CDC, 2007; Finer & Henshaw, 2006). However, there is no clear evidence of how often friends assist each other with sexual decision-making.

In Study 1, participants reported the frequency with which they consulted with their friends about sexual decisions. Of the 298 taking part, 32 indicated that they “never” spoke with their friends about their sexual decisions (10.7%). Thus, over 89% of the sample had spoken to their friends at some point or another regarding one or more of their sexual decisions. In fact, 192 participants reported talking about sex with their friends occasionally or more often (64.4%). This evidence suggests that consultation about sex-related decisions is a pervasive phenomenon in college-aged friendships.

It is worth noting that for each open-ended question, there was missing data and/or some participants noting, “not applicable,” “do not discuss,” “no decisions made,”

or “no support provided.” Some of the nonresponses were connected with those who reported “never” speaking with their friends about sexual decisions, whereas other missing data implied that there could be other reasons why consultation did not occur. In particular, the likelihood of conversations could depend on the person, his or her friend, his or her sexual experience, and the norms and rules governing the friendship. However, a review of the data did not reveal any strong distinguishing patterns for those who responded versus those who did not. There could be an expectation that individuals with little sexual experience might skip questions (Catania, McDermott, & Pollack, 1986; Wiederman, 2002), yet this was not the case in Study 1. A sample consisting of participants with varying levels of sexual experience, among other demographic variables, such as sexual orientation and dating status could provide more evidence about which college-aged individuals consult their friends as opposed to those who do not. Reviewing the results of each open-ended question should provide a clearer picture of the sexual decision-making consultation phenomenon.

Reasons for/against Sexual Decision Conversations

Comfort is often cited as the primary reason young people talk to their friends about sex-related topics (Herold & Way, 1988). Study 1 was, in part, an attempt to identify what other reasons might exist. For Research Question 1, participants were to indicate the reasons for or against having sex-related conversations with friends. The data results revealed that nearly half of the sample began by noting they did not discuss sexual decisions with their friends ($n = 145$). At first glance, the open-ended responses appear to contradict the frequency results. However, many participants went on to describe

additional reasons for or against the sexual decision conversations even if they had indicated that they themselves did not discuss them.

Responding that one did not participate in these conversations and then providing a detailed description of such an event may have occurred for several different reasons. First, questions about a friend's assistance with decisions may have made the participants feel as if they were unable make decisions on their own, or perhaps these individuals did not want to be viewed as being "influenced" by their friends. In this case, social desirability may have played a role in the resulting responses. In sex-related research, participants can feel compelled to provide answers they believe the researchers are more likely to accept (Orbuch & Harvey, 1991), and it could be that participants believe being an independent decision-maker would be a preferable response to professing being one influenced by others.

The participants' dating status may also have had an impact on whether or not to consult with friends. A number of participants noted decisions with their friends helped them with *before* they started dating their relational partners, but because they were now committed, the friend's help was no longer needed. A number of these respondents further noted that they made their sex-related decisions now in consultation with the romantic partner. In an interesting contrast, research suggests that few romantic partners actually talk about sex (Cline et al., 1990; Cline et al., 1992), but those who talk with their friends about sex also would be more likely to talk to their partners (Powell & Segrin, 2004). Further research into dating status may reveal the complications of the contesting significant relationships, the types of decisions made with friends as compared to romantic partners, and the impact these conversations have on one's sexual well-being.

The most popular reason for having sexual decision conversations with friends was to gain help ($n=165$). College-aged individuals may talk about sexual decisions with the expectation that a friend should “be there when needed” (Youniss & Smollar, 1985). “Being there” is the obligation of a close friend (Youniss & Smollar) that perhaps has become synonymous with the function of a friendship (e.g., Burleson, 1994; Reohr, 1991). Friends are expected to help each other, especially during crises (Barnes & Duck, 1994). Individuals often turn to their friends during a time of need (Barbee et al., 1998), and sexual decisions that concern young people at an age when they are establishing their sexual identity may also in their estimation require the assistance of a friend (Arnett, 2000; Finken, 2005). Significant sexual decisions may be difficult to struggle with alone (e.g., Fischhoff, 1996; Zeelenberg, 1999), especially when balancing one’s identity, reputation, and well-being with social norms and with the desires and needs of a relational partner (e.g., Arnett, 2000; 2006a). Yet, the input and experiences of one’s friends are valued (Wilks, 1986) and can alleviate the stress of making decisions in isolation (e.g., Cohen & McKay, 1984), particularly if one knows that their friend is “always there,” as suggested by the participants.

Another obligation of a close friend is to be loyal and protective (Youniss & Smollar, 1985), which encompasses helping to keep one out of trouble. In line with this reasoning, participants described trusting their friends to help them make sound decisions because the friend would provide assistance aligned with the person’s best interest (e.g., Adelman, Parks, & Albrecht, 1987; Argyle & Henderson, 1985). By assisting with decisions, a friend can declare loyalty while the college-aged individual can expect the friend to guide him or her down the right path.

Another common reason for talking about sexual decisions was that it was simply part of the friendship (n = 129). One participant noted talking about *everything*, including sex, with a friend, while another noted in talking about so many different topics with friends relationships and sex were bound to surface. Similarly, friendship researchers have described talk as a major benefit (Monsour, 1992, Parks & Floyd, 1996; Rawlins, 1992) and as the main activity that occurs in these relationships (Duck & Wright, 1993). One significant benefit of talk is that it increases intimacy (Fehr, 2004) or builds solidarity (Wheeless, 1976). Certainly, talking about sex with a friend may signal the friendship is close or exclusive (Reohr, 1991) or that close intimate friends would indeed have these types of conversations (e.g., Tardy, Hosman, & Bradac, 1981). In addition, another benefit of talk is the pure fun and enjoyment the parties' experience (Reohr, 1991). In fact, many participants described conversations about sex as an enjoyable activity they did together and indicated that the conversations were often accompanied by laughing and joking.

Types of Sexual Decisions

Previous research involving the sexual topics that college-aged individuals discuss has not been consistent. Rittenour and Booth-Butterfield (2006) reported that college students mostly discussed birth control, condom use, and STIs with their peers. In this case, it might be expected that the participants in this study would describe sexual decisions related to sexual health, such as how one can ask a relational partner to wear a condom, or whether one should be tested for a STI. However, Lucas (2007) and Lucas and Afifi (2006) have noted that college students talk less about sexual health and more about sexual fun. In their studies, topics such as sexual experiences, relationships, sexual

likes/dislikes, and sexual sensations, were more frequently in evidence than sexual health; in fact, only 11% of the college-aged individuals noted discussing condoms, STIs, or birth control. On the basis of these data, one might expect that the participants in this study would have been more likely to ask questions related to sexual behavior, for example, how to ask a relational partner for oral sex or how best to achieve an orgasm. However, the open-ended data indicated that although the participants ostensibly talked about a wide range of sexual decisions, the decisions they made centered on which types of behavior to engage in and with whom. As previous research, only 11% of those in Study 1 mentioned sexual health decisions they discussed with friends.

Research Question 2 focused on what decisions college-aged individuals discussed with friends. The participants described the different types of sexual decisions made in consultation with a friend. The most frequently mentioned types were “whether or not to” engage in some specific behavior or to pursue a particular person ($n = 165$). These decisions included engaging in sexual behavior, such as hook-ups, one-night stands, losing one’s virginity, initiating sex for the first time in a relationship, cheating on a partner, and having sex with an ex-partner. As outlined by Emerging Adulthood (Arnett 2000, 2006a, 2006c), young people may be considering engaging in these types of sexual behavior for the first time or in developing more intimate sexual relationships. Young people may have such interests as a way to define their sexual identity (Arnett, 2000), but it is through interactions with same-sex friends that they learn about the skills necessary for and the normative behaviors present in sexual and romantic relationships (Blieszner & Roberto, 2004). Friends should be there to help in these situations based on most definitions and expectations of the relationship (Hartup & Stevens, 1997; Reohr, 1991;

Youniss & Smollar, 1985). Indeed, previous research is clear that friends are the primary educational and informational source for sex (Gebhard, 1977; Kallen et al., 1983; Rouner & Lindsey, 2006; Spanier, 1977), despite their not often having the necessary information about sex to pass on to their peers (Handelsman et al., 1987).

Additionally, college-aged individuals seeking consultation concerning “whether or not to” decisions may be seeking social approval and acceptance. As Baumeister and Leary (1995) have noted, humans have a strong need to belong and it is through interpersonal relationships, such as friendship, that they often meet these needs (e.g., Burleson, 1994). Researchers have extensively examined the qualities that constitute the definition of friendship (e.g., Fehr, 2004). Burleson (1994) has highlighted the two most critical to individuals’ views of friendship: acceptance and support. That is, individuals are expected to convey acceptance of their friend and to provide support during times of need (Adelman et al., 1987). Through the communication of social support one can emphasize to an individual that he or she accepts the person (Samter, 1994). In fact, Sarason, Pierce, and Sarason (1990) have called one’s perception of social support from a friend as a “sense of acceptance.”

College students are particularly prone to loneliness, often a result of a sense of rejection occurring, present in the transition from high school to college (Cutrona, 1982). During this time, they are separated from their family and friends; establishing new ties with friends can decrease loneliness and, in turn, lead to feelings of acceptance (Samter, 1994). In addition, as Emerging Adulthood proposes, college-aged individuals also find themselves involved in the exploration of sexual identity, which may entail different romantic and sexual relationships and behavior (e.g., Arnett, 2000, Arnett, 2006a).

Certainly, asking a friend about whether or not to engage in a sexual behavior provides one an opportunity to clarify his or her sexual identity and to receive support from a friend, as well as to gauge acceptance by a friend or group of friends, or, moreso the acceptance of the behavior in which he or she is considering engaging (e.g., Mirande, 1968; Teevan, 1972).

Types of Social Support

College-aged individuals consult with friends while making decisions because they want help. Specifically, the help they seek in the present context is often social support. Both Study 1 and Study 3 had participants provide specific examples of the social support their friends provided. They reported a number of ways in which their friends communicated such support, with esteem (ego) support reported frequently (Study 1, $n = 151$; Study 3, $n = 129$). According to Cutrona, Suhr, and MacFarlane (1990), this encompasses supportive behavior such as complimenting (making positive comments about the receiver and his or her ability), validating (communicating agreement), and reassuring (communicating to the receiver not to worry about the situation). It also makes the receiver feel good about himself or herself (Westmyer & Myers, 1996). The participants characterized such support from their friends as positive, approving of the sexual behavior, and, in a number of cases, praising them for the behavior or for a specific action.

In particular, it appears that the communication interaction occurs in a manner wherein friends can ask for assistance with a “whether or not to” decision involving desire for approval, while the support provider has the opportunity in this situation to give approval via esteem support (Burlison, 1994; Samter, 1994). Goldsmith (2004)

describes social support as a situated event; in other words, it depends on the context. Through frequent sex talk, or what Barnes and Duck (1994) label “everyday talk,” the dyad can clarify similarities in attitudes and behaviors about sex, vent about sex and sexual partners, and, even more, maintain their friendship. By being familiar with the sexual decision conversation context, as well as a young person’s sexual behavior and goals, a friend can provide social support which is most appropriate for that situation.

What do individuals desire from supportive communication? By and far, they want social support to be positive. In particular, it should be helpful, with supporters’ communicating understanding and praising, as well as confirming of “valued identities” (Goldsmith, 1994, 2004). In this case, then, if a young person values his or her sexual lifestyle and is comfortable discussing sex with a friend, the response should fall within the constraints of ego support. Gable, Gonzaga, and Strachman (2006) indicate that people often like to share with significant others (including friends) the positive events in their lives. The sexual experiences of college-aged individuals are often positive events that, in turn, elicit a positive response from friends. Supportive responses, such as ego support, are likely to make the receiver feel closer to the friend and more well satisfied with the friendship than unsupportive responses would (Gable, Reis, Impett, & Asher, 2004).

Participants also noted frequently that their friends provide informational social support ($n = 120$). They offered detailed examples of informational support that included messages involving suggestions/advice and teaching; friends provided opinions and advice concerning how to proceed with sexual decisions (suggestions/advice) and tips for how to enhance sexual behavior (teaching). Some participants indicated that their friends

were able to provide honest opinions about whether or not they should engage in specific sexual behavior, and in some cases the friend's expertise in sexual behavior was beneficial to proceeding with their own encounters. Although honesty may be an obstacle in some instances to being supportive (Goldsmith, 2004), participants nonetheless were often appreciative of the times a friend did not approve of a partner or a behavior because it may have saved the participant from making a poor decision. Yet, if the friend was not honest or expressed approval when it was not appropriate, that signal of disloyalty could evoke conflict. In general, through informational support, friends run the risk of coming across as unsupportive (Goldsmith, 2004) or disloyal (Youniss & Smollar, 1985), but must balance being supportive, helpful with tips, and honest with the college-aged individual.

In conclusion, Study 1 provided data illuminating the experiences college-aged individuals reported regarding their consultations with friends about sexual decisions. However, not everyone discussed sexual decisions with friends. Further research should explore the characteristics of those who are willing and wanting to consult with their friends as compared to those who do not seek friends' opinions concerning such matters. The participants who made clear conditions about the experience of discussing decisions with their friends concerning engaging in specific sexual behavior and the social support their friends provided in response proved to be helpful in generating the scenarios developed and tested in Study 2.

Study 2: Rating of Hypothetical Scenarios

In Study 2, twenty-four generated hypothetical scenarios were submitted for review and assessment by a second sample of college-aged individuals. The purpose of

this study was to identify the most compelling and realistic scenarios for this population. The participants responded to items centering on the typicality of the event (i.e., friend providing support for a sexual decision) and its relational importance to the friendship (i.e., whether the event reminded participants of what transpired in their friendships as related to such matters?). To increase the observations and maximize the sample size, each participant reviewed six different scenarios; then order effects were analyzed to determine if the sequence of scenarios affected participants' ratings of typicality and relational importance. The six scenarios included: (1) Friday night/hook-up, (2) Party/ONS, (3) Over the phone/sex for the first time, (4) Dorm/lose virginity, (5) Out to eat/sex with ex, and (6) Online/random hook-up. The results of the analyses permitted selection of a final set of hypothetical scenarios focused on a single context for inclusion in Study 3.

Typicality

The scenario context with the highest overall typicality ratings needed to be identified for Study 3. In general, all the contexts were rated as typical, with scores above three (ranging from 1 to 5) with all male typicality scores above 3.0 and all female typicality scores above 3.5. However, three significant findings led to selecting the *Friday night/hook-up*.

First, the *Friday night/hook-up* was the highest-rated context among the six scenarios. Considering the sexual decisions offered by participants in Study 1, it is not surprising that hook-up behavior was seen as typical. Recent research has described hook-ups and other casual sex behaviors (e.g., friends with benefits) as characteristic of college campuses (Bogle, 2008; Hughes, Morrison, & Asada, 2005; Paul, 2006).

Although part of normative sexual behavior (Collins & van Dulmen, 2006), hook-ups can be a source of regret (Paul, 2006) and, then, of particular importance for this dissertation.

Second, males rated this context as the most typical while females rated the *Friday night/hook-up* typical, but not as significantly different from the *Over the phone/sex for the first time*, *Dorm/lose virginity*, and *Out to eat/sex with sex*. Females rated the *Party/ONS* and *Online/random hook-up* contexts as less typical than the other four, whereas males rated the *Party/ONS* as the second most typical context. The participants' reported rates of sexual behavior also support the participants' ratings for the scenarios. Males more often initiate sexual activity prior to females, have more sexual partners than females, and exhibit more open views toward casual sex than females (Lefkowitz & Gillen, 2006). On the other hand, females may be managing both the normative nature of hook-ups and the double-standard suggesting that they should engage in premarital or casual sex (e.g., Arnett, 2006c; Bogle, 2008; Paul, 2006).

Third, when comparing single and nonsingle participants' ratings for typical contexts, both viewed the *Friday night/hook-up* as the most typical. In addition, nonsingles rated the *Over the phone/sex with ex* context similarly in respect to typicality. Singles and nonsingles may have experiences attending parties as a way to meet potential romantic and/or sexual partners and therefore related to that scenario. For example, Bogle (2008) describes hooking up as based in group interactions in which friends, whether single or not, interact at parties and bars. Additionally, nonsingles may have more recently experienced a situation in which sex entered into the relationship; hence the high typicality scores for this context.

Other findings merit further discussion as well. The contexts in the positive social support conditions were rated as more typical than those in the negative social support conditions. Yet females rated all, whether positive or negative, as typical, which suggests perhaps that males prefer situations in which their friends provide positive social support. Barbee, Gulley, and Cunningham (1990) found that men were less interested in speaking with their same-sex friends about relational issues because they anticipated more negative responses.

Participants reviewing scenarios with low anticipated regret rated positive social support scenarios more typical than negative social support scenarios. Perhaps if they assume there is little likely regret in engaging in the behavior in the scenario, college-aged individuals do not want their friends discouraging them from following through. Similarly, friends may have expectations for their friends (e.g., Youniss & Smollar, 1985) regarding independence and dependence in their relationships. Rawlins (1983) described the dialectic of “freedom to be independent/freedom to be dependent” as friends being able to live life without the other prying, but also being able to seek the friend out when they are needed. In positive social support scenarios, these freedoms seem unbalanced, which possibly results in one’s perceiving the friend as interfering rather than as helpful. On the other hand, positive interactions between friends may be preferred all the time (e.g., Baumeister & Leary, 1995).

In sum, the *Friday night/hook-up* context was selected for the final scenarios in Study 3. However, differences between the sexes and dating status (nonsingles and singles) made it critical to explore the association of these demographics with the

variables of interest in the final study to determine the extent and nature of the influence.

Specifically, sex and dating status were reviewed as potential covariates.

Relational Importance

The measure of relational importance (from Knobloch & Solomon, 2002) was not internally consistent and, therefore, excluded from analyses for Study 2. The use of only two items may have been the reason for unacceptably low reliability. The two items separately had means that were around the midpoint of the scale, ranging from 1 (strongly disagree) to 5 (strongly agree): “important” ($M = 3.18$, $SD = 1.16$) and “makes me think of friendship” ($M = 2.85$, $SD = 1.31$).

Another complicating factor that although the events were rated as realistic and believable, especially when participants considered the perceived normal behavior of their peers (Agostinelli & Seal, 1998), the events may not have been viewed as salient or important to the friendship. For example, sex-related conversations may occur frequently in friendships and, paralleling the recall of sexual behavior, the discussions may blend together with no one event standing out as more important than the others (e.g., Wiederman, 2004). Furthermore, although self-disclosure is often a relational turning point (Johnson, Wittenberg, Villagran, Mazur, & Villagran, 2003) and likely to change friendships in a positive direction, the scenarios included in Study 2 may not have mirrored the participants’ exact experiences. Although participants may have experienced events similar to those rated in the survey, some other sex-related decisions may have been more relationally meaningful to them. Goldsmith (2004) describes support as having

meaning or being meaningful; however, the participants may have seen the interactions not as support, but merely a part of the everyday communication occurring in the friendship (e.g., Barnes & Duck, 1994). In this case, one single encounter with the friend may not be viewed as important as continued conversations and interactions about the same matter. Even more, college-aged individuals may consider the actual sexual behavior with their partners as more salient and meaningful than the conversations they have about the behavior with their friends.

Summary

In conclusion, the goal of Study 2 was to establish further the scenarios' external validity by engaging a second set of college-aged individuals to determine the typicality and relational importance of six sexual decision contexts within their same-sex friendships. The *Friday night/hook-up* scenario proved to be the most typical in the view of the participants and was selected for hypothesis testing in Study 3. Relational importance failed to provide a basis for selection.

Study 3: Testing the Regret Regulation Theory

Study 3 was conducted to examine how behavioral intentions regarding engaging in risky sexual behavior and discussing such decisions of future occasions with a friend who has been involved in a current decisions may be influenced by levels of anticipated regret and social support. A 2 (anticipated regret: low and high) x 2 (social support: positive and negative) design was employed. Participants completed a questionnaire containing measures of friendship quality and closeness, sexual behavior, sexual self-disclosure, and social support. In addition, they responded to the final hypothetical scenarios in respect of typicality, relational importance, intention to engage in the

behavior involved, intention to seek friend for discussion in the future, and perceptions of both social support and anticipated regret.

Anticipated Regret

The regret regulation theory is based on the premise that decisions often evoke the negative emotional experience of regret (Zeelenberg & Pieters, 2007). Because we would like to avoid such outcomes, we will anticipate our post-decision feelings. Accordingly, anticipated regret functions as an evaluative tool during decision-making (Janis & Mann, 1977). If an individual believes that making one decision will have negative outcomes, he or she instead is apt to make another decisions that is less likely to be regrettable. Thus, anticipating regret provides the benefit of taking more time to select a decision (Baumeister et al., 2006) and, of course, minimizing the effect of negative outcomes (Janis & Mann, 1977). This led to the first hypothesis that the more anticipated regret college-aged individuals experience, the less likely their intentions to participate in risky sexual behavior as compared to individuals who experienced low anticipated regret (Hypothesis 1a; Main Effect).

The results supported this hypothesis. Anticipated regret was strongly and negatively associated with intentions to engage in the behavior in the scenario one read; it was a strong predictor, and accounted for 66% of the variance in the criterion measure. As suggested by Zeelenberg and Pieters' (2007) regret regulation theory, participants' decisions to engage in behavior entailed some experience of anticipating or evaluating one's future regret. Thus, if one believes he or she will feel bad after making a specific

decision, he or she will avoid making that decision. Previously, Richard et al. (1996) found that over time anticipated regret increased college students' intentions to prevent risky sexual behavior. The data, then, were supportive of the theory.

The awareness of regret as the potential result of a tough choice may cause young people to turn to their friends for assistance in making decisions (Finken, 2005). This study proposed that college-aged individuals experiencing high levels of anticipated regret would have greater inclination to seek a friend's advice in the future than those individuals who experienced low anticipated regret (Hypothesis 1b; Main Effect).

The results did not support the hypothesized main effect. Seeking advice from a friend in the future did not appear to be contingent on one's experience of anticipated regret. Moreover, this contradicted the assumption that anticipated regret and decision-making may be a social activity that occurs in collaboration with a significant other, such as a friend (e.g., Janis & Mann, 1977; Zeelenberg & Pieters, 2007). Instead, these findings suggest that, consistent with Burleson and Samter's (1994) functional perspective, a friend is expected and obligated to be there for advice independently if anticipated regret is experienced or not. Through continued encounters with their close friends, the participants in this study may have been quite certain that the friend will be there for them in the future (Youniss & Smollar, 1985) and, hence, felt no need to think about seeking advice.

Social Support

The function of friends is to be supportive (Burleson, 1995) whether in a time of need (Barbee et al., 1998) or in response to a positive event (Gable et al., 2006). One particular context in which friends are called upon to be supportive is during sexual

conversations; so as to have a comfortable atmosphere when one is sharing personal sexual details (Herold & Way, 1988; Rozema, 1986). Being supportive provides many positive benefits for the relational partners (Goldsmith, 1994), including making both feel good about themselves and being able to achieve their personal goals (Cutrona et al., 1990; Westmyer & Myers, 1996). Therefore, it was hypothesized that participants who perceived positive social support from their friends would have a greater inclination to engage in sexual behavior described in a given scenario than those participants who perceived a lack of support (Hypothesis H2a; Main Effect).

The results revealed positive association between perceptions of social support and intentions to engage in the behavior of interest; that is, social support was a strong predictor of the participants' intentions to go through with the hook-up. As hypothesized, participants in the positive social support conditions reported stronger intentions than those in the negative social support conditions. By providing positive social support, a friend can approve of one's behavior (e.g., Mirande, 1968) while at the same time verifying one's self-views (Swann & Brown, 1990). Then, approval of behavior may also signal that it is normal and typical (e.g., Kinsman, Romer, Furstenberg, & Schwarz, 1998). The essence of ego support is to make the recipient feel good about self, and the validation is likely to encourage a college-aged individual to participate in behavior which may be problematic for his or her sexual health (e.g., Le Poire, 1994). For example, Mitchell (2001) found that individuals in happy moods are more likely to be persuaded by positive messages. In Mitchell's study, which involved seeking information about genital herpes, happy individuals did not feel as susceptible for genital herpes as sad ones. Although Mitchell did not have friends sending positive messages, receiving

positive support may make these college students vulnerable to the effects of a positive mood and/or validation of a positive behavior provided by the friend.

Social support may be an obligation or an expectation of a friend (Burleson & Samter, 1994; Youniss & Smollar, 1985); repeated opportunities for supportive interactions to occur can lead to the support being valued by college-aged individuals especially (Albrecht & Adelman, 1987). Emerging Adulthood provides young people with repeated opportunities to participate in new and more intimate forms of sexual behavior (Arnett, 2006a; Arnett, 2006c) that can make one feel a need for the advice and expertise of one's friends. Continued supportive encounters in response to one's sexual behavior are likely to make one feel good about him or herself, as well as provide more relational satisfaction in the friendship (Gable et al., 2006). These considerations led to the next hypothesis - - namely, that participants who perceived positive social support from a friend would have greater inclinations to seek the friend's advice in the future than individuals who perceive receiving negative social support (Hypothesis 2b; Main Effect).

The results supported this hypothesis. There was a moderate, positive association between perceptions of social support and intentions to seek friend's advice in the future. Participants in the positive social support conditions reported being more likely to continue to seek friend's advice in the future than those individuals in the negative support condition. A reason for this is that positive interactions provide a number of benefits for individuals and their friendship, including the promotion of interpersonal bonds (Baumeister & Leary, 1995). Positive supportive responses are also likely to communicate acceptance (Samter, 1994) and improve relational satisfaction (Gable et al., 2004). Ego supportive messages, as noted by the participants, are common, but, even

more, they are especially preferred by college students (Burleson & Samter, 1996). As with Mitchell's (2001) study, college students may be affected by positively framed messages, and the current findings indicate college-aged individuals will return for a friend's advice because of the positive nature of the relationship.

Combination of Anticipated Regret and Social Support

When one is engaged in making sex-related decisions, the experience of anticipated regret should, according to Zeelenberg and Pieters's (2007) regret regulation theory, lead the college-aged individual to choose the option with less risk. Janis and Mann (1977) suggested that significant relational partners provide assistance, especially when making tough decisions. Because friends in the role of consultants may be supportive or unsupportive (e.g., Burleson & Samter, 1996), either behavior in conjunction with anticipated regret would likely to affect one's intentions to participate in future risky sexual behavior. This led to a hypothesized interaction. It was expected that intention to engage in the sexual behavior in the scenario would depend on a combination of perceptions of anticipated regret (low or high) and perceptions of friend's social support (positive or negative) (Hypotheses 3a-3d; Interaction Effect). Specifically, (a) low anticipated regret/positive (encouraging) social support would be associated with strong inclinations for one to want to engage in behavior; (b) high anticipated regret/negative (discouraging) social support with low intentions to engage in the behavior; (c) high anticipated regret/positive social support with moderately strong intentions; and (d) low anticipated regret/negative social support also with moderately strong intentions.

In the case of conversations involving sex-related decisions, the function of social support may be to provide the college-aged individual with help while also showing acceptance, or even praise (Goldsmith, 1994). Sexual behavior is normative for college students (Collins & van Dulmen, 2006; Kinsman et al., 1998) and they have reported enjoying having these types of discussions with their friends (Lefkowitz et al., 2004). Consequently, because social support is contextual (Goldsmith, 2004), the expected response of the friend in positive discussions about sexual behavior is supportive, positive, and enthusiastic (Gable et al., 2006). Similarly, when people facing sex-related decisions are afraid, they may experience regret, and want their friends to respond in a way that discourages them (negative support) from going through with a more risky decision. The essential idea is that friends are there when you need them, in the way that you need them (e.g., Youniss & Smollar, 1985). Not everyone is skilled in providing the necessary support (Burleson, 1994; Burleson & Samter, 1995); however, and in some cases friends may communicate in an unsupportive way (e.g., Gable et al., 2004; Goldsmith, 2004). Hence, college-aged individual's intention to seek a friend's advice may depend on his or her experience of anticipated regret and the social support provided by that friend during the sexual decision conversation. This thinking was at the basis of the hypothesized interaction embodied in the study (Hypotheses 4a-4d; Interaction Effect): (a/b) both low anticipated regret/positive social support and high anticipated regret/negative social support would show strong intentions to seek friend's advice, and (c/d) both low anticipated regret/negative social support and high anticipated regret and positive social support would reveal weak intentions to seek a friend's advice.

For neither set of hypotheses did the expected interaction surface. A number of researchers have indicated that decisions, especially difficult ones, are made in consultation with significant others (Finken, 2005; Janis & Mann, 1977; Zeelenberg, 1999); however, the present findings suggest that, for college-aged individuals, the experience of anticipating regret may not coincide with friend's support.

There may be several reasons why the interactions did not emerge. First, anticipating regret may be more cognitive in nature than communicative (e.g., Landman, 1993; Zeelenberg 1999) when it comes to friendships. For example, looking to friends for assistance with the management of regret may be viewed as risky (Goldsmith & Parks, 1990). If college-aged individuals expect regret to result from a hook-up, their friends may view them as outside the norm, especially since hooking up is considered more typical (Bogle, 2008; Hughes et al., 2005; Paul, 2006). To maintain an allegiance to friends (e.g., Mirande, 1968; Teevan, 1972), one may think about regret alone to avoid problematic situations.

Second, college-aged individuals may believe they can make decisions on their own without the assistance of friends. Rawlins (1983) described one dialectic tension related to independence-dependence in friendship. In particular, friends should be there when they are needed, but then provide enough space for one to be independent. Certainly, a consistent need to seek out friends for help may undermine one's independence. Participants in this study noted that being in a relationship reduced the dependence on friends in making sex-related decisions, which suggests that the significance of friends ends when romantic partners become more prominent (Collins & van Dulmen, 2006). It is likely that when engaging in the sexual decision-making

process, single and nonsingle individuals have different procedures, with singles looking to friends more so than nonsingles.

Finally, it is also likely that the absence of interactions indicates that college students do not experience regret as substantially as indicated by previous studies (Oswalt et al., 2005; Richard et al., 1996). In fact, young people are not likely to see themselves as vulnerable to the consequences of their decisions as compared to adults (Fischhoff, Crowell, & Kipke, 1999), which may be a result of the optimism and sexual experimentation that marks Emerging Adulthood (Arnett, 2006a).

Overall, given these findings, it seems important to take a note of other findings related to positive social support conditions. In general, positive social support conditions showed evidence of lower anticipated regret across both dependent variables. Anticipated regret was always lowest in the low anticipated regret/positive social support condition. Moreover, as noted in Hypothesis 2a, intention to engage in the risky behavior was greater positive social support conditions, with the strongest intentions in the low anticipated regret/positive social support condition. Indeed, positive social support appears to be a critical factor in the sexual decision-making process, whether one is considering the intention to engage in risky behavior or to seek a friend's advice again in the future.

Summary

In conclusion, Study 3 was a test of the regret regulation theory (Zeelenberg & Pieters, 2007) as applied to sexual decision-making with a friend. In particular, the hypotheses tested the role of anticipated regret, friend's social support, and a combination of these levels (low/high anticipated regret and positive/negative social support)

regarding intentions to engage in risky sexual behavior and to seek a friend's advice about such matters in the future. The results indicated that although anticipated regret was a strong predictor of intention to engage in the behavior and friend's social support was a strong predictor of intention to seek the friend's advice in the future, the two factors did not interact. In general, positive social support conditions showed greater impact on the types of intentions and less evidence of anticipated regret. In addition, male participants showed intentions to engage in the behavior; female participants showed higher intentions to seek friend's advice in the future. Females, overall, reported higher levels of anticipated regret than their male counterparts. The next section highlights the sex differences from all three studies.

Sex Similarities and Differences

Across the three studies, the sex of the participant surfaced as a variable of interest. Open-ended responses (Study 1), assessments of typicality (Study 2), and sex as a covariate of dependent measures in analyses (Study 3) all point to the similarities and (potential) differences among male and female college-aged individuals. The following section provides a discussion of these similarities and differences.

Previous research involving same-sex friendships suggests that females and males communicate differently in their friendships (e.g., Wright, 1982). Most commonly, female friendships are defined through talk (Caldwell & Peplau, 1982), or typically face-to-face (Booth & Hess, 1974), whereas male friendships are defined in terms of the activities the parties share (Caldwell & Peplau, 1982; Youniss & Smollar, 1985), or considered side-by-side (Booth & Hess, 1974). Research in the areas of self-disclosure and social support provides further evidence for this contrast. In particular, females

reportedly self-disclose more intimate topics (Aries & Johnson, 1983; Cozby, 1973), and conceiving their friendships as more intimate (Winstead, 1986) than males. In addition, females are expected to provide more emotional social support, whereas males are expected to want to solve problems (Derlega, Barbee, & Winstead, 1994; Maltz & Borker, 1982).

On the other hand, there is a growing belief that sex difference effects between same-sex friendships (male versus female) are small (Wright, 1982; see also Canary & Hause, 1993). In fact, a meta-analysis of sex differences in self-disclosure revealed small effects which also depended on a number of other factors, such as topic, sex of the target, and sex role identity (Dindia & Allen, 1992). Possibly male and female friendships are even more similar than research suggests, in which both relationships are face-to-face and side-by-side, but perhaps follow a different “trajectory” (Wright, 1982). For example, both sexes value friendships highly by both sexes (Caldwell & Peplau, 1982), and both look for intimacy, acceptance, trust, and help (Sherrod, 1989). Research relating to social support has also revealed similarities in the types and amounts males and females provide (Goldsmith & Dun, 1997).

Study 1 revealed several gender-based similarity and differences worth noting. First, both females and males similarly reported speaking with their friends about sexual decisions and having the same reasons for consulting with them about decisions, including acquiring assistance and simply being part of the friendship. Despite the claims that males prefer to talk less about intimate topics (Aries & Johnson, 1983; Youniss & Smollar, 1985), the male participants in this study noted approaching sexual topics

considered intimate in nature; however, the level of depth in which they did was not determinant.

Second, the most typical sex-related decision participants discussed was “whether or not to” engage in certain types of risky sexual behaviors. This was consistent for both sexes. This finding suggests that both males and females are both more in tune with and in control of their sexual identities and behavior than in the past. The expectation was that females would remain virgins until marriage whereas the males had license to engage in premarital sex (e.g., Arnett, 2006c). Now, emerging adults are operating under the assumption that engaging in dating and sexual behavior will help them (both males and females) determine what type of partner they would like to marry some day (Arnett, 2006c). Although previous (heterosexual) dating procedures (i.e., courting) would suggest that the males have more liberties in initiating a relationship or in their sexual behavior than females (e.g., Bogle, 2008), there are particular types of sexual behavior that are considered normative and typical for all college-aged individuals (Bogle, 2008; Paul, 2006). Future research should explore the motivations of college-aged individuals for asking their friends about “whether or not to” decisions, as perhaps sexual identity has an impact. Bogle (2008) has suggested that males and females are seeking different things when participating in hook-ups. For example, reputations of the college-aged individuals may be central to whether or not one engage in a particular type of sexual behavior. Females may need to protect their reputations whereas males can build their reputation by hooking up. In such cases, females may seek assistance from their friends to determine whether they will appear to be promiscuous, in light of the fact that male

participants noted in open-ended responses that their friends helped them determine whether or not a female is “slutty.”

Relatedly, although the frequencies were small, females reported talking about sexual health more than males did. There were also differences in respect to sexual health topics. Females engaged in conversations about birth control and menstrual cycles, while male conversations concerning sexual health focused on how to diagnose which partners would be safe or risky (e.g., Williams et al., 1992). Rittenour and Booth-Butterfield (2006) asked college students to identify the health-related topics they discussed with their peers and reported that a large percentage of the sample spoke about condoms (81.8%), birth control (72.7%), and sexually transmitted diseases (55.0%). For this study, participants were not directed to focus specifically on health-related issues and therefore, the responses to open-ended items reflected the topics participants thought were more prevalent, or even more interesting, to their lives. Sexual topics should be examined to identify what messages friends communicated related to health-specific topics (e.g., condoms, birth control, etc.) as compared to behavior-focused topics (e.g., “whether or not to” decisions). Because friends are viewed and valued as sexual informational sources (Dickinson, 1978; Handelsman et al., 1987; Kallen et al., 1983; Spanier, 1977; Wilks, 1986), future research could focus on information exchange as related to decision-making and one’s health. For example, one female participant in Study 1 indicated she went to see a doctor after her friend provided her with a diagnosis, whereas a male participant in Study 3 described his friend as providing an alternative method for the morning after pill. The sources and types of information, then, may be critical to the decision-making process (Weiss, 2007).

Third, females and males both reported ego social support as the most frequent type of behavior their friends displayed. Participants offered detailed examples of support that encouraged them to participate in behavior and praised them for such interactions. Similarly, previous research indicated that college-aged individuals like affectively-oriented support like ego support from their friends (e.g., Burleson & Samter, 1990; Samter, 1994; Westmyer & Myers, 1996). In particular, a friend making a college-aged individual feel good about him or herself and his or her ability to achieve goals can also signal acceptance of this individual (Westmyer & Myers, 1996). By sharing positive experiences such as sexual conquests, college-aged individuals may enhance their closeness in and satisfaction with friendship as well (Gable et al., 2004). In fact, Burleson and Samter (1996) observed that those who are skilled in social support like to interact with and form friendships with others who have similar skills. Hence, skilled ego supporters will likely be friends with others who are skilled at ego support and, in turn, their supportive interactions will inherently be positive and reassuring (e.g., Samter, 1994).

Social support provided in the form of ego support to a college-aged individual from a friend should meet a few critical criteria. The social support must align with the stress one is experiencing, or the support is apt to be considered “unhelpful” (Cutrona, 1982). To assist with this determination, one should reflect on the situation in which the support is needed (Goldsmith, 2004) because some support may not be appropriate given the scenario. For example, friends may not want discouraging communication when the sexual behavior is typical (Bogle, 2008; Paul, 2006) or if they believe they are independent enough to make the choice themselves (Rawlins, 1983). In addition, the

social support provided should align with one's identity (Goldsmith 1994), or, in this case, sexual identity (e.g., Arnett, 2006a). Individuals are motivated to seek friends who support their positive self-views, in that a friend who provides ego support will reassure the college-aged individual that his or her decisions and behavior are acceptable (e.g., Swann, Pelham, & Krull, 1989). For example, sexual behavior and talk are considered positive (e.g., Gable et al, 2004) and, therefore, may call for positive feedback from a friend.

Receiving social support can make a college-aged individual feel good about him or herself as well as interpersonally accepted. Essentially, skilled ego supporters are maintain and enhance their friendships (Burleson & Samter, 1994), which promotes one's positive well-being (Cohen & McKay, 1984). Yet, there may be a double bind with such support. One can feel good about one's self and one's friendships, but also be encouraged to engage in sexual behavior that could be potentially damaging to his or her health.

Females reported receiving more emotional social support from friends than did the male participants. Emotional social support entails communicating care, affection, and interest (e.g., Albrecht & Adelman, 1987). For these studies, support was categorized as emotional if responses reflected "being there," listening, being non-judgmental, and being understanding. However, perhaps these expressions of emotional social support were narrow. Burleson (1994) suggested a larger construct that could also encompass expressions of esteem support. By acting in line with Burleson's view, then, both females and males in these studies would have similar reports of social support. Still, males communicated less of the smaller category of emotional social support.

There is extensive research concerning sex differences in social support (e.g., Barbee et al., 1990; Burleson, 1982; Kunkel & Burleson, 1999; MacGeorge, Graves, Feng, Gillihan, & Burleson, 2004). Specifically, both females and males presumably prefer emotional support from a female friend (Winstead, 1986), and both indicated that a female providing insensitive support is a violation the feminine sex role and the role of a friend (Holmstrom et al., 2005). Overall, the research has suggested that females are both more skilled in crafting emotionally supportive messages and more likely to communicate social support than males (Kunkel & Burleson, 1999). Although females and males both value and are able to assess the effectiveness of social support, the main reason for differences appears to be skill, or the ability to communicate social support (MacGeorge et al., 2004).

Similarly, open-ended responses suggested that the male participants (both in Study 1 and 3) were less likely to receive, or perceive receiving, less emotional social support than females. There may be a number of reasons why males do not as frequently receive the amount of emotional social support from their same-sex friends that females do. Perhaps males find seeking social support to be more risky than female college-aged individuals do. As Goldsmith and Parks (1990) noted, seeking support from a friend can be risky for a number of reasons, including negative impressions or stigma and violation of confidentiality. If emotional social support is something we perceive as a female skill, then, a college-aged male seeking such support from a male friend may result in negative responses. For example, college-aged individuals prefer speaking with their same-sex friends as compared to other relationships; however, with relational issues, males may expect negative support from their male friends (Barbee et al., 1990). In addition,

seeking support “in a time of need” suggests there may be a stress or crisis, but for males, sexual interactions and decisions may not provide a threatening situation (e.g., Cohen & McKay, 1984) because the normality of sexual behavior has decreased the need for college-aged individuals to be anxious about sex (Arnett, 2006c). Furthermore, males’ sex-related goals are often considered to be “recreational” or casual (Arnett, 2006c; Bogle, 2008), which may suggest either that these individuals have enough experience and, therefore, do not need help from a friend or that ego support is the appropriate response for this particular situation (e.g., Goldsmith, 1994). MacGeorge et al. (2004) suggested that females and males are similar in the types of support communicated, but any differences in the quality of communicated support still need to be explicated.

Implications

The research reported in this dissertation made three contributions to the field of communication and sexuality research: (a) it provided an initial test of Zeelenberg and Pieters’s regret regulation theory; (b) it extended research on communication among friends, as well as sexual communication and social support within friendships; and (c) it generated data useful for designing and developing sexual-risk prevention programs.

First, this dissertation provides an initial test of the regret regulation theory (Zeelenberg & Pieters, 2007) by extending the theory’s predictions to interpersonal decision-making. Studies of sexuality are primarily atheoretical (Davis, 1974); thus, the application of the regret regulation theory to the sexual communication among friends extended theory application and theory testing. Davis noted that sexuality research has been mostly descriptive in nature; yet continued theory testing may yield new insights into the sexual decisions of young people most at-risk for unintended pregnancies and

STIs. Regret regulation theory offers a unique way to understand risky decision-making in interpersonal relationships as well as to encourage the testing of other theories. The researchers most associated with regret regulation theory are in social psychology, economics, and marketing, and tend to focus on the decisions individuals make related to such matters as purchasing lottery tickets. By reviewing the work of theorists in other fields, researchers may find a wide range of theories available to test within friendships and other significant types of relationships.

The findings from the present research suggest the regret regulation theory may not completely capture the sexual decision-making process of college students. The findings did not show support for the social aspect of decision-making (e.g., Janis & Mann, 1977), but a number of additional questions or factors bearing on sex-related decision-making arose that may provide to be critical for further testing and extension of the theory (Zeelenberg & Pieters, 2007). The main assumptions will be discussed in line with the findings of the present studies.

The theory assumes that regret is a negative experience that causes distress for most individuals (Zeelenberg & Pieters, 2007). In addition, it posits that anticipated regret is an evaluative tool people use during the decision-making process to avoid negative outcomes (Baumeister et al., 2006; Janis & Mann, 1977). The initial manipulations of the scenario did not lead to evidence of anticipated regret experiences for the college-aged participants suggesting that anticipating regret may not be critical to the sexual decision-making process.³ Caffray and Schneider (2000) determine that young

³ The Limitations section will address other concerns impacting the role of anticipated regret in college-aged individuals' sexual decision-making process.

people with less sexual experience spent more time anticipating regret than those individuals with more experience. The sample for this study included individuals who primarily were involved in sexual behavior. In line with Caffray and Schneider's study, it is likely that majority of the sample, due to their sexual experience, did not need to anticipate regret when deciding whether or not to engage in a hook-up; in fact, experienced individuals may have found other ways in which to reduce or avoid their experience of regret. Thus, when using regret regulation theory to explore the process of sexual decision-making, the inclusion of sexual experience as an influential factor may be necessary.

Furthermore, participants' views of anticipated regret may imply that the sexual behavior described in the hypothetical scenarios was not something participants viewed as risky enough to induce anticipated regret or regret. Oswald et al. (2005) identified a number of events that led to sexual regret in college students, yet hooking up may be too typical and common for young people to view as producing negative outcomes (e.g., Bogle, 2008; Collins & van Dulmen, 2006; Kinsman et al., 1998). The intensity of one's regret experience may vary (e.g., Beike, Markman, & Karadogan, 2009), but even more, individuals may actually appreciate their regretful experiences (Saffrey et al., 2008), which may influence how participants view potentially regretful scenarios. Saffrey et al. noted that participants viewed regret as a valuable, favorable, and beneficial emotion, specifically, because the experience served an important function. For example, participants noted that regret helped them make sense of events, avoid mistakes, and prepare for future events. Individuals who value regretful situations, may not take the time before making a decision to assess the regret they would experience. Obviously,

individual differences, such as the function of emotion, may also impact the regret regulation process (Zeelenberg & Pieters, 2007).

Further research is necessary to explicate the experience of sexual decision-making and the sexual behavior and events that produce regret. For example, potentially regrettable sexual events include being pressured by a partner, having sex without a condom, and having sex under the influence of alcohol (Oswalt et al., 2005). These events are likely to occur infrequently while hooking up may take place often in college students' lives. In terms of sexual decision-making, there may be more than one process - one that takes place *after* a regretful event has occurred (e.g., sex without a condom), one that takes place *before* sexual events occur (e.g., sex for the first time in a new relationship), and one that takes place *as the sexual event is occurring* (e.g., a hook-up). Open-ended responses concerning the types of sexual decisions made with the help of friends provide evidence of different decision-making processes occurring. For example, the most common scenario was the hook-up reflected in the hypothetical scenarios used for Study 3. Other less frequently reported scenarios entailed needing a friend's help *after* sex had occurred (e.g., pregnancy scare) or the continued conversations that occurred up until sex was initiated in a romantic relationship. Regret regulation theory holds that regret can occur over past scenarios or future scenarios (as tested in this dissertation); thus, more tests seem to be necessary to determine which ones reflect the decision-making process of college-aged individuals. Certainly, preventive programs and messages could benefit from the determination of which process college students are engaged.

In creating new conditions based on perceptions of anticipated regret, the research for this dissertation did uncover support the notion that anticipating regret delays making decisions (Baumeister et al., 2006) that would be regretful. Specifically, anticipated regret was found to be a strong predictor of intentions to participate in behavior. That is, participants in the high anticipated regret grouping (i.e., saw the hook-up as potential regret inducing decision) reported lower intentions to participate in the hook-up. Although this finding constitutes evidence that individuals use anticipated regret as an evaluative tool for post-decisional feelings, it does not view regret regulation as a social activity. This initial test of the regret regulation theory in friendships is rooted in the suggestion that difficult decisions may require the help of significant others (Janis & Mann, 1977; Zeelenberg; 1999). The results of Study 3 may suggest that anticipating regret is not a “social” activity or nor an activity that college-aged individuals participate in and, therefore, does not provide support for the social lens offered by the theory.

Feedback is essential to anticipating regret (Zeelenberg & Beattie, 1997). When one receives feedback about available options, he or she can determine what decision option promotes the most regret-averse decision (Zeelenberg & Pieters, 2007). Furthermore, according to Zeelenberg et al. (1996), feedback can promote both risk-averse and risk-seeking choices. In the scenarios, the participants imagine themselves receiving positive or negative social support from the friend as feedback for their sex-related decision. The findings suggest that college-aged individuals prefer positive support from their same-sex friends when having conversations concerning sex-related decisions, but they did not have feedback for all options. For example, participants were either encouraged or discouraged to engage in a hook-up.

Although the current results did not provide full support for the assumptions of the regret regulation theory, they are encouraging for continued testing of the theory. In fact, past sexual experience, intensity of the regret experience, function of a regretful encounter, sexual behavior that produces regret, timing of decision-making and regret, and the feedback from friends all leads to interesting possibilities for furthering our understanding of the sexual decision-making process and the experience of regulating regret.

Second, the dissertation extends research relating to communication among friends in its focus on the sex-related communication and social support in friendships. Friends have a positive impact on one's well-being (Cohen & McKay, 1984), and although friendships change throughout the lifespan (Hartup & Stevens, 1997), they are particularly critical during adolescence and emerging adulthood (Collins & van Dulmen, 2006). In particular, the interactions with same-sex friends provide the necessary development of skills and experience in social behavior (Berndt, 1982). For example, same-sex friendships are viewed as helping prepare for adult relationships, including those with romantic partners (Blieszner & Roberto, 2004). This period is short-lived, however, as the transition to romantic relationships and marriage can also ignite a transition away from friends' dominance (Collins & van Dulmen, 2006; Collins & Laursen, 2004).

Despite the importance of developing communication and relational skills through interactions with same-sex friends during this time, studies of sex-related communication among friends are limited (Halpern-Felsher et al., 2004; Holtzman & Robinson, 1995; Lefkowitz et al., 2004). The present inquiry provides much needed information on the

sexual conversations friends have and the role communication plays in making sexual decisions. Participants noting a high frequency of conversations about sex with friends indicated they wanted the friends' help - a finding that suggests a communication phenomenon that may occur differently within this significant relationship than with family members (e.g., Rozema, 1986) and romantic partners (e.g., Pliskin, 1997). Clearly, the functional approach to friendship applied to sexual communication about sex-related decisions suggests that friends are valued and expected communicative partners (e.g., Burleson, 1995; Burleson & Samter, 1994). In addition, participants reported the supportive communication received from their friends during these interactions mostly in the form of esteem, informational, and emotional messages.

Conclusions concerning peer influence often derive from significant correlations between participants' sexual behavior and reports of peers' sexual behaviors (Berndt, 1996). Such correlations may be attributable to the selection of friends who have similar beliefs and values that contribute to a "co-occurrence of risk behavior" (Jaccard et al., 2005). By moving beyond simple correlations and global measures of communication (Lefkowitz, 2002), the influence of consultants, such as friends, can perhaps be better understood (Finken, 2005), as it leads to more specific insights into the decision-making process of young people (Halpern-Felsher et al., 2004).

Third, understanding the role of friendship support in risky sex-related decision making may lead to the design and development of programs related to communication as a preventive measure. Engaging in safer-sex practices, such as using contraceptives, we know, can assist in decreasing the risk of STIs and unintended pregnancies (e.g., Coleman & Ingham, 1999). Often communication serves as a preventive measure, but

individuals often do not have the strategies necessary to profit from it (Powell & Segrin, 2004). In line with this point, some research has revealed that sex-related communication between romantic partners is minimal (Cleary et al. 2002; Cline et al., 1990; Cline et al., 1992). On the other hand, Powell and Segrin (2004) noted that individuals who have spoken to family members or friends, are more likely to talk about sex with current romantic partners, yet the friends may not have the necessary information to exchange (Handelsman et al., 1987). It will be useful to identify the extent of influence friends may have in one's sex-related decisions, the types of support that enable or encourage risky sexual behavior, and the behavior friends enact during conversations about sex. The results could provide greater insight into how individuals to skillfully support their friends and promote healthy lifestyles.

Overall, the research for this dissertation has made several contributions to existing scholarship in the areas of both communication and sexuality. The initial test of the regret regulation theory offers new ways in which to view interpersonal relationships. Focusing on college-aged friendships offers an important way to consider the factors contributing to the risky sexual behavior that plagues this age group and to gain new insights into this understudied, yet important relationship. The use of open-ended questions provides a way to obtain richer data concerning the sexual experiences of college-aged individuals, and using hypothetical scenarios offers a vehicle by which one can address phenomena that are private and difficult to observe in other venues. Finally, the results of the study emphasize the importance of exploring the ways communication among friends may hinder one from leading a healthy sexual life. Despite

its contributions, there were limitations of the research requiring mentioning suggestions for avoiding them in the future inquiries.

Limitations

All three samples ($N = 785$), although representative of the university in which the data were collected, were largely homogeneous in terms of ethnicity, sexuality, self-reports of sexual experience, and enrollment in communication classes, all of which raises concerns about the generalizability of the results. The experiences of these college students may be unrepresentative in a university with particular demographic, geographic, and social factors playing a role in the commonplace of hook-ups, sexual decision-making, and conversations with friends about sex, especially risky forms. Further research across a number of campuses could help illuminate the matter.

Such breadth could be of help; however, Lefkowitz and Gillen (2006) point out what is known about sexuality and emerging adults comes from studies conducted within the constraints of a university setting. Rates of unintended pregnancies and exposure to STIs span the life stages of both adolescence and emerging adulthood and point to a health crisis prevalent among a group larger than just college students. The findings from studies of sexuality and sexual behavior might be the result of the “college effect” (Mirande, 1968), in that a young person’s isolation from parental supervision and familial ties places a strong importance on friends as a point of reference about sexuality. By sampling non-college students, researchers could begin to understand better the sexual

behavior of those most at-risk for pregnancy and STIs as a developmental issue, whether impacted by the experience of college, or perhaps by some other unknown factor.

A conscious effort to recruit from diverse populations can yield broader research results concerning the sex-related decisions young people make. Two characteristics of particular concern are ethnicity and sexual orientation. According to Lefkowitz and Gillen (2006), the majority of studies have focused on young white students, whose responses may not necessarily reflect the sexual attitudes, behavior, and decisions of young people from other ethnic backgrounds. Also of significance is that a heterosexual focus in studies of sexuality neglects the young people who are curious or uncertain about their sexuality, as well as those who identify themselves as bisexual, gay, or lesbian. One of the main defining features of emerging adulthood is the exploration of identity that takes place. Part of clarifying one's sexual identity may entail making in difficult decisions, such as whether to "come out" or to experiment (e.g., Arnett, 2000a). Non-heterosexuals may have experiences similar to or different from their heterosexual peers. The inclusion of them in research like that reported herein could be of considerable value.

A second limitation involved the reliance on self-reports which also throw generalizability of the dissertation's results into question. Survey methodology is frequently used and recommended in research about sexual behavior. Fowler (2002) noted surveys can increase the response rate for matters that may be embarrassing, or address socially undesirable questions related to sexuality (Johnson & Delamater, 1976; Sprecher & McKinney, 1993). For instance, Catania et al. (1986) observed that participants were more comfortable responding to sex-related items in a survey format rather than in an interview format. Hence, the likelihood of obtaining a good quantity of

information about young people's sexual behavior, decisions, and conversations is expectedly higher when using a survey.

On the other hand, although surveys may provide a protective and private environment in which participants can share their sexual experiences, they have a number of disadvantages. The main concern with survey research is the accuracy of the participants' recall and reporting of sexual behavior and experiences. For example, in the research for this dissertation, some participants indicated that they had not had conversations about sex-related decisions with their friends, yet went on to describe at least one or more instances of such conversations. Perhaps the conversations actually occurred so infrequently (or so frequently) that recalling specific decisions they made in consultation was a problem for participants. Previous research has fostered debate about participants' ability to recall sexual experience (Jaccard et al., 2005; Spanier, 1977; Wiederman, 2004), which may also apply to the recollection of conversations concerning sex. In some cases, participants with little sexual experience appear to be more accurate in recalling sexual behavior since the events have not occurred frequently, whereas more experienced individuals blur their experiences and estimate in incremental quantities (Wiederman, 2004). The majority of the sample had engaged in sexual intercourse, and perhaps both the behavior and their conversations about it occur frequently enough for them to have confused which decisions they made alone, with a romantic partner, or with a friend. Perhaps, then, participants assumed they did not make decisions with their friends. On the other hand, others have argued that sexual experience is salient and can be recalled with ease (Spanier, 1977). In this case, perhaps as participants responded to the surveys, the specific questions may have triggered experiences, they were then able to

recall the times they turned to their friends for help. It is significant to note that participating in research are likely to underreport (women) or overreport (men) sexual behavior (Catania, Binson, Canchola, Pollack, Hauck, & Coates, 1996)

A third study limitation of the research involved the use of hypothetical situations. There are advantages to having participants review hypothetical scenarios, yet the inclusion of such scenarios in research may also pose difficulties for generalizing findings. The sex-related conversations and decisions of college-aged individuals are private and may occur infrequently, as well as in settings that a researcher cannot create practically or ethically in a lab. Hypothetical scenarios provide a venue to ask questions about phenomena that occur outside the realm of other research methodology. Oswalt et al. (2005) have called for more research concerning future regrets, and certainly, the use of hypothetical scenarios allows for assessment of particular events about which it would otherwise be difficult to acquire information.

On the other hand, scenarios of the type involved in the present research may not completely tap into the world of the participants. The ones of interest have been typical and relationally important to some participants, whereas others may not be able to relate to them at all. In Study 2 and Study 3, the participants reported their intentions to engage in risky forms of sexual behavior and to seek advice concerning anticipated regret. Anticipating an emotion or hypothesizing what one would do in a particular situation may not match one's actual behavior at, say, a party and interacting with a potential hook-up. Some participants indicated they would *not* engage in the hook-up described in the scenario. What could be missing from the scenarios were the aspects of attraction to the hook-up partner and arousal. In one study, Ariely and Lowenstein (2006) determined

that male college students responded to sexual decisions differently when in an aroused-state than when not. Although college-aged individuals may report not engaging in specific types of sexual behavior after reviewing a hypothetical scenario, there could be particular aspects of an actual encounter that would likely have further impact on their intentions to enact a particular form of a behavior and, in turn, what one actually does.

In overcoming the limitations of this methodology, longitudinal research may enable researchers to parcel out participants' intentions to engage in behavior, their actual behavior, and their post-decisional feelings of regret. Diary studies would allow for the participants to describe the sexual decisions as they surface and to indicate the frequency of sexual decision conversations with their friends, their intentions to engage in specific behavior, the decisions they actually make, their feelings post decision-making, and their feelings about the assistance from their friends. Furthermore, because longitudinal methodology provides the opportunity to assess behavior over time, researchers can map out behavior change. Richard et al. (1996) determined that individuals anticipating regret after an unsafe sexual encounter increased their intentions to engage in preventive behavior. The individuals first participated in a study exploring their anticipated feelings concerning sexual behavior and their intentions to reduce future risk. Five months later, they reported engaging in less risky behavior. Indeed, time-sensitive research may allow the researcher to capture not only the participants' intentions, but also their actual behavior.

An additional aspect of the scenarios in the research for Study 3 is that they did not produce the intended effects. The levels of anticipated regret (low and high) and friend's social support (positive and negative) were manipulated; however, participants

viewed both low and high anticipated regret scenarios similarly. New groupings were created with the existing measures of perceptions of anticipated regret and perceptions of friend's support. Regardless of the original assignment to conditions, the absence of the perceptions in line with manipulations raises the question: Why would college-aged individuals view the different scenarios in similar ways?

To begin, the scenarios intended to manipulate positive and negative friend's social support, but it was discovered that encouragement and discouragement may have instead been manipulated. The scenarios incorporated the terminology of encouragement and discouragement concerning the sexual behavior (i.e., the friend encouraged or discouraged sexual behavior), or the hook-up, as a way to assess valence of social support perceived by the participants. However, reported scores for social support showed no significant differences between positive (or encouragement of sexual behavior) and negative (or discouragement of sexual behavior) scenarios, which suggests that support participants "felt" from the friend may have been different from the support that was intended to emerge from the manipulations. For example, support provided by friends may be an *expected* behavior no matter what a participant's decision was (engaging in the hook-up or not engaging in the hook-up) (e.g., Burleson, 1995; Burleson & Samter, 1994), hence, similar scores of perceptions of social support valence. Yet, it may be the case that friends are supportive of decisions, no matter what they are, but that encouragement is an influencing factor in emerging adults engaging in risky sexual behavior. Future research should explicate the differences between social support and encouragement as well as continue examination of the role friend encouragement may have in risky sexual decision making.

Furthermore, the manipulations of the scenario may not have been compelling enough for the participants to anticipate regret in the ways envisioned. Further testing of typical scenarios depicting sexual decision conversations with friends may reveal what types of scenario manipulations would be most likely to have the intended effects on participants' perceptions. It is also important to explore college-aged individuals' actual experiences with regret and anticipated regret. Oswalt et al. (2005) uncovered a number of regretful sexual encounters college students reportedly experienced, but little concerning how frequently and/or intensely.

Although regret regulation theory assumes that individuals experience regret and will use it as a basis for avoiding a negative experience, one must be familiar with the emotion of regret to be able to regulate the experience. In the present inquiries, the participants' ability (or inability) to experience and label regret may have played a role in their ability to distinguish differences in the two anticipated regret scenarios. Previous research has suggested that the experience of regret is age-specific (Jokisaari, 2004; Wrosch & Heckhausen, 1999) and, thus, a matter of development. Nurmi (1992) suggested that individuals have differing concerns that reflect their specific life stage. Young people's regrets often relate to relationships (Jokisaari, 2003) and align with the sheer amount of relationships young people have (e.g., West, Anderson, & Duck, 1996), as well as the time they spend with friends and romantic partners (Colins & van Dulmen, 2006). Yet younger participants, as compared to older ones, perceived their regrets as both "changeable and controllable" (Jokisaari, 2003, p. 497). If college students believe they are in control of their sexual decisions and the potential outcomes, it is likely they would not use anticipated regret to evaluate the negative consequences of their behavior.

Emerging adults, especially those in college, are balancing new freedoms with the process of identity exploration and new relationships (Arnett, 2000; Arnett, 2006a; Arnett, 2006c). Often, college life provides individuals with their first experiences with sexual intercourse and romantic intimacy (Arnett, 2006a). Through sexual experiences, they come to learn what kind of partner they would like to marry “eventually” (Arnett, 2006c). Behavior such as hook-ups, friends-with-benefits, premarital sex, and casual sex have all become normative for young people, especially those on college campuses (Bogle, 2008; Collins & van Dulmen, 2006; Hughes et al., 2005; Kinsman et al., 1998; Lefkowitz & Gillen, 2006; Paul, 2006). Over time, social norms have changed and paved the way for new sexual opportunities and the acceptance of previously taboo behavior (Arnett, 2006c). Today’s college students are in what Bogle (2008) labels a “hooking up era.” Together, the increased freedom to engage in behavior of one’s own volition without parental pressure and supervision added to the normalcy of behavior within one’s social environment provide a strong indication that current college-aged individuals would not view a hook-up at a party as potentially anxious-inducing or potentially regrettable (e.g., Arnett, 2006c).

Beyond that, college-aged individuals may fall victim to a view of the risks of sexual behavior that is misleading and possibly even dangerous. In general, college students perceive their peers to be more at-risk for the consequences of sexual decisions than they do themselves (Agostinelli & Seal, 1998). The participants in Agostinelli and Seal’s study perceived “typical” college students to be the most at-risk, followed by their friends, and, finally, themselves. In line with this finding, Oswalt et al. (2005) noted that college students do not anticipate experiencing regret related to getting pregnant or

contracting an STI. Certainly, if college students do not perceive possible negative outcomes resulting from their sexual behavior, they will not experience anticipated regret when making sexual decisions. Teevan (1972) also discovered that college students were likely to participate in sex if they perceived their friends as having a healthy sex life. This view of peer behavior creates the sense that sexual behavior is normal and frequent (Kinsman et al., 1998). If college-aged students see their friends participating in hook-ups frequently, they may also consider engaging in the same behavior because its incidence may also indicate its acceptability.

Directions for Future Research

In the research for this dissertation, it was clear that a large number of college students discuss sexual decisions with their friends. Although friends appear not to have much impact on the level of anticipated regret one experiences, the positive support they provide does appear to influence the likelihood of engaging in sexual behavior and the intention to continue seeking the friend's advice. In addition, sex differences surfaced in respect to these dependent variables. The results suggest a need for future research to explicate the complex issues of sex-related decision-making, friendship, social support, and the methodology.

The research for the dissertation was an initial testing of the regret regulation theory and its utility in explaining and predicting college-aged individuals' behavioral intentions in respect to decisions involving risky sexual behavior. This test indicated that the regret regulation theory may not be useful in accounting for communication experiences of young people when they turn to others for assistance. Further testing of the theory may provide an enhanced and improved view of the process of regulating

regret in consultation with friends. Other theories may also prove useful in gaining an understanding of sexual decision-making and friendship support; for example, inconsistent nurturing for control (Le Poiré, 1994) may further extend the idea that friends, through positive support, affect the likelihood of young people's engaging in risky behavior. Additional research should focus on young people's experience with regret. Oswalt et al. (2005) identified five categories of sexual regrets among college students; however, little is known about the frequency of regret, its intensity, how regrettable experiences play into future sexual interactions, or the impact of the interaction on one's well-being.

Second, additional research should focus on the process of sexual decision-making. In the present research, college-aged individuals consulted with friends about their sex-related decisions. What remained unclear was the order in which these events occur. For example, some participants noted that their friends were there *after* a decision was made and the friend's role was making them feel better about the situation and themselves. Previous research has revealed a wide-range of sex-related topics friends discuss, ranging from pleasurable matters (Lucas, 2007) to serious, health-related ones (Rittenour & Booth-Butterfield, 2006). There may be different processes that occur in the decisions involved and discussions relating to them. Hook-ups may be viewed as enjoyable experiences and the decision to go forth with the encounter, as described by participants, takes place quickly, possibly under the influence of alcohol, at a party while interacting with a potential partner. On the other hand, a pregnancy scare presents itself in the aftermath of enacted sexual behavior and may include a series of long, emotional discussions concerning how to tell the partner and whether or not to have an abortion.

The present work has barely touched on the variety of sex-related decisions that young people face, when they take place, who is involved, what types of support or response leads to what decision options, how everyday sex talk might turn into “supportive” communication enabling certain behavioral decisions, and who might be more prone to asking friends for helping making such decisions. Certainly, this area seems fruitful for future research when one is considering the extent of consequences that may acquire from one’s sex-related decision-making, which can range from the obvious health concerns to ones about relational threats.

Third, future research should have as one aim resolving the debate involving friendship influence versus friendship selection. Do friends influence college-aged individuals, or do young people select friends who engage in similar sexual behavior? A common finding is that peers or friends influence young people’s behavior (Halpern-Felsher et al., 2004; Mirande, 1968; Smith, Udry, & Morris, 1985; Schulz, Bohrnstedt, & Evans, 1977). Jaccard et al. (2005), however, have suggested that the influence of friends on sexual behavior is not as critical as these studies can lead one to believe. In fact, others note the friendship selection explanation as the more accurate in accounting for “influence” (e.g., Cohen, 1983). Maxwell (2002) noted that participants may overestimate their friends’ behavior by projecting their own behavior onto it. In this way, the young people may select friends similar to them in respect to attitudes and behavior. Thus, the “influence” may actually highlight the voluntary nature of friendships, in that people can select friends with whom to spend time. To determine whether or not influence or selection is confounding research results, Urberg, Degirmencioglu and Pilgrim (1997) called for the collection of longitudinal data with individuals in already

existing friendships and examining only new behavior that surfaces in the relationship. Longitudinal research is purportedly the best approach to examining friendship influence (Billy & Udry, 1985) because over time researchers can determine a baseline of behavior, factors involved in the selection of friends, and changes in behavior.

Fourth, the sex differences emerging in the current project bring to light another need for additional research. Male participants appeared to have a more difficult time completing the survey than did their female counterparts. Specifically, the responses of the male participants indicated problems with reflecting on a friend of the same gender. Their issues were rooted in the definition of “same-sex” and “friend.” Although in the instructions, the participants were informed that “same-sex” referred to the gender of the friend, not to their friend’s sexuality, a number of male participants responded in a way that suggested their masculinity or heterosexuality was in question. In addition, a number of male participants noted that they do not use the term “friend” to describe such individuals. Focus groups comprised of college-aged males might lead to improvement in the terminology in the research materials and, in turn, perhaps create a more comfortable environment for individuals to participate in studies related to sexuality and friendship.

Finally, the open-ended data suggested that males communicate about sex differently with their friends than females do. Quantitatively, both sexes reported equally seeking friends for assistance with sexual decisions; however, there appeared to be some qualitative differences. In particular, if males spoke to their friends about sex, they predominantly did so in respect to *whether or not to* decisions and received ego support. Future studies should focus on the types of specific messages that friends exchange as a way to further examine these differences. When thinking of prevention, it may be critical

that young male and female college students may relate better to and respond to completely different messages related to sex.

REFERENCES

- Afifi, W. A., & Weiner, J. L. (2006). Seeking information about sexual health: Applying the theory of motivated information management. *Human Communication Research, 32*, 35-57.
- Adelman, M. B., Parks, M. R., & Albrecht, T. L. (1987). Supporting friends in need. In T. L. Albrecht & M. B. Adelman (Eds.), *Communicating social support* (pp. 105-125). Newbury Park, CA: Sage.
- Agostinelli, G., & Seal, D. W. (1998). Social comparisons of one's own with others' attitudes toward casual and responsible sex. *Journal of Applied Social Psychology, 28*, 845-860.
- Albrecht, T. L., & Adelman, M. B. (1987). *Communicating social support*. Newbury Park, CA: Sage.
- American Cancer Society (2008). *Overview: Cervical cancer*. Retrieved June 23, 2009, from http://www.cancer.org/docroot/CRI/CRI_2_1x.asp?rnav=criov&dt=8
- Argyle, M., & Henderson, M. (1985). *The anatomy of relationships and the rules and skills needed to manage them successfully*. London: Heinemann.
- Ariely, D., & Lowenstein, G. (2006). The heat of the moment: The effect of sexual arousal on sexual decision making. *Journal of Behavioral Decision Making, 19*, 87-98.
- Aries, E. J., & Johnson, F. L. (1983). Close friendship in adulthood: Conversational content between same-sex friends. *Sex Roles, 9*, 1183-1196.

- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55, 469-480.
- Arnett, J. J. (2006a). Emerging adulthood: Understanding the new way of coming of age. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in 21st century* (pp. 3-19). Washington, DC: American Psychological Association.
- Arnett, J. J. (2006b). The psychology of emerging adulthood: What is known, and what remains to be known? In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in 21st century* (pp. 303-330). Washington, DC: American Psychological Association.
- Arnett, J. J. (2006c). *Emerging adulthood: The winding road from late teens through the twenties*. New York: Oxford University Press.
- Barbee, A. P., Rowatt, T. L., & Cunningham, M. R. (1998). When a friend is in need: Feelings about seeking, giving, and receiving social support. In P. A. Andersen & L. K. Guerrero (Eds.), *Handbook of communication and emotion: Research, theory, application, and contexts*. (pp. 281-301). New York: Academic Press.
- Barbee, A. P., Gulley, M. R., & Cunningham, M. R. (1990). Support seeking in personal relationships. *Journal of Social & Personal Relationships*, 7, 531-540.
- Barnes, M. K., & Duck, S. (1994). Everyday communicative contexts for social support. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 175-194). Thousand Oaks, CA: Sage.

- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2006). Emotional influences on decision making. In A.W. Kruglanski, J. P. Forgas (Series Eds.), & J. P. Forgas (Vol. Ed.), *Affect in social thinking and behavior: Sydney Symposium of Social Psychology* (Vol. 3, pp. 143-175). New York: Psychology Press.
- Beike, D. R., Markman, K. D., & Karadogan, F. (2009). What we regret most are lost opportunities: A theory of regret intensity. *Personality and Social Psychology Bulletin*, 35, 385-397.
- Bell, D. E. (1982). Regret in decision making under uncertainty. *Operations Research*, 30, 961-981.
- Berndt, T. J. (1982). The features and effects of friendship in early adolescence. *Child Development*, 53, 1447-1460.
- Berndt, T. (1996). Transitions in friendship and friends' influence. In J. Grabner, J. Brooks-Gunn, & A. Peterson (Eds.), *Transitions through adolescence: Interpersonal dimensions and contexts* (pp. 57-84). Mahwah, NJ: Erlbaum.
- Billy, J. O. G., & Udry, J. R. (1985). Patterns of adolescent friendship and effects on sexual behavior. *Social Psychology Quarterly*, 48, 27-41.
- Bogle, K. A. (2008). *Hooking up: Sex, dating, and relationships on campus*. New York: New York University Press.

- Blieszner, R., & Roberto, K. A. (2004). Friendship across the life span: Reciprocity in individual and relationship development. In F. R. Lang & K. L. Fingerman (Eds.), *Growing together: Personal relationships across the lifespan* (pp. 159-182).
- Booth, A., & Hess, E. (1974). Cross-sex friendship. *The Journal of Marriage and the Family*, 36, 38-47.
- Brooks-Gunn, J., & Furstenberg, F. F. (1989). Adolescent sexual behavior. *American Psychologist*, 44, 249-257.
- Bukowski, W. M., Newcomb, A. F., & Hoza, B. (1987). Friendship conceptions among early adolescents: A longitudinal study of stability and change. *Journal of Early Adolescence*, 7, 143-152.
- Burleson, B. R. (1982). The development of comforting communication skills in childhood and adolescence. *Child Development*, 53, 1578-1588.
- Burleson, B. R. (1995). Personal relationships as a skilled accomplishment. *Journal of Social and Personal Relationships*, 12, 575-581.
- Burleson, B. R., & Samter, W. (1990). Effects of cognitive complexity on the perceived importance of communication skills in friends. *Communication Research*, 17, 165-182.
- Burleson, B. R., & Samter, W. (1994). A social skills approach to relationship maintenance: How individual differences in communication skills affect the achievement of relationship functions. In D. J. Canary & L. Stafford (Eds.), *Communication and relational maintenance* (pp. 61-90). San Diego, CA: Academic Press.

- Burleson, B. R., & Samter, W. (1996). Similarity in the communication skills of young adults: Foundations of attraction, friendship, and relationship satisfaction. *Communication Reports, 9*, 125-139.
- Burleson, B. R., Samter, W., & Lucchetti, A. E. (1992). Similarity in communication values as a predictor of friendship choices: Studies of friends and best friends. *Southern Communication Journal, 57*, 260-276.
- Button, L. (1979). Friendship patterns. *Journal of Adolescence, 2*, 187-199.
- Caffray, C. M., & Schneider, S. L. (2000). Why do they do it? Affective motivators in adolescents' decisions to participate in risk behaviors. *Cognition & Emotion, 14*, 543-576.
- Caldwell, M. A., & Peplau, L. A. (1982). Sex differences in same-sex friendship. *Sex Roles, 8*, 721-732.
- Canary, D. J., & Hause, K. S. (1993). Is there any reason to research sex differences in communication? *Communication Quarterly, 41*, 129-144.
- Catania, J. A., Binson, D., Canchola, J., Pollack, L. M., Hauck, W., & Coates, T. J. (1996). Effects of interviewer gender, interviewer choice, and item wording on responses to questions concerning sexual behavior. *Public Opinion Quarterly, 60*, 345-375.
- Catania, J. A., McDermott, L. J., & Pollack, L. M. (1986). Questionnaire response bias and face-to-face interview sample bias in sexuality research. *The Journal of Sex Research, 22*, 52-72.
- Cardinal, R. N., & Aitken, M. R. F. (2006). *ANOVA for the behavioural sciences researcher*. Mahwah, NJ: Erlbaum.

- Centers of Disease Control and Prevention. (2007). Trends in reportable sexually transmitted diseases in the United States, 2007. *National surveillance data for chlamydia, gonorrhea, and syphilis*. Retrieved June 23, 2009, from <http://www.cdc.gov/std/stats07/trends.pdf>
- Christopher, F. A., & Roosa, M. W. (1991). Factors affecting sexual decisions in the premarital relationships of adolescents and young adults. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 111-133). Hillsdale, NJ: Erlbaum.
- Cleary, J., Barhman, R., MacCormack, T., & Herold, E. (2002). Discussing sexual health with a partner: A qualitative study with young women. *Canadian Journal of Human Sexuality, 11*, 117-132.
- Cline, R. J. W., Freeman, K. E., & Johnson, S. J. (1990). Talk among partners about AIDS: Factors differentiating those who talk from those who do not. *Communication Research, 17*, 792-808.
- Cline, R. J. W., Johnson, S. J., & Freeman, K. E. (1992). Talk among sexual partners about AIDS: Interpersonal communication for risk reduction or risk enhancement? *Health Communication, 4*, 39-56.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational & Psychological Measurement, 20*, 37-46.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

- Cohen, S., & McKay, G. (1984). Social support, stress, and the buffering hypothesis: A theoretical analysis. In A. Baum, S. E. Taylor, & J. E. Singer (Eds.), *Handbook of psychology and health* (pp. 253-267). Hillsdale, NJ: Erlbaum.
- Cohen, S., & Syme, S. L. (1985). Issues in the study and application of social support. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 3-22). San Francisco: Academic Press.
- Coleman, L. M., & Ingham, R. (1999). Exploring young people's difficulties in talking about contraception: How can we encourage more discussion between partners? *Health Education Research*, 14, 741-750.
- Collins, W. A., & Van Dulmen, M. (2006). *Friendships and romance in emerging adulthood: Assessing distinctiveness in close relationships*. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 219-233). Washington, DC: American Psychological Association.
- Collins, W. A., & Laursen, B. (2004). Parent-adolescent relationships and influence. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 331-362). Hoboken, NJ: John Wiley & Sons.
- Cozby, P. C. (1973). Self-disclosure: A literature review. *Psychological Bulletin*, 79, 73-89.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Cutrona, C. E. (1986). Objective determinants of perceived social support. *Journal of Personality and Social Psychology*, 50, 349-355.

- Cutrona, C. E., & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 319-366). New York: John Wiley & Sons.
- Cutrona, C. E., Suhr, J. A., & MacFarlane, R. (1990). Interpersonal transactions and the psychological sense of support. In S. Duck & R. C. Silver (Eds.), *Personal relationships and social support* (pp. 30-45). Newbury Park, CA: Sage.
- Dallal, G. E. (2001). Fixed and random effects. *The little handbook of statistical practice*. Retrieved May 16, 2009, from <http://www.jerrydallal.com/LHSP/fixran.htm>
- Davis, P. (1974). Contextual sex-saliency and sexual activity: The relative effects of family and peer group in the sexual socialization process. *Journal of Marriage and the Family*, 36, 196-202.
- Derlega, V. J., Barbee, A. P., & Winstead, B. A. (1994). Friendship, gender, and social support: Laboratory studies of supportive interactions. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 136-151). Thousand Oaks, CA: Sage.
- Dickinson, G. E. (1978). Adolescent sex information sources: 1964-1974. *Adolescence*, 13, 653-658.
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin*, 112, 106-124.
- Duck, S., & Wright, P. H. (1993). Reexamining gender differences in same-gender friendships: A close look at two kinds of data. *Sex Roles*, 28, 709-727.

- Edgar, T., Freimuth, V. S., Hammond, S. L., McDonald, D. A., & Fink, E. L. (1992). Strategic sexual communication: Condom use and resistance and response. *Health Communication, 15*, 349-366.
- Fehr, B. (2004). A prototype model of intimacy interactions in same-sex friendships. In D. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 9-26). Mahwah, NJ: Erlbaum.
- Finer, L. B., & Henshaw, S. K. (2006). Disparities in rates of unintended pregnancy in the United States, 1994 and 2001. *Perspectives on Sexual and Reproductive Health, 38*, 90-96.
- Finken, L. L. (2005). The role of consultants in adolescents' decision making: A focus on abortion decisions. In J. E. Jacobs & P. A. Klaczynski (Eds.), *The development of judgment and decision making in children and adolescents* (pp. 255-278). Mahwah, NJ: Erlbaum.
- Fischhoff, B. (1996). The real world: What good is it? *Organizational Behavior and Human Decision Processes, 65*, 232-248.
- Fischhoff, B., Crowell, N. A., & Kipke, M. (Eds., 1999). Adolescent decision making: Implications for prevention programs. *Workshop on adolescent decision making*. Washington, DC: Institute of Medicine & National Research Council.
- Fowler, F. J. (2002). Survey research methods (3rd ed). Thousand Oaks, CA: Sage.
- Gable, S. L., Gonzaga, G. C., & Strachman, A. (2006). Will you be there for me when things go right? Supportive responses to positive event disclosures. *Journal of Personality & Social Psychology, 91*, 904-917.

- Gable, S. L., Reis, H. T., Impett, E., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87, 228-245.
- Garson, G. D. (2008). *Linear mixed models*. Retrieved May 9, 2009, from <http://faculty.chass.ncsu.edu/garson/PA765/multilevel.htm>
- Gebhard, P. H. (1977). The acquisition of basic sex information. *The Journal of Sex Research*, 13, 148-169.
- Gilovich, T., & Medvec, V. H. (1995). The experience of regret: What, when, and why. *Psychological Review*, 102, 379-395.
- Goldsmith, D. J., & Dun, S. A. (1997). Sex differences and similarities in the communication of social support. *Journal of Social and Personal Relationships*, 14, 317-337.
- Goldsmith, D. J. (1994). The role of facework in supportive communication. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 29-49). Thousand Oaks, CA: Sage.
- Goldsmith, D. J. (2004). *Communicating social support*. New York: Cambridge University Press.
- Goldsmith, D. J., & Parks, M. R. (1990). Communicative strategies for managing risks of seeking social support. In S. Duck (Ed.), *Personal relationships and social support* (pp. 104-121). Newbury Park, CA: Sage.

- Halpern-Felsher, B. L., Kropp, R. Y., Boyer, C. B., Tschann, J. M., & Ellen, J. M. (2004). Adolescents' self-efficacy to communicate about sex: It's role in condom attitudes, commitment, and use. *Adolescence*, 39, 443-456.
- Handelsman, C. D., Cabral, R. J., & Weisfeld, G. E. (1987). Sources of information and adolescent sexual knowledge and behavior. *Journal of Adolescent Research*, 2, 455-463.
- Harel, O., Zimmerman, R., & Dekhtyar, O. (2008). Approaches to the handling of missing data in communication research. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *The SAGE sourcebook of advanced data analysis methods for communication research* (pp. 349-371). Los Angeles: Sage.
- Hartup, W. W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin*, 121, 355-370.
- Hayes, A. F. (2005). *Statistical methods for communication science*. Mahwah, NJ: Erlbaum.
- Herold, E. S., & Way, L. (1988). Sexual self-disclosure among university women. *The Journal of Sex Research*, 24, 1-14.
- Holmstrom, A. J., Burleson, B. R., & Jones, S. M. (2005). Some consequences for helpers who deliver "cold comfort": Why it's worse for women than men to be inept when providing emotional support. *Sex Roles*, 53, 153-172.
- Holtzman, D., & Robinson, R. (1995). Parent and peer communication effects on AIDS-related behavior among U.S. high school students. *Family Planning Perspectives*, 27, 235-240.

- Hughes, M., Morrison, K., & Asada, K. J. K. (2005). What's love got to do with it? Exploring the impact of maintenance rules, love attitudes, and network support on friends with benefits relationships. *Western Journal of Communication*, 69, 49-66.
- Institute of Medicine. (1997). Committee on prevention and control of sexually transmitted diseases. In T. R. Eng & W. T. Butler (Eds.), *The hidden epidemic: Confronting sexually transmitted diseases*. Washington, DC: National Academy Press.
- Janis, I. L., & Mann, L. (1977). *Decision making: A psychological analysis of conflict, choice, and commitment*. New York: The Free Press.
- Jaccard, J., Blanton, H., & Dodge, T. (2005). Peer influence on risky behavior: An analysis of the effects of a close friend. *Developmental Psychology*, 41, 135-147.
- Jaccard, J., Dittus, P. J., & Gordon, V. V. (2000). Parent-teen communication about premarital sex: Factors associated with the extent of communication. *Journal of Adolescent Research*, 15, 187-208.
- Jokisaari, M. (2003). Regret appraisals, age, subjective well-being. *Journal of Research in Personality*, 37, 487-503.
- Jokisaari, M. (2004). Regrets and subjective well-being: A life course approach. *Journal of Adult Development*, 11, 281-288.
- Johnson, W. T., & DeLamater, J. D. (1976). Response effects in sex surveys. *Public Opinion Quarterly*, 40, 165-181.
- Johnson, A. J., Wittenberg, E., Villagran, M. M., Mazur, M., & Villagran, P. (2003). Relational progression as a dialectic: Examining turning points in communication among friends. *Communication Monographs*, 70, 230-249.

- Kallen, D. J., Stephenson, J. J., & Doughty, A. (1983). The need to know: Recalled adolescent sources of sexual and contraceptive information and sexual behavior. *The Journal of Sex Research, 19*, 137-159.
- Keppel, G. & Wickens, T. D. (2004). *Design and analysis: A researcher's handbook* (4th Edition). Upper Saddle River, NJ: Pearson Prentice Hall.
- Kinsman, S. B., Romer, D., Furstenberg, F. F., & Schwarz, D. F. (1998). Early sexual initiation: The role of peer norms. *Pediatrics, 102*, 1185-1192.
- Knobloch, L. K., & Solomon, D. H. (2002). Intimacy and the magnitude and experience of episodic relational uncertainty within romantic relationships. *Personal Relationships, 9*, 457-478.
- Kunkel, A. W., & Burleson, B. R. (1999). Assessing explanations for sex differences in emotional support: A test of the different cultures and skill specialization accounts. *Human Communication Research, 25*, 307-340.
- Kuttler, A. F., La Greca, A. M., & Prinstein, M. J. (1999). Friendship qualities and social-emotional functioning of adolescents with close, cross-sex friendships. *Journal of Research on Adolescence, 9*, 339-366.
- Landman, J. (1993). *Regret: The persistence of the possible*. New York: Oxford University Press.
- Landman, J., Vandewater, A. A., Stewart, A. J., & Malley, J. E. (1995). Missed opportunities: Psychological ramifications of counterfactual thought in midlife women. *Journal of Adult Development, 2*, 87-97.

- Lefkowitz, E. S. (2002). Beyond the yes-no question: Measuring parent-adolescent communication about sex. *New Directions for Child and Adolescent Development, 97*, 43-56.
- Lefkowitz, E. S., Boone, T. L., & Shearer, C. L. (2004). Communication with best friends about sex-related topics during emerging adulthood. *Journal of Youth and Adolescence, 33*, 339-351.
- Lefkowitz, E. S., & Gillen, M. M. (2006). "Sex is just a normal part of life": Sexuality in emerging adulthood. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century*. Washington, DC: American Psychological Association.
- Le Poire, B. A. (1994). Inconsistent nurturing as control theory: Implications for communication-based research treatment programs. *Journal of Applied Communication Research, 22*, 60-74.
- Le Poire, B. A., Hallett, J. S., & Erlandson, K. T. (2000). An initial test of inconsistent nurturing as control theory: How partners of drug abusers assist their partners' sobriety. *Human Communication Research, 26*, 432-457.
- Loomes, G., & Sugden, R. (1982). Regret theory: An alternative theory of rational choice under uncertainty. *Economic Journal, 92*, 805-824.
- Lucas, A. A. (2007, November). *Sexual communication in college-aged friendships: A replication of communication patterns and satisfaction*. Paper presented at the annual convention of the National Communication Association, Chicago.
- Lucas, A. A., & Afifi, W. A. (2006, November). "We talk about that and everything in between." *Exploring patterns of sexual communication in college-aged*

- friendships*. Paper presented at the annual convention of the National Communication Association, San Antonio.
- MacGeorge, E. L., Graves, A. R., Feng, B., Gillihan, S. J., & Burleson, B. R. (2004). The myth of gender cultures: Similarities outweigh the differences in men's and women's provision of and responses to supportive communication. *Sex Roles, 50*, 143-175.
- Maltz, D. N., & Borker, R. A. (1982). A cultural approach to male-female miscommunication. In J. J. Gumperz (Ed.), *Language and social identity* (pp. 196-216). New York: Cambridge University Press.
- Marr, L. (2007). *Sexually transmitted diseases: A physician tells you what you need to know*. Baltimore: The Johns Hopkins University Press.
- Marston, C., & King, E. (2006). Factors that shape young people's sexual behavior: A systematic review. *Lancet, 368*, 1581-1586.
- Maxwell, K. A. (2002). Friends: The role of peer influence across adolescent risk behaviors. *Journal of Youth and Adolescence, 31*, 267-277.
- McKnight, P. E., McKnight, K. M., Sidani, S., & Figueredo, A. J. (2007). *Missing data: A gentle introduction*. New York: Guilford Press.
- Mirande, A. M. (1968). Reference group theory and adolescent sexual behavior. *Journal of Marriage and the Family, 30*, 572-577.
- Mitchell, M. M. (2001). Risk, threat, and information seeking about genital herpes: The effects of mood and message framing. *Communication Studies, 52*, 141-152.
- Monsour, M. (1992). Meanings of intimacy in cross- and same-sex friendships. *Journal of Social and Personal Relationships, 9*, 277-295.

- Myers, J. L., & Well, A. D. (1995) *Research design & statistical analysis*. Hillsdale, NJ: Erlbaum.
- Nurmi, J.-E. (1992). Age differences in adult life goals, concerns, and their temporal extension: A life course approach to future-oriented motivation. *International Journal of Behavioral Development*, 15, 487-508.
- Orbuch, T. L., & Harvey, J. H. (1991). Methodological and conceptual issues in the study of sexuality in close relationships. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 9-24). Hillsdale, NJ: Erlbaum.
- Oswald, D. L., & Clark, E. M. (2003). Best friends forever? High school best friendships and the transition to college. *Personal Relationships*, 10, 187-196.
- Oswald, S. B., Cameron, K. A., & Koob, J. J. (2005). Sexual regret in college students. *Archives of Sexual Behavior*, 34, 663-669.
- Page, R. M., Hammermeister, J., & Scanlan, A. (2000). Everybody's not doing it: Misperceptions of college students' sexual activity. *American Journal of Health Behavior*, 24, 387-394.
- Pallant, J. (2007). *SPSS survival guide: A step by step guide to data analysis using SPSS for Windows* (3rd ed.). New York: McGraw Hill-Open University Press.
- Papini, D. R., Farmer, F. L., Clark, S. M., Micka, J. C., & Barnett, J. K. (1990). Early adolescent age and gender differences in patterns of self-disclosure to parents and friends. *Adolescence*, 25, 959-976.
- Papini, D. R., Farmer, F. L., Clark, S. M., & Snell, W. E. (1988). An evaluation of adolescent patterns of sexual self-disclosure to parents and friends. *Journal of Adolescent Research*, 3, 387-401.

- Parks, M. R., & Floyd, K. (1996). Meanings for closeness and intimacy in friendship. *Journal of Social and Personal Relationships, 13*, 85-107.
- Paul, E. L. (2006). Beer goggles, catching feelings, and the walk of shame: The myths and realities of the hookup experience. In D. C. Kirkpatrick, S. Duck, & M. K. Foley (Eds.), *Relating difficulty: The processes of constructing and managing difficult interaction* (pp. 141-160). Mahwah, NJ: Erlbaum.
- Pieters, R., & Zeelenberg, M. (2005). On bad decisions and deciding badly: When intention-behavior inconsistency is regrettable. *Organizational Behavior and Human Decision Processes, 97*, 18-30.
- Pieters, R., & Zeelenberg, M. (2007). A theory of regret regulation 1.1. *Journal of Consumer Psychology, 17*, 29-35.
- Pliskin, K. L. (1997). Verbal intercourse and sexual communication: Impediments to STD prevention. *Medical Anthropology Quarterly, 11*, 89-109.
- Powell, H. L., & Segrin, C. (2004). The effect of family and peer communication on college students' communication with dating partners after HIV and AIDS. *Health Communication, 16*, 427-449.
- Rawlins, W. K. (1983). Openness as problematic in ongoing friendships: Two conversational dilemmas. *Communication Monographs, 50*, 1-13.
- Rawlins, W. K. (1992). *Friendship matters: Communication, dialectics, and the life course*. New York: Aldine de Gruyter.
- Reohr, J. R. (1991). *Friendship: An exploration of structure and process*. New York: Garland.

- Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology, 38*, 119-125.
- Richard, R., van der Pligt, J., & de Vries, N. (1996). Anticipated regret and time perspective: Changing sexual risky-taking behaviors. *Journal of Behavioral Decision Making, 9*, 185-199.
- Rittenour, C. E., & Booth-Butterfield, M. (2006). College students' sexual health: Investigating the role of peer communication. *Qualitative Research Reports in Communication, 7*, 57-65.
- Rouner, D., & Lindsey, R. (2006). Female adolescent communication about sexuality transmitted diseases. *Health Communication, 19*, 29-38.
- Rozema, H. J. (1986). Defensive communication climate as a barrier to sex education in the home. *Family Relations, 35*, 531-537.
- Saffrey, C., Summerville, A., & Roese, N. J. (2008). Praise for regret: People value regret about other negative emotions. *Motivation and Emotion, 32*, 46-54.
- Samter, W. (1994). Unsupportive relationships: Deficiencies in the support-giving skills of the lonely person's friends. In B. R. Burleson, T. L. Albrecht, & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 195-214). Thousand Oaks, CA: Sage.
- Sarason, B. R., Pierce, G. R., & Sarason, I. G. (1990). Social support: The sense of acceptance and role of relationships. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 97-128). New York: John Wiley & Sons.

- Schulz, B., Bohrnstedt, G. W., & Evans, R. R. (1977). Explaining premarital sexual intercourse among college students: A casual model. *Social Forces*, 56, 148-156.
- Sherrod, D. (1989). The influence of gender on same-sex friendship. In C. Hendrick (Ed.), *Close relationships* (pp. 164-186). Newbury Park, CA: Sage.
- Simonson, I. (1992). The influence of anticipating regret and responsibility on purchase decisions. *The Journal of Consumer Research*, 19, 105-118.
- Smallman, R., & Roese, N. J. (in press). Counterfactual thinking facilitates behavioral intentions. *Journal of Experimental Social Psychology*.
- Smith, E. A., Udry, J. R., & Morris, N. M. (1985). Pubertal development and friends: A biosocial explanation of adolescent sexual behavior. *Journal of Health and Social Behavior*, 26, 183-192.
- Snell, W. E., Belk, S. S., Papini, D. R., & Clark, S. (1989). Development and validation of the sexual self-disclosure scale. *Annals of Sex Research*, 2, 307-334.
- Spanier, G. B. (1977). Sources of sex information and premarital sexual behavior. *The Journal of Sex Research*, 13, 73-88.
- Sprecher, S., & McKinney, K. (1993). *Sexuality*. Newbury Park, CA: Sage.
- SPSS (2005). *Linear mixed-effects modeling in SPSS: An introduction to the mixed procedure*. Retrieved May 9, 2009, from http://www.spss.ch/upload/1126184451_Linear%20Mixed%20Effects%20Modeling%20in%20SPSS.pdf
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

- Swann, W. B., Jr., & Brown, J. D. (1990). From self to health: Self-verification and identity disruption. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 150-172). New York: John Wiley & Sons.
- Swann, W. B., Jr., Pelham, B. W., & Krull, D. S. (1989). Agreeable fancy or disagreeable truth? Reconciling self-enhancement and self-verification. *Journal of Personality and Social Psychology*, 57, 782-791.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.
- Tardy, C. H., Hosman, L. A., & Bradac, J. J. (1981). Disclosing self to friends and family: A reexamination of initial questions. *Communication Quarterly*, 29, 263-268.
- Teevan, J. J. (1972). Reference groups and premarital sexual behavior. *Journal of Marriage and the Family*, 34, 283-291.
- Thompson, L., & Spanier, G. B. (1978). Influence of parents, peers, and partners on the contraceptive use of college men and women. *Journal of Marriage and the Family*, 40, 481-492.
- UNAIDS. (1998). *Report on the global HIV/AIDS epidemic*. Geneva, Switzerland: UNAIDS & WHO.
- Umphrey, L., & Sherbolm, J. (2007). Relational commitment and threats to relationship maintenance goals: Influences on condom use. *Journal of American College Health*, 56, 61-67.

- Urberg, K. A., Degirmencioglu, S. M., & Pilgrim, C. (1997). Close friend and group influence on adolescent cigarette smoking and alcohol use. *Developmental Psychology, 33*, 834-844.
- von Sadoszky, V., Keller, M. L., Vahey, D. C., McKinney, K., Powwattana, A., & Pornchiakate, A. (2002). Situational factors involved in college students' safer and risky sexual encounters. *Journal of Obstetric, Gynecologic, and Neonatal Nursing, 32*, 612-622.
- Weinstock, H., Berman, S., & Cates W., Jr. (2004). Sexually transmitted diseases among American youth: Incidence and prevalence estimates, 2000. *Perspectives on Sexual and Reproductive Health, 36*, 6-10.
- Weiss, J. A. (2007). Let us talk about it: Safe adolescent sexual decision making. *Journal of the American Academy of Nurse Practitioners, 19*, 450-458.
- West, L., Anderson, J., & Duck, S. (1996). Crossing the barriers to friendships between men and women. In J. Wood (Ed.), *Gendered Relationships* (pp. 111-127). Mountain View, CA: Mayfield Publishing Company.
- Westmyer, S. A., & Myers, S. A. (1996). Communication skills and social support messages across friendship levels. *Communication Research Reports, 13*, 191-197.
- Westrom, L. (1992). Pelvic inflammatory disease and fertility. *Sexually Transmitted Diseases, 19*, 185-192.
- Wheless, L. R. (1976). Self-disclosure and interpersonal solidarity: Measurement, validation, and relationships. *Human Communication Research, 3*, 47-61.

- Winstead, B. A. (1986). Sex differences in same-sex friendships. In V. J. Derlega & B. A. Winstead (Eds.), *Friendship and social interaction* (pp. 81-99). New York: Springer-Verlag.
- Wiederman, M. W. (2002). Reliability and validity of measurement. In M. W. Wiederman & B. E. Whitley (Eds.), *Handbook for conducting research on human sexuality* (pp. 25-50). Mahwah, NJ: Erlbaum.
- Wiederman, M. W. (2004). Methodological issues in studying sexuality in close relationships. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 31-56). Mahwah, NJ: Erlbaum.
- Wilks, J. (1986). The relative importance of parents and friends in adolescent decision-making. *Journal of Youth and Adolescence*, 15, 323-334.
- Williams, S. S., Kimble, D. L., Covell, N. H., Weiss, L. H., Newton, K. J., Fisher, J. D., et al. (1992). College students use implicit personality theory instead of safer sex. *Journal of Applied Social Psychology*, 22, 921-933.
- Wood, E., Senn, C. Y., Desmarais, S., Park, L., & Verberg, N. (2002). Sources of information about dating and their perceived influence on adolescents. *Journal of Adolescent Research*, 17, 401-417.
- Wright, P. H. (1982). Men's friendships, women's friendships and the alleged inferiority of the latter. *Sex Roles*, 8, 1-20.
- Wrosch, C., & Heckhausen, J. (1999). Control processes before and after passing a developmental deadline: Activation and deactivation of intimate relationship goals. *Journal of Personality and Social Psychology*, 77, 415-427.

- Yaffee, R. A. (n.d.). *Mixed analysis of variance models with SPSS*. Retrieved May 9, 2009, from <http://www.nyu.edu/its/statistics/Docs/SPSSMixed.ppt>
- Youniss, J., & Smollar, J. (1985). *Adolescent relations with mothers, fathers, and friends*. Chicago: The University of Chicago Press.
- Zeelenberg, M. (1999). Anticipated regret, expected feedback, and behavioral decision making. *Journal of Behavioral Decision Making*, 12, 93-106.
- Zeelenberg, M., & Beattie, J. (1997). Consequences of regret aversion 2: Additional evidence for effects of feedback on decision making. *Organizational Behavior and Human Decision Processes*, 72, 63-78.
- Zeelenberg, M., Beattie, J., van der Pligt, J., & de Vries, N. K. (1996). Consequences of regret aversion: Effects of expected feedback on risky decision-making. *Organizational Behavior and Human Decision Processes*, 65, 148-158.
- Zeelenberg, M., & Pieters, R. (2007). A theory of regret regulation 1.0. *Journal of Consumer Psychology*, 17, 3-18.

Appendix A

Complete List of Hypothetical Scenarios by Context

Note: Female scenarios listed first, male scenarios listed second

Friday Night/Hook-up with Person You Like

Positive Support/High Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and he responds enthusiastically encouraging you to go ahead and have some fun!

Negative Support/Low Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person and it seems like a good idea. You ask your friend whether you should hook up and she does not respond enthusiastically discouraging you to do something so risky!

You and your friend are hanging out in your room getting ready to go out to party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person and it seems like a good idea. You ask your friend whether you should hook up and he does not respond enthusiastically discouraging you to do something so risky!

Positive Support/Low Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person and it seems like a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person and it seems like a good idea. You ask your friend whether you should hook up and he responds enthusiastically encouraging you to go ahead and have some fun!

Negative Support/High Anticipated Regret

You and your friend are hanging out in your room getting ready to go out to party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she does not respond enthusiastically discouraging you to do something so risky!

You and your friend are hanging out in your room getting ready to go out to party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and he does not respond enthusiastically discouraging you to do something so risky!

Party/ONS

Positive Support/High Anticipated Regret

You and your friend are at a party when you see a good-looking guy. After flirting and dancing with this guy for most of the night, you are thinking about staying the night over at his place, but you are afraid you might feel remorse the next day. You ask your friend whether you should go home and have sex with this guy and she responds with approval encouraging you to go ahead and have some fun!

You and your friend are at a party when you see a good-looking girl. After flirting and dancing with this girl for most of the night, you are thinking about staying the night over at her place, but you are afraid you might feel remorse the next day. You ask your friend whether you should go home and have sex with this girl and he responds with approval encouraging you to go ahead and have some fun!

Negative Support/Low Anticipated Regret

You and your friend are at a party when you see a good-looking guy. After flirting and dancing with this guy for most of the night, you are thinking about staying the night over at his place. You do not believe much risk is involved, but you ask your friend whether you should go home and have sex with this guy. Your friend responds with disapproval discouraging you from going ahead and doing something so risky!

You and your friend are at a party when you see a good-looking girl. After flirting and dancing with this girl for most of the night, you are thinking about staying the night over at her place. You do not believe much risk is involved, but you ask your friend whether you should go home and have sex with this girl. Your friend responds with disapproval discouraging you from going ahead and doing something so risky!

Positive Support/Low Anticipated Regret

You and your friend are at a party when you see a good-looking guy. After flirting and dancing with this guy for most of the night, you are thinking about staying the night over at his place. You do not believe much risk is involved, but you ask your friend whether you should go home and have sex with this guy. Your friend responds with approval encouraging you to go ahead and have some fun!

You and your friend are at a party when you see a good-looking girl. After flirting and dancing with this girl for most of the night, you are thinking about staying the night over at her place. You do not believe much risk is involved, but you ask your friend whether you should go home and have sex with this girl. Your friend responds with approval encouraging you to go ahead and have some fun!

Negative Support/High Anticipated Regret

You and your friend are at a party when you see a good-looking guy. After flirting and dancing with this guy for most of the night, you are thinking about staying the night over at his place, but

you are afraid you might feel remorse the next day. You ask your friend whether you should go home and have sex with this guy and she responds with disapproval discouraging you from going ahead and doing something so risky!

You and your friend are at a party when you see a good-looking girl. After flirting and dancing with this girl for most of the night, you are thinking about staying the night over at her place, but you are afraid you might feel remorse the next day. You ask your friend whether you should go home and have sex with this girl and he responds with disapproval discouraging you from going ahead and doing something so risky!

Over the Phone/Sex for First Time

Positive Support/High Anticipated Regret

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell her that you have been thinking about whether to have sex with your new partner. You are afraid of making a mistake so you ask your friend what she thinks, but your friend responds enthusiastically encouraging you to go ahead and have some fun!

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell him that you have been thinking about whether to have sex with your new partner. You are afraid of making a mistake so you ask your friend what he thinks, but your friend responds enthusiastically encouraging you to go ahead and have some fun!

Negative Support/Low Anticipated Regret

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell her that you have been thinking about whether to have sex with your new partner. You cannot think of any negative consequences so you ask your friend what she thinks. She responds with disapproval discouraging you from going ahead and doing something so risky!

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell him that you have been thinking about whether to have sex with your new partner. You cannot think of any negative consequences so you ask your friend what he thinks. He responds with disapproval discouraging you from going ahead and doing something so risky!

Positive Support/Low Anticipated Regret

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell her that you have been thinking about whether to have sex with your new partner. You cannot think of any negative consequences so you ask your friend what she thinks. Your friend responds enthusiastically encouraging you to go ahead and have some fun!

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell him that you have been thinking about whether to have sex with your new partner. You cannot think of any negative consequences so you ask your friend what he thinks. Your friend responds enthusiastically encouraging you to go ahead and have some fun!

Negative Support/High Anticipated Regret

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell her that you have been thinking about whether to have sex with your new partner. You are afraid of making a mistake so you ask your friend what she thinks. She responds with disapproval discouraging you from going ahead and doing something so risky!

Your friend calls you that the two of you can catch up your lives. When the conversation turns to your new dating relationship, you tell him that you have been thinking about whether to have sex with your new partner. You are afraid of making a mistake so you ask your friend what he thinks. He responds with disapproval discouraging you from going ahead and doing something so risky!

*Dorm/Lose Virginity***Positive Support/High Anticipated Regret**

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person, but you are afraid losing your virginity might be a mistake. You ask your friend whether you should have sex for the first time and she responds enthusiastically encouraging you to go ahead and go for it!

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person, but you are afraid losing your virginity might be a mistake. You ask your friend whether you should have sex for the first time and he responds enthusiastically encouraging you to go ahead and go for it!

Negative Support/Low Anticipated Regret

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person. You cannot think of any negative consequences so you ask your friend whether you should have sex for the first time. She does not respond enthusiastically discouraging you to go for it.

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person. You cannot think of any negative consequences so you ask your friend whether you should have sex for the first time. He does not respond enthusiastically discouraging you to go for it.

Positive Support/Low Anticipated Regret

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person. You cannot think of any negative consequences so you ask your friend whether you should have sex for the first time. She responds enthusiastically encouraging you to go ahead and go for it!

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person. You cannot think of any negative consequences so you ask your friend whether you should have sex for the first time. He responds enthusiastically encouraging you to go ahead and go for it!

Negative Support/High Anticipated Regret

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person, but you are afraid losing your virginity might be a mistake. You ask your friend whether you should have sex for the first time and she does not respond enthusiastically discouraging you to go for it.

You and your friend are hanging out in your room catching up on each other's lives. You have been dating for a few months and you have been thinking about having sex with this person, but you are afraid losing your virginity might be a mistake. You ask your friend whether you should have sex for the first time and he does not respond enthusiastically discouraging you to go for it.

*Out to Eat/Sex with Ex***Positive Support/High Anticipated Regret**

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again, but you are afraid you might feel remorse after doing it. You ask your friend what she thinks and she responds with approval encouraging you to go ahead and have some fun!

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again, but you are afraid you might feel remorse after doing it. You ask your friend what he thinks and he responds with approval encouraging you to go ahead and have some fun!

Negative Support/Low Anticipated Regret

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again and you cannot think of any negative consequences. You ask your friend what she thinks and she responds with disapproval discouraging you to do something so risky!

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again and you cannot think of any negative consequences. You ask your friend what he thinks and he responds with disapproval discouraging you to do something so risky!

Positive Support/Low Anticipated Regret

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again and you cannot think of any negative consequences. You ask your friend what she thinks and she responds with approval encouraging you to go ahead and have some fun!

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again and you cannot think of any negative consequences. You ask your friend what he thinks and he responds with approval encouraging you to go ahead and have some fun!

Negative Support/High Anticipated Regret

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with

them again, but you are afraid you might feel remorse after doing it. You ask your friend what she thinks and she responds with disapproval discouraging you to do something so risky!

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again, but you are afraid you might feel remorse after doing it. You ask your friend what he thinks and he responds with disapproval discouraging you to do something so risky!

Online/Random Hook-Up

Positive Support/High Anticipated Regret

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random, but you are afraid you might feel remorse the next day. You ask your friend whether you should hook up with someone random and she responds with approval encouraging you to go ahead and have some fun!

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random, but you are afraid you might feel remorse the next day. You ask your friend whether you should hook up with someone random and he responds with approval encouraging you to go ahead and have some fun!

Negative Support/Low Anticipated Regret

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random. You do not believe much risk is involved, but you ask your friend whether you should hook up with someone random. She responds with disapproval discouraging you to go ahead with something so risky!

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random. You do not believe much risk is involved, but you ask your friend whether you should hook up with someone random. He responds with disapproval discouraging you to go ahead with something so risky!

Positive Support/Low Anticipated Regret

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random. You do not believe much risk is involved, but you ask your friend whether you should hook up with someone random. She responds with approval encouraging you to go ahead and have some fun!

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random. You do not believe much risk is involved, but you ask your friend whether you should hook up with someone random. He responds with approval encouraging you to go ahead and have some fun!

Negative Support/High Anticipated Regret

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random, but you are afraid you might feel remorse the next day. You ask your friend whether you should hook up with someone random and she responds with disapproval discouraging you to go ahead with something so risky!

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up someone random, but you are afraid you might feel remorse the next day. You ask your friend whether you should hook up with someone random and he responds with disapproval discouraging you to go ahead with something so risky!

Appendix B

Survey 1 Questionnaire

Sexual Decision-Making Questionnaire

Instructions: In this survey, I am interested in the communication that surrounds your own and a same-sex friend's sexual decision-making, the context of these discussions, and, if any, the social support provided during these sexual conversations.

Please read everything carefully and answer each question as completely and honestly as possible. Your responses will be treated as confidential and anonymous. If you require more space for a specific answer, please feel free to use the back of the page. Do not include your name on this survey. Again, your responses are anonymous and cannot be linked to you in any way.

In this survey you are to describe your communication with your closest or best same-sex friend (i.e., if you are female, you will describe communication with another female, and if you are male, you will describe communication with another male) who is not related to you (i.e., cousin or sibling). Please respond to the items as they relate to you and your closest or best same-sex friend. Write your same-sex friend's initials here: _____

Instructions: To begin, please fill out the following demographic information about yourself and your friendship.

What is your gender? (circle one)

Female

Male

Transgender

Other (please specify) _____

Age: _____

Ethnicity: (circle all that apply)

African-American

Native American

Hispanic

Caucasian

Asian-American

Other _____

What is your religion preference (circle one)?

None

Buddhism

Christian

Judaism

Islam

Other (please specify) _____

Are you (circle one):

Single

Casually Dating

Seriously Dating

Engaged

Married

Divorced

Other (please specify) _____

Are you (circle one):

Freshman

Sophomore

Junior

Senior

Graduate Student

Other (please specify) _____

What is your sexual orientation? (circle one)

Bisexual

Gay

Lesbian

Heterosexual

Uncertain

Other (please specify) _____

For the current survey, please keep in mind that you should be thinking of a same-sex friend. To confirm, the friend you are reflecting on is (circle one):

Male

Female

Do you consider this person to be your best friend? YES NO

How many other close friends do you currently have? _____

How long (in years, months, or days) have you been in this friendship?

How often does this close friend assist in your sexual decision-making? (circle one)

Never

Rarely

Occasionally

Frequently

All the time

Other (please specify) _____

Why or why not?

How often do YOU assist in your friend in their sexual decision-making? (circle one)

Never

Rarely

Occasionally

Frequently

All the time

Other (please specify) _____

Why or why not?

Instructions: Please read the definitions below and then answer the following question regarding your sexual experience.

Sexual intercourse refers to sex in which the penis penetrates the vagina or anus.

Sexually intimate behavior (no oral sex) refers to acts that include deep kissing, touching above and underneath clothes.

Sexually intimate behavior (with oral sex) refers to acts that include deep kissing, touching above, underneath clothes, and oral sex.

Please circle one of the following responses to reflect your sexual experience:

I have never been sexually intimate with another person.

I have never had sexual intercourse, but I have been sexually intimate (no oral sex) with one or more individuals.

I have never had sexual intercourse, but I have been sexually intimate (with oral sex) with one or more individuals.

I have had sexual intercourse one or more times.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

[illegible]

Instructions: When considering the sexual decisions YOU have participated in, what types of social support has your closest same-sex friend provided you? Provide specific examples of the social support received.

[illegible]

Instructions: In the following questions, please provide a detailed description of how a sexual conversation with your friend occurs. Please use the back if more space is needed.

1. How often do these types of sexual conversations take place in your friendship?

2. When do these sexual conversations take place?

3. Where do these sexual conversations take place?

4. Who is involved in these conversations?

5. Who initiates these conversations?

6. How are these conversations initiated? (For example, specific verbal and/or nonverbal communication that takes place when bringing up sexual conversations).

7. What is going on during these conversations?

8. What is said during these conversations?

9. What other sexual topics do you and your friend discuss during these conversations?

10. What are your general feelings about these sexual conversations?

11. Do you feel supported by your friend during these conversations? Why or why not?

12. Please provide any other details about these conversations below.

Instructions: Please answer *all* of the following questions honestly. For the questions dealing with frequency of behavior, please rate items using the scale: (1) never, (2) not too often, (3) half the time, (4) frequently, and (5) all of the time. For the questions dealing with percentage of behavior, *write* your answers in the blank spaces provided and be sure to use the scale of 0-100% for each item.

Given your sexual experience (i.e., sexually intimate behaviors and sexual intercourse) in the last SIX MONTHS:

1. How often do you **directly** talk to your romantic partner about using condoms?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

2. How often do you **directly** talk to your romantic partner about using birth control?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

3. How often do you **directly** talk to your romantic partner about your past sexual experiences?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

4. How often do you **directly** talk to your romantic partner about other contraceptives?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

5. If any, what are the other contraceptives you discuss? List these contraceptives below.

For the items below, please answer the contraceptive related items based on BOTH you and your partner. If you are not sure about a particular method, please indicate NOT APPLICABLE. Otherwise, please provide a percentage on a scale of 0-100%.

6. How often do you use male condoms? _____
7. How often do you use female condoms? _____
8. How often do you use birth control? _____
9. How often do you use the sponge? _____
10. How often do you use spermicide methods? _____
11. How often do you use a vaginal ring (e.g., NuvaRing)? _____
12. How often do you use a skin patch (e.g., Ortho Evra)? _____
13. How often do you use the withdrawal method? _____
14. How often do you use emergency methods (e.g., morning after pill)? _____
15. How often do you prescribe to NO METHOD? _____

For the items below, please answer the sexual behavior items based on what you and your partner(s) have participated in during the LAST SIX MONTHS. Please respond with the frequency of the behaviors occurring between partners by using a percentage on a scale of 0-100%. If you have *not* participated in a particular behavior, please indicate NOT APPLICABLE.

16. Abstinence. _____
17. Kissing on the face including cheeks and lips. _____
18. Deep kissing. _____
19. Touching above clothes. _____
20. Touching underneath clothes. _____
21. Manual stimulation of female breasts. _____
22. Manual stimulation of female clitoris. _____
23. Manual stimulation of male penis. _____
24. Manual stimulation of male scrotum. _____
25. Oral stimulation of female genitals (e.g., oral sex). _____

26. Oral stimulation of male genitals (e.g., oral sex). _____

27. Anal intercourse. _____

28. Sexual intercourse (when penis penetrates vagina). _____

Thanks for your participation!

Appendix C

Study 2 Questionnaire (Example of Version A for Females)

Sexual Decision Making & Communication Questionnaire

Instructions: In this survey I am interested in the communication that surrounds your own and a same-sex friend's sexuality and sexual behavior, sexual decision making, the thoughts involved in these discussions, and the satisfaction of social support.

Please read everything carefully and answer each question as completely and honestly as possible. Your responses will be treated as confidential and anonymous. Do not include your name on this survey. Again, your responses are anonymous, so your answers cannot be linked to your identity in any way.

In this survey you will be asked to describe your communication with your closest or best same-sex friend (i.e., if you are female, you will describe communication with another female and if you are male, you will describe communication with another male) who is not related to you (i.e., cousin or sibling). Please answer the following packet based on you and your closest or best same-sex friend. Write your same-sex friend's initials here:

Instructions: To begin, please fill out the following demographic information about yourself and your friendship.

What is your gender? (circle one)

Female

Male

Transgender

Other (please specify) _____

Age: _____

Ethnicity: (circle one)

African-American

American Indian

Hispanic

Caucasian

Asian-American

Other (please specify) _____

What is your religion preference (circle one)?

None

Jewish

Buddhism

Muslim

Christian

Other (please specify) _____

Are you (circle one):

Single

Casual Dating

Serious Dating

Engaged

Married

Divorced

Other (please specify) _____

If in a romantic relationship, how long (in years, months, or days) have you been in this relationship(s)?

Are you (circle one):

Freshman

Sophomore

Junior

Senior

Graduate Student

Other (please specify) _____

What is your sexual orientation? (circle one)

Bisexual

Gay

Lesbian

Heterosexual

Uncertain

Other (please specify) _____

For the current survey, please keep in mind that you should be thinking of a same-sex friend. To confirm, the friend you are reflecting on is (circle one):

Male

Female

Do you consider this person to be your best friend? YES NO

How long (in years, months, or days) have you been in this friendship?

How many other close friends do you currently have? _____

Instructions: Please read the definitions below and then answer the following question regarding your sexual experience.

Sexual intercourse refers to sex in which the penis penetrates the vagina or anus.

Sexually intimate behavior (no oral sex) refers to acts that include deep kissing, touching above and underneath clothes.

Sexually intimate behavior (with oral sex) refers to acts that include deep kissing, touching above, underneath clothes, and oral sex.

Please circle one of the following responses to reflect your sexual experience:

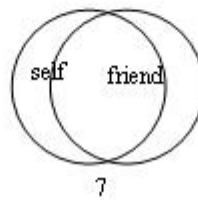
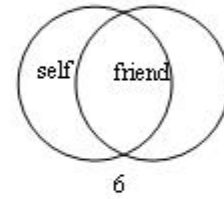
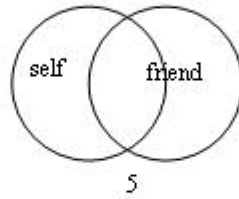
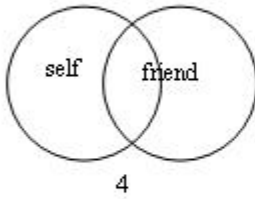
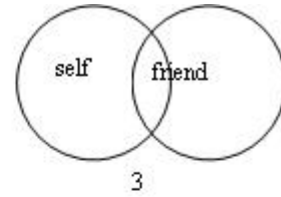
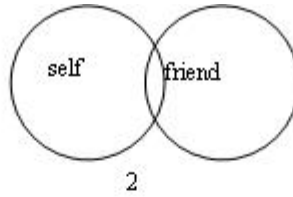
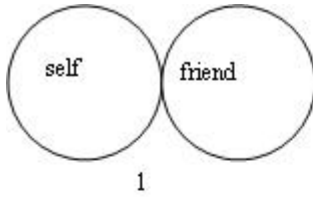
I have never been sexually intimate with another person.

I have never had sexual intercourse, but I have been sexually intimate (no oral sex) with one or more individuals.

I have never had sexual intercourse, but I have been sexually intimate (with oral sex) with one or more individuals.

I have had sexual intercourse one or more times.

Instructions: Which of the following sets of circles best describes the closeness of you and your friend? (Circle the correct set of circles).



Instructions: I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend's initials here: _____

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

Instructions: Think about the scenario you just read and please answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. I would feel guilty if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. I would be satisfied with the support my friend provided.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. I would be likely to participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. My friend communicated negatively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This situation would make me feel sad.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. I would definitely not request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

7. In the future, I would seek out my friend to discuss sex-related topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

8. I would be angry in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

9. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

10. I would feel disappointed.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

11. After talking with my friend, I would not participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

12. My friend communicated positively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

13. It is unlikely that I would turn to my friend to help with future sexual decisions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

14. My friend did not provide the support I'd expect from a friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

15. I would definitely request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

16. I would not ask my friend for advice again regarding sexual topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

17. It is likely that I would participate in this behavior after speaking with my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

18. I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

19. The social support provided by my friend is not helpful.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

20. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

21. I would be ashamed if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

22. I know I will talk to my friend again about the sexual decisions I am faced with.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

23. It is unlikely that I would follow through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

24. My friend was very supportive.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

25. I would be envious in this situation.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Please re-read the situation (provided below) and answer the following questions. The following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

1. This event is realistic.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. This would be an important event in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. This event is believable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. This would make me think about my friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This event is typical.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. Events like this have happened often in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend's initials here: _____

You and your friend are at a party when you see a good-looking guy. After flirting and dancing with this guy for most of the night, you are thinking about staying the night over at his place. You do not believe much risk is involved, but you ask your friend whether you should go home and have sex with this guy. Your friend responds with disapproval discouraging you from going ahead and doing something so risky!

Instructions: Think about the scenario you just read and please answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. I would feel guilty if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. I would be satisfied with the support my friend provided.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. I would be likely to participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. My friend communicated negatively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This situation would make me feel sad.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. I would definitely not request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

7. In the future, I would seek out my friend to discuss sex-related topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

8. I would be angry in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

9. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

10. I would feel disappointed.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

11. After talking with my friend, I would not participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

12. My friend communicated positively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

13. It is unlikely that I would turn to my friend to help with future sexual decisions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

14. My friend did not provide the support I'd expect from a friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

15. I would definitely request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

16. I would not ask my friend for advice again regarding sexual topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

17. It is likely that I would participate in this behavior after speaking with my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

18. I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

19. The social support provided by my friend is not helpful.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

20. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

21. I would be ashamed if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

22. I know I will talk to my friend again about the sexual decisions I am faced with.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

23. It is unlikely that I would follow through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

24. My friend was very supportive.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

25. I would be envious in this situation.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Please re-read the situation (provided below) and answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

You and your friend are at a party when you see a good-looking guy. After flirting and dancing with this guy for most of the night, you are thinking about staying the night over at his place. You do not believe much risk is involved, but you ask your friend whether you should go home and have sex with this guy. Your friend responds with disapproval discouraging you from going ahead and doing something so risky!

1. This event is realistic.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. This would be an important event in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. This event is believable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. This would make me think about my friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This event is typical.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. Events like this have happened often in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend's initials here: _____

Your friend calls you so that the two of you can catch up on your lives. When the conversation turns to your new dating relationship, you tell her that you have been thinking about whether to have sex with your new partner. You cannot think of any negative consequences so you ask your friend what she thinks. Your friend responds enthusiastically encouraging you to go ahead and have some fun!

Instructions: Think about the scenario you just read and please answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. I would feel guilty if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. I would be satisfied with the support my friend provided.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. I would be likely to participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. My friend communicated negatively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This situation would make me feel sad.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. I would definitely not request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

7. In the future, I would seek out my friend to discuss sex-related topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

8. I would be angry in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

9. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

10. I would feel disappointed.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

11. After talking with my friend, I would not participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

12. My friend communicated positively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

13. It is unlikely that I would turn to my friend to help with future sexual decisions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

14. My friend did not provide the support I'd expect from a friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

15. I would definitely request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

16. I would not ask my friend for advice again regarding sexual topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

17. It is likely that I would participate in this behavior after speaking with my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

18. I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

19. The social support provided by my friend is not helpful.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

20. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

21. I would be ashamed if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

22. I know I will talk to my friend again about the sexual decisions I am faced with.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

23. It is unlikely that I would follow through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

24. My friend was very supportive.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

25. I would be envious in this situation.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Please re-read the situation (provided below) and answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

Your friend calls you so that the two of you can catch up on your lives. When the conversation turns to your new dating relationship, you tell her that you have been thinking about whether to have sex with your new partner. You cannot think of any negative consequences so you ask your friend what she thinks. Your friend responds enthusiastically encouraging you to go ahead and have some fun!

1. This event is realistic.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. This would be an important event in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. This event is believable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. This would make me think about my friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This event is typical.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. Events like this have happened often in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend's initials here: _____

You and your friend are hanging out in your room catching up on each other's lives. You have been dating someone for a few months and you have been thinking about having sex with this person, but you are afraid losing your virginity might be a mistake. You ask your friend whether you should have sex for the first time and she does not respond enthusiastically discouraging you to go for it.

Instructions: Think about the scenario you just read and please answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. I would feel guilty if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. I would be satisfied with the support my friend provided.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. I would be likely to participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. My friend communicated negatively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This situation would make me feel sad.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. I would definitely not request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

7. In the future, I would seek out my friend to discuss sex-related topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

8. I would be angry in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

9. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

10. I would feel disappointed.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

11. After talking with my friend, I would not participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

12. My friend communicated positively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

13. It is unlikely that I would turn to my friend to help with future sexual decisions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

14. My friend did not provide the support I'd expect from a friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

15. I would definitely request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

16. I would not ask my friend for advice again regarding sexual topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

17. It is likely that I would participate in this behavior after speaking with my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

18. I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

19. The social support provided by my friend is not helpful.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

20. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

21. I would be ashamed if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

22. I know I will talk to my friend again about the sexual decisions I am faced with.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

23. It is unlikely that I would follow through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

24. My friend was very supportive.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

25. I would be envious in this situation.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Please re-read the situation (provided below) and answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

You and your friend are hanging out in your room catching up on each other's lives. You have been dating someone for a few months and you have been thinking about having sex with this person, but you are afraid losing your virginity might be a mistake. You ask your friend whether you should have sex for the first time and she does not respond enthusiastically discouraging you to go for it.

1. This event is realistic.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. This would be an important event in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. This event is believable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. This would make me think about my friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This event is typical.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. Events like this have happened often in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend's initials here: _____

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again, but you are afraid you might feel remorse after doing it. You ask your friend what she thinks and she responds with approval encouraging you to go ahead and have some fun!

Instructions: Think about the scenario you just read and please answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. I would feel guilty if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. I would be satisfied with the support my friend provided.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. I would be likely to participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. My friend communicated negatively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This situation would make me feel sad.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. I would definitely not request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

7. In the future, I would seek out my friend to discuss sex-related topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

8. I would be angry in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

9. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

10. I would feel disappointed.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

11. After talking with my friend, I would not participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

12. My friend communicated positively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

13. It is unlikely that I would turn to my friend to help with future sexual decisions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

14. My friend did not provide the support I'd expect from a friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

15. I would definitely request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

16. I would not ask my friend for advice again regarding sexual topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

17. It is likely that I would participate in this behavior after speaking with my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

18. I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

19. The social support provided by my friend is not helpful.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

20. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

21. I would be ashamed if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

22. I know I will talk to my friend again about the sexual decisions I am faced with.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

23. It is unlikely that I would follow through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

24. My friend was very supportive.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

25. I would be envious in this situation.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Please re-read the situation (provided below) and answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

Over dinner, you and your friend are catching up with each other's lives when you bring up your ex-partner. After seeing your ex the last few times, you have been interested in having sex with them again, but you are afraid you might feel remorse after doing it. You ask your friend what she thinks and she responds with approval encouraging you to go ahead and have some fun!

1. This event is realistic.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. This would be an important event in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. This event is believable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. This would make me think about my friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This event is typical.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. Events like this have happened often in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend's initials here: _____

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up with someone random. You do not believe much risk is involved, but you ask your friend whether you should hook up with someone random. She responds with disapproval discouraging you to go ahead with something so risky!

Instructions: Think about the scenario you just read and please answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. I would feel guilty if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. I would be satisfied with the support my friend provided.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. I would be likely to participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. My friend communicated negatively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This situation would make me feel sad.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. I would definitely not request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

7. In the future, I would seek out my friend to discuss sex-related topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

8. I would be angry in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

9. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

10. I would feel disappointed.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

11. After talking with my friend, I would not participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

12. My friend communicated positively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

13. It is unlikely that I would turn to my friend to help with future sexual decisions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

14. My friend did not provide the support I'd expect from a friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

15. I would definitely request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

16. I would not ask my friend for advice again regarding sexual topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

17. It is likely that I would participate in this behavior after speaking with my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

18. I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

19. The social support provided by my friend is not helpful.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

20. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

21. I would be ashamed if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

22. I know I will talk to my friend again about the sexual decisions I am faced with.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

23. It is unlikely that I would follow through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

24. My friend was very supportive.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

25. I would be envious in this situation.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Please re-read the situation (provided below) and answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

You and your friend are chatting online about what happened over the weekend. You tell her about another boring Saturday night! You are tired of not meeting anyone and you would like to hook up with someone random. You do not believe much risk is involved, but you ask your friend whether you should hook up with someone random. She responds with disapproval discouraging you to go ahead with something so risky!

1. This event is realistic.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. This would be an important event in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. This event is believable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. This would make me think about my friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This event is typical.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. Events like this have happened often in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Please answer *all* of the following questions honestly. For the questions dealing with frequency of behavior, please rate items using the scale: (1) never, (2) not too often, (3) half the time, (4) frequently, and (5) all of the time. For the questions dealing with percentage of behavior, *write* your answers in the blank spaces provided and be sure to use the scale of 0-100% for each item.

Given your sexual experience (i.e., sexually intimate behaviors and sexual intercourse) in the last SIX MONTHS:

1. How often do you **directly** talk to your romantic partner about using condoms?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

2. How often do you **directly** talk to your romantic partner about using birth control?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

3. How often do you **directly** talk to your romantic partner about your past sexual experiences?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

4. How often do you **directly** talk to your romantic partner about other contraceptives?

Never	Not too often	Half the time	Frequently	All of the time
1	2	3	4	5

5. If any, what are the other contraceptives you discuss? List these contraceptives below.

For the items below, please answer the contraceptive related items based on BOTH you and your partner. If you are not sure about a particular method, please indicate NOT APPLICABLE. Otherwise, please provide a percentage on a scale of 0-100%.

6. How often do you use male condoms? _____
7. How often do you use female condoms? _____
8. How often do you use birth control? _____
9. How often do you use the sponge? _____
10. How often do you use spermicide methods? _____
11. How often do you use a vaginal ring (e.g., NuvaRing)? _____
12. How often do you use a skin patch (e.g., Ortho Evra)? _____
13. How often do you use the withdrawal method? _____
14. How often do you use emergency methods (e.g., morning after pill)? _____
15. How often do you prescribe to NO METHOD? _____

For the items below, please answer the sexual behavior items based on what you and your partner(s) have participated in during the LAST SIX MONTHS. If you have not participated in a particular behavior, please indicate NOT APPLICABLE. Otherwise, please provide a percentage on a scale of 0-100%.

1. Abstinence. _____
2. Kissing on the face including cheeks and lips. _____
3. Deep kissing. _____
4. Touching above clothes. _____
5. Touching underneath clothes. _____
6. Manual stimulation of female breasts. _____
7. Manual stimulation of female clitoris. _____
8. Manual stimulation of male penis. _____
9. Manual stimulation of male scrotum. _____

- 10. Oral stimulation of female genitals (e.g., oral sex). _____
- 11. Oral stimulation of male genitals (e.g., oral sex). _____
- 12. Anal intercourse. _____
- 13. Sexual intercourse (when penis penetrates vagina). _____

Instructions: People can influence each other's health behaviors in a lot of different ways. For each of the following items, please rate how true each item is of your relationship with friends. Try to base your answers on your past experience with these people. For the following questions, please rate items using the scale: (1) never, (2) not too often, (3) half the time, (4) frequently, and (5) often.

1. They offer to engage in healthy behaviors with me.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

2. They expect me to engage in healthy sexual behaviors.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

3. I feel a sense of responsibility to them to try to stay in good health.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

4. They do things for me that make it easier for me to engage in healthy behavior (or avoid engaging in unhealthy behavior).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

5. They discourage me to participate in unhealthy sexual behaviors.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

6. They expect me to try to stay healthy.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

7. They drop hints that I should engage in healthy behavior.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

8. They ask me to engage in certain healthy sexual behaviors (or to stop engaging in certain unhealthy sexual behaviors).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

9. If I didn't make an effort to try to be healthy, I think that they would be disappointed.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

10. They leave reminders that I should engage in a particular health-related behavior.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

11. They do things for me that make it easier for me to engage in healthy sexual behavior (or avoid engaging in unhealthy sexual behavior).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

12. They encourage me to participate in healthy sexual behaviors.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

13. It is important to them that I make an attempt to be physically fit for health reasons.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

14. They ask me to engage in certain healthy behaviors (or to stop engaging in certain unhealthy behaviors).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

Thanks for your participation!

-A-

Appendix D

Study 3 Questionnaire (Example of Version A for Females)

Sexual Decision Making & Communication Questionnaire

Instructions: In this survey, I am interested in the communication that surrounds your own and a same-sex friend's sexuality and sexual behavior, sexual decision making, the thoughts involved in these discussions, and the satisfaction of social support.

Please read everything carefully and answer each question as completely and honestly as possible. Your responses will be treated as confidential. Do not include your name on this survey. Again, your responses are confidential, so your answers cannot be linked to your identity in any way.

In this survey you will be asked to describe your communication with **your closest or best same-sex friend** (i.e., if you are female, you will describe communication with another female and if you are male, you will describe communication with another male) who is **not** related to you (i.e., cousin or sibling). Please answer the following packet based on you and your closest or best same-sex friend (the friend in which you'd likely have these types of conversations). Write your same-sex friend's initials here: _____

Instructions: To begin, please fill out the following demographic information about yourself and your friendship.

What is your gender (circle one)?

Female

Male

Transgender

Other (please specify): _____

Age: _____

Ethnicity: (circle all that apply)

African-American

American Indian

Hispanic

Caucasian

Asian-American

Other (please specify): _____

What is your religion preference (circle one)?

None

Jewish

Buddhism

Muslim

Christian

Other (please specify): _____

Are you (circle one):

Single

Casual Dating

Serious Dating

Engaged

Married

Divorced

Other (please specify): _____

If in a romantic relationship, how long (in years, months, and/or days) have you been in this relationship(s)? (After the number, please indicate “years,” “months,” or “days.”)

Are you (circle one):

Freshman

Senior

Sophomore

Graduate Student

Junior

Other (please specify): _____

What is your sexual orientation (circle one)?

Bisexual

Heterosexual (i.e., Straight)

Gay

Uncertain

Lesbian

Other (please specify): _____

For the current survey, please keep in mind that you should be thinking of a same-sex friend. To confirm, the friend you are reflecting on is (circle one):

Male

Female

Do you consider this person to be your best friend (circle one)? YES NO

How long (in years, months, and/or days) have you been in this friendship? (After the number, please indicate “years,” “months,” or “days.”)

How many other close friends do you currently have? (Please provide an approximate number).

Instructions: Please rank the relational partners listed below in which you have sex-related conversations. Write “1” next to the relational partner you talk to the MOST about sex-related topics, write “2” next to the person you talk to the second most, write “3” next to the person you talk to the third most, and so on. If you do not talk to a relational partner about sex, please write “NA” for not applicable. You may write-in additional relationships not listed in the spots marked “Other” provided below.

Same-sex Friend	_____	Cross-sex Friend	_____
Same-Sex Sibling	_____	Cross-Sex Sibling	_____
Mother	_____	Father	_____
Romantic Partner	_____	Other:	_____
Other:	_____	Other:	_____

Instructions: Please read the definitions below and then answer the following question regarding your sexual experience.

Sexual intercourse refers to sex in which the penis penetrates the vagina or anus.

Sexually intimate behavior (no oral sex) refers to acts that include deep kissing, touching above and underneath clothes.

Sexually intimate behavior (with oral sex) refers to acts that include deep kissing, touching above, underneath clothes, and oral sex.

Now, please circle one of the following responses to reflect your sexual experience:

I have never been sexually intimate with another person.

I have never had sexual intercourse, but I have been sexually intimate (no oral sex) with one or more individuals.

I have never had sexual intercourse, but I have been sexually intimate (with oral sex) with one or more individuals.

I have had sexual intercourse one or more times.

Instructions: Based on the definitions provided on the previous page, please answer the following questions about your recent sexual experience.

1. In the past 60 days, how many times have you been sexually intimate (with oral sex)?
Please provide a number: _____
2. Of the times you've been sexually intimate (with oral sex) in the past 60 days, how many times did you use protection?
Please provide a number: _____
3. In your entire life, how many partners have you been sexually intimate (with oral sex) with?
Please provide a number: _____
4. In the past 60 days, how many times have you had sexual intercourse?
Please provide a number: _____
5. Of the times you've had sexual intercourse in the past 60 days, how many times did you use a condom?
Please provide a number: _____
6. In your entire life, how many partners have you had sexual intercourse with?
Please provide a number: _____

Instructions: Please answer the following questions about hooking up.

In your own words, how would you define "hooking up"?

Which of the following behaviors do you consider hooking up (circle one)?

Just Kissing

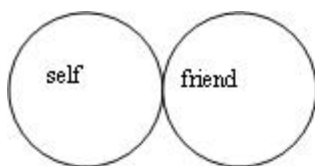
Sexually intimate behaviors (no oral sex)

Sexually intimate behaviors (with oral sex)

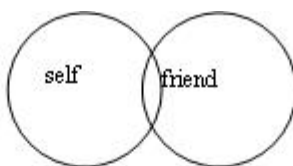
Sexual intercourse

Other (please specify) _____

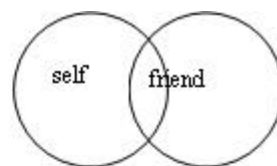
Instructions: The next several pages will ask questions about your friendship with your same-sex friend in which you provided initials for on the first page of the survey. To begin, which of the following sets of circles best describes the closeness of you and your friend? (Circle the correct set of circles).



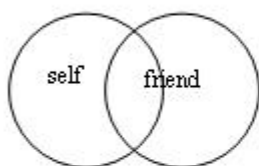
1



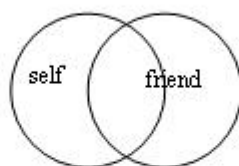
2



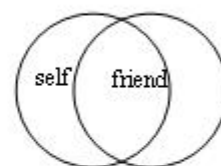
3



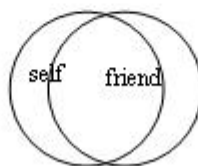
4



5



6



7

Instructions: Please read each sentence carefully and indicate the extent to which you agree with each statement. Please indicate whether you strongly disagree (1), disagree (2), are undecided (3), agree (4), or strongly agree (5). Circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. If I ever need help, my friend is there.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

2. My friend and I have very little in common.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

3. If I have any problems, my friend will help.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

4. If my friend has any problems, I'll try to help.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

5. There are many people that I associate with, but not too many that I would call really good friends.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

6. My friend and I correspond and talk to each other on the telephone.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

7. I'd be awful lonesome without my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

8. My friend has been pretty nice to me.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

9. My friend does not understand me.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

10. I am frequently closer to this friend than to a family member.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

11. My friend loves me.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

12. I think my friend would do anything for me.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

13. My friend and I have a great deal in common.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

14. My friend and I disagree on most important things.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

15. My friend cares for me and I care for my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

16. I have many acquaintances, but not too many friends.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

17. Some friends are closer than others.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

18. My friend and I enjoy each other talking.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

19. I count on my friend for fellowship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

20. Without friends, you can't do anything in the business world.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

21. I tell my friend things that I don't tell other people.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

22. My friend does many nice things for me.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

23. Without friends, you can't do anything in the social world.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

24. My friend likes to do the things I like to do.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

25. Right now, if I should email my friend, they would answer me.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

26. My friend and I have common interests.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

27. I accept my friend as they are.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	2	3	4	5

Instructions: For the next two questions, please reflect on the same-sex friend you provided initials for on the first page of the survey as you respond.

1. How often does YOUR FRIEND assist in your sexual decision-making (i.e. how often do you ask for assistance or do they provide you with advice/info/tips)? (circle one)

Never

Rarely

Occasionally

Frequently

All the time

Other (please specify) _____

Why or why not?

2. How often do YOU assist your friend in their sexual decision-making (i.e. how often do they ask for your assistance or do you provide them with advice/info/tips)? (circle one)

Never

Rarely

Occasionally

Frequently

All the time

Other (please specify) _____

Why or why not?

Instructions: This survey is concerned with the extent to which you have discussed the following information with your same-sex friend that you listed on the first page. Rate the following items with 1 = have not discussed this topic, 2 = have slightly discussed this topic, 3 = have moderately discussed this topic, 4 = have mostly discussed topic, and 5 = have fully discussed. Please circle not applicable (NA) when necessary.

We have discussed or have not discussed...	Not Applicable	Not Discussed			Fully Discussed
1. My past sexual experiences	NA	1	2	3	4 5
2. The things that sexually arouse me	NA	1	2	3	4 5
3. My imaginary sexual encounters	NA	1	2	3	4 5
4. The sexual behaviors which I think people ought to exhibit	NA	1	2	3	4 5
5. What sex means to me	NA	1	2	3	4 5
6. How guilty I feel about sex	NA	1	2	3	4 5
7. How satisfied I feel about the sexual aspects of my life	NA	1	2	3	4 5
8. Times when sex was distressing for me	NA	1	2	3	4 5
9. What I think about birth control	NA	1	2	3	4 5
10. My private notion of sexual responsibility	NA	1	2	3	4 5
11. The times I have faked an orgasm	NA	1	2	3	4 5
12. My private views about rape	NA	1	2	3	4 5
13. The types of sexual behaviors I've engaged in	NA	1	2	3	4 5
14. The sexual activities that "feel good" to me	NA	1	2	3	4 5
15. My private sexual fantasies	NA	1	2	3	4 5
16. What I consider "proper" sexual behaviors	NA	1	2	3	4 5
17. What it means to make love together with someone	NA	1	2	3	4 5
18. How anxious I feel about my sex life	NA	1	2	3	4 5
19. How content I feel about the sexual aspects of my life	NA	1	2	3	4 5
20. Times when I had undesired sex	NA	1	2	3	4 5
21. How I feel about abortions	NA	1	2	3	4 5
22. The responsibility one ought to assume for one's sexuality	NA	1	2	3	4 5
23. The times I have pretended to enjoy sex	NA	1	2	3	4 5
24. The "truths and falsehoods" about rape	NA	1	2	3	4 5
25. The number of times I have had sex	NA	1	2	3	4 5
26. The behaviors that are sexually exciting to me	NA	1	2	3	4 5
27. My sexually exciting imaginary thoughts	NA	1	2	3	4 5
28. The sexual conduct that people ought to exhibit	NA	1	2	3	4 5
29. What I think and feel about having sex with someone	NA	1	2	3	4 5
30. How depressed I feel about my own sexuality	NA	1	2	3	4 5
31. How happy I feel about my sexuality	NA	1	2	3	4 5
32. Times I was pressured to have sex	NA	1	2	3	4 5
33. How I feel about pregnancy	NA	1	2	3	4 5
34. My own ideas of sexual accountability	NA	1	2	3	4 5
35. The times I have lied about sexual matters	NA	1	2	3	4 5
36. What women and men really feel about rape	NA	1	2	3	4 5
37. The sexual positions I have tried	NA	1	2	3	4 5
38. The sensations that are sexually arousing to me	NA	1	2	3	4 5
39. My "juicy" sexual thoughts	NA	1	2	3	4 5

40. My attitudes about sexual behaviors	NA	1	2	3	4	5
41. The meaning that sexual intercourse has for me	NA	1	2	3	4	5
42. How frustrated I feel about my sex life	NA	1	2	3	4	5
43. How much joy that sex gives me	NA	1	2	3	4	5
44. The aspects of sex that bother me	NA	1	2	3	4	5
45. My private beliefs about pregnancy prevention	NA	1	2	3	4	5
46. The idea of having to answer for one's sexual conduct	NA	1	2	3	4	5
47. What I think about sexual disloyalty	NA	1	2	3	4	5
48. Women's and men's reactions to rape	NA	1	2	3	4	5
49. The places and times-of-day when I've had sex	NA	1	2	3	4	5
50. The types of sexual foreplay that feel arousing to me	NA	1	2	3	4	5
51. The sexual episodes that I daydream about	NA	1	2	3	4	5
52. My personal beliefs about sexual morality	NA	1	2	3	4	5
53. The importance that I attach to making love with someone	NA	1	2	3	4	5
54. How angry I feel about the sexual aspect of my life	NA	1	2	3	4	5
55. How enjoyable I feel about my sexuality	NA	1	2	3	4	5
56. Times when I wanted to leave a sexual encounter	NA	1	2	3	4	5
57. The pregnancy precautions that people ought to take	NA	1	2	3	4	5
58. The notion one is answerable for one's sexual behaviors	NA	1	2	3	4	5
59. How I feel about sexual honesty	NA	1	2	3	4	5
60. Times when I prefer to refrain from sexual activity	NA	1	2	3	4	5

Instructions: I am interested in how individuals perceive friendship social support during sex-related conversations. Please read the following situation carefully, put yourself in the position described, and reflect upon what it would be like to be in a friendship like this with your closest or best same-sex friend. Write your same-sex friend's initials here:

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

Instructions: Think about the scenario you just read and please answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or not applicable (NA). Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

1. I would feel guilty if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. I would be satisfied with the support my friend provided.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. I would be likely to participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. If I follow through with this behavior, I would experience negative consequences.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. My friend communicated negatively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. This situation would make me feel sad.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

7. I would definitely not request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

8. In the future, I would seek out my friend to discuss sex-related topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

9. I think I would feel bad if I participated in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

10. I would be angry in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

11. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

12. I think I would feel disappointed in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

13. After talking with my friend, I would not participate in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

14. My friend communicated positively.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

15. I would not feel remorse for following through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

16. It is unlikely that I would turn to my friend to help with future sexual decisions.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

17. My friend did not provide the support I'd expect from a friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

18. I would definitely request a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

19. I would experience regret if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

20. I would not ask my friend for advice again regarding sexual topics.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

21. It is likely that I would participate in this behavior after speaking with my friend.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

22. I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

23. The social support provided by my friend was not helpful.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

24. There are no foreseeable consequences for participating in this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

25. It is likely that I would have sex with this person without a condom.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

26. I would be ashamed if this event occurred.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4		

27. I know I will talk to my friend again about the sexual decisions I am faced with in the future.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

28. It is unlikely that I would follow through with this behavior.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

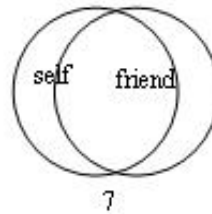
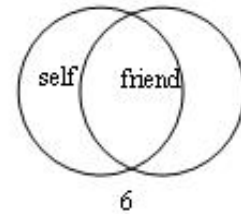
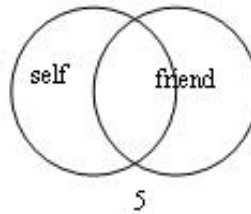
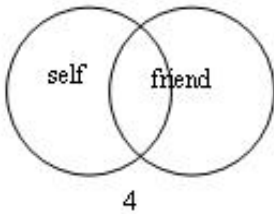
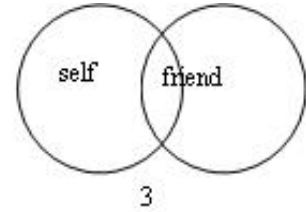
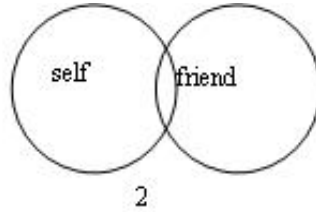
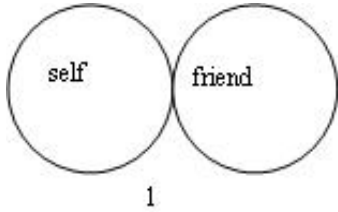
29. My friend was very supportive in this scenario.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

30. I would be envious of my friend in this situation.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

Instructions: Which of the following sets of circles would best describe the closeness of you and your friend now (if this scenario occurred)? (Circle the correct set of circles).



Instructions: Please re-read the situation (provided below) and answer the following questions. Rate the following items with strongly disagree (1), disagree (2), are undecided (3), agree (4), strongly agree (5), or (NA) for not applicable. Please circle the number that corresponds with your response. The responses are listed under each question for your convenience.

You and your friend are hanging out in your room getting ready to go out to a party on a Friday night. The person you like will be at the party. You are thinking about hooking up with this person, but you are afraid it might not be a good idea. You ask your friend whether you should hook up and she responds enthusiastically encouraging you to go ahead and have some fun!

1. This event is realistic.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

2. This would be an important event in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

3. This event is believable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

4. This would make me think about my friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

5. This event is typical.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

6. Events like this have happened in my best or closest friendship.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	NA
1	2	3	4	5	

[illegible]

[illegible]

[illegible]

Instructions: The following questions ask you about your same-sex friend and the help or support they provide you **in general**. Each question has THREE parts. For the *first* part, rate how much you feel you can count on your same-sex friend for help or support in the manner described. For the *second* part, rate how satisfied you are with the overall support you have from that same-sex friend in the manner described. Finally, for the *third* part, list the number of other friends you feel provide you help and support in the manner described.

1. Can you really count on this person to distract you from your worries when you feel under stress?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to distract you?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

2. Can you really count on this person to help you feel more relaxed when you are under pressure or tense?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to help you feel relaxed?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

3. Do they accept you totally, including both your worst and your best points?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to accept you?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

4. Can you really count on them to care about you, regardless of what is happening to you?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to care about you?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

5. Can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to help you feel better?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

6. Can you count on them to console you when you are very upset?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to console you?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

7. Can you count on them to talk with about private issues?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to talk to about private issues?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

8. Can you count on them to talk with about your sexual behavior?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to talk to about your sexual behavior?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

9. Do they accept you totally, including your decisions regarding sexual behavior?

Never	Rarely	Sometimes	Mostly	Always
1	2	3	4	5

How satisfied are you with this person's ability to accept your sexual behavior decisions?

Very dissatisfied	Fairly dissatisfied	Neutral	Fairly satisfied	Very satisfied
1	2	3	4	5

How many friends provide help or support in this manner: _____

Instructions: Please answer *all* of the following questions honestly. For the questions dealing with frequency of behavior, please rate items using the scale: (1) never, (2) not too often, (3) half the time, (4) frequently, and (5) all of the time. For the questions dealing with percentage of behavior, *write* your answers in the blank spaces provided and be sure to use the scale of 0-100% for each item.

Given your sexual experience (i.e., sexually intimate behaviors and sexual intercourse) in the last SIXTY DAYS:

1. How often do you **directly** talk to your romantic partner about using condoms?

Never	Not too often	Half the time	Frequently	All of the time	NA
1	2	3	4	5	

2. How often do you **directly** talk to your romantic partner about using birth control?

Never	Not too often	Half the time	Frequently	All of the time	NA
1	2	3	4	5	

3. How often do you **directly** talk to your romantic partner about your past sexual experiences?

Never	Not too often	Half the time	Frequently	All of the time	NA
1	2	3	4	5	

4. How often do you **directly** talk to your romantic partner about other contraceptives?

Never	Not too often	Half the time	Frequently	All of the time	NA
1	2	3	4	5	

5. If any, what are the other contraceptives you discuss? List these contraceptives below.

For the items below, please answer the contraceptive related items based on BOTH you and your partner. If you are not sure about a particular method, please indicate NOT APPLICABLE. Otherwise, please provide a percentage on a scale of 0-100%.

- | | |
|---|-------|
| 6. How often do you use male condoms? | _____ |
| 7. How often do you use female condoms? | _____ |
| 8. How often do you use birth control? | _____ |
| 9. How often do you use the sponge? | _____ |

10. How often do you use spermicide methods (e.g., with condoms)? _____
11. How often do you use a vaginal ring (e.g., NuvaRing)? _____
12. How often do you use a skin patch (e.g., Ortho Evra)? _____
13. How often do you use the withdrawal method? _____
14. How often do you use emergency methods (e.g., morning after pill)? _____
15. How often do you prescribe to NO METHOD? _____

For the items below, please answer the sexual behavior items based on what you and your partner(s) have participated in during the LAST SIXTY DAYS. If you have participated in a particular behavior, please indicate NOT APPLICABLE (NA). Otherwise, please provide a percentage on a scale of 0-100%.

1. Abstinence. _____
2. Kissing on the face including cheeks and lips. _____
3. Deep kissing. _____
4. Touching above clothes. _____
5. Touching underneath clothes. _____
6. Manual stimulation of female breasts. _____
7. Manual stimulation of female clitoris. _____
8. Manual stimulation of male penis. _____
9. Manual stimulation of male scrotum. _____
10. Oral stimulation of female genitals (e.g., oral sex). _____
11. Oral stimulation of male genitals (e.g., oral sex). _____
12. Anal intercourse. _____
13. Sexual intercourse (when penis penetrates vagina). _____

Instructions: Please answer *all* of the following questions honestly. For the questions dealing with behavior, *write* your answers in the blank spaces provided. For the questions dealing with thoughts and attitudes, *circle* the appropriate number on the scales provided. If the following items do not pertain to you, please write not applicable (NA).

1. With how many different partners have you had sex (sexual intercourse) within the past year?
Please provide a number: _____
2. How many different partners do you foresee yourself having sex with during the next five years? Please give a *specific, realistic* estimate number: _____
3. With how many different partners have you had sex on *one and only one* occasion?
Please provide a number: _____
4. With how many of these partners (listed in Question 3 above) have you used a condom?
Please provide a number: _____
5. How long ago was your last sexual encounter? (Circle one or write NA).
 1. Less than a week
 2. Between one week and one month ago
 3. Between one month and three months ago
 4. Between three months and six months ago
 5. Between six months and one year ago
 6. More than one year ago
 7. I have never been sexually intimate with another person
6. During this sexual encounter, did you or your partner mention practicing safer sex? (Circle one or write NA).
 1. You
 2. Your partner
 3. You and your partner
 4. Neither you or your partner
 5. Contraception was just used with no discussion
7. How often do you fantasize about having sex with someone other than your current dating partner? (Circle one or write NA).
 1. Never
 2. Once every two or three months
 3. Once a month
 4. Once every two weeks
 5. Once a week
 6. A few times a week
 7. Nearly every day
 8. At least once a day

8. Sex without love is OK.

1 2 3 4 5 6 7

Strongly Disagree

Strongly Agree

9. I can imagine myself being comfortable and enjoying “casual” sex with different partners.

1 2 3 4 5 6 7

Strongly Disagree

Strongly Agree

10. I would have to be closely attached to someone (both emotionally and psychologically) before I could feel comfortable and fully enjoy having sex with him or her.

1 2 3 4 5 6 7

Strongly Disagree

Strongly Agree

Instructions: For the following questions, please rate items using the scale: (1) not at all like me, (2) not too much like me, (3) undecided, (4) somewhat like me, and (5) very much like me.

1. I am interested in trying out new sexual experiences.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

2. The physical sensations are the most important things about having sex.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

3. I enjoy the sensation of intercourse without a condom.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

4. My sexual partners probably think I am a “risk taker.”

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

5. I like wild “uninhibited” sexual encounters.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

6. When it comes to sex, physical attraction is important to me than how well I know the person.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

7. I enjoy the company of “sensual” people.”

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

8. I enjoy watching “X-rated” videos.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

9. I have said things that were not exactly true to get a person to have sex with me.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

10. I feel like exploring my sexuality.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

11. I like to have new and exciting sexual experiences and sensations.

Not at all like me	Not too much like me	Undecided	Somewhat like me	Very much like me	NA
1	2	3	4	5	

Instructions: People can influence each other's health behaviors in a lot of different ways. For each of the following items, please rate how true each item is of your relationship with friends. Try to base your answers on your past experience with these people. For the following questions, please rate items using the scale: (1) never, (2) not too often, (3) half the time, (4) frequently, and (5) often.

1. They offer to engage in healthy behaviors with me.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

2. They expect me to engage in healthy sexual behaviors.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

3. I feel a sense of responsibility to them to try to stay in good health.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

4. They do things for me that make it easier for me to engage in healthy behavior (or avoid engaging in unhealthy behavior).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

5. They discourage me to participate in unhealthy sexual behaviors.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

6. They expect me to try to stay healthy.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

7. They drop hints that I should engage in healthy behavior.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

8. They ask me to engage in certain healthy sexual behaviors (or to stop engaging in certain unhealthy sexual behaviors).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

9. If I didn't make an effort to try to be healthy, I think that they would be disappointed.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

10. They leave reminders that I should engage in a particular health-related behavior.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

11. They do things for me that make it easier for me to engage in healthy sexual behavior (or avoid engaging in unhealthy sexual behavior).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

12. They encourage me to participate in healthy sexual behaviors.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

13. It is important to them that I make an attempt to be physically fit for health reasons.

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

14. They ask me to engage in certain healthy behaviors (or to stop engaging in certain unhealthy behaviors).

Never	Not too often	Half the time	Frequently	Often
1	2	3	4	5

Instructions: Respond to the following items as honestly as possible. The scale ranges from 1 to 7 with (1) being that you strongly disagree with the statement and (7) being strongly agree with the statement.

		Strongly Disagree			Strongly Agree			
1.	Before voting I thoroughly investigate the qualifications of all the candidates.	1	2	3	4	5	6	7
2.	I never hesitate to go out of my way to help someone in trouble.	1	2	3	4	5	6	7
3.	I am always careful about my manner of dress.	1	2	3	4	5	6	7
4.	I like to gossip at times.	1	2	3	4	5	6	7
5.	No matter who I'm talking to, I'm always a good listener.	1	2	3	4	5	6	7
6.	I'm always willing to admit it when I make a mistake.	1	2	3	4	5	6	7
7.	I sometimes think when people have misfortune they only got what they deserved.	1	2	3	4	5	6	7
8.	I have never deliberately said something that hurt someone's feelings.	1	2	3	4	5	6	7

Thanks for your participation!

-A-

VITA

Alysa Ann Lucas

The Pennsylvania State University
Department of Communication Arts and Sciences
234 Sparks Building
University Park, PA 16802
a-lucas@psu.edu

Educational History

The Pennsylvania State University, University Park, PA

Ph.D. in Communication Arts and Sciences, December 2009

Advisor: Dr. Jon F. Nussbaum; Committee: Drs. Dennis S. Gouran, Denise H. Solomon, and Mary Beth Oliver (Communications)

Dissertation: *The Role of Friendship Support in Risky Sexual Decision-Making: A Test of the Regret Regulation Theory*

Michigan State University, East Lansing, MI

M.A. in Communication, August 2004

Advisor: Kelly Morrison; Committee: Drs. Sandi W. Smith and Brent Donnellan (Psychology)

Thesis: *Exploring the Relationship Between Attributions and Communication in Response to Jealousy in Same-Sex Friendships*

Michigan State University

B.A. in Communication, May 2002

Academic and Professional Experience

Graduate Assistant, Fall 2004-Summer 2008, Summer 2009

The Pennsylvania State University

Research Assistant, Summer 2008, Summer 2009

The Pennsylvania State University

Teamwork Center Coordinator, Fall 2007-Spring 2008

The Pennsylvania State University

Graduate Assistant, Fall 2002-Summer 2004

Michigan State University

Publications

Afifi, W.A., & Lucas, A.A. (2008). Information seeking in initial stages of relational development. In S. Sprecher, A. Wenzel, & J. Harvey (Eds.), *The handbook of relationship initiation*. Mahwah, NJ: Lawrence Erlbaum Associates.

Awards

Recipient of The Kathryn DeBoer Distinguished Teaching Award, 2007

Department of Communication Arts & Sciences, The Pennsylvania State University