

INTIMATE JUSTICE: SEXUAL SATISFACTION IN YOUNG ADULTS

by

SARA I. MCCLELLAND

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment  
of the requirements for the degree of Doctor of Philosophy,  
The City University of New York

2009

© 2009

SARA I. MCCLELLAND

All Rights Reserved

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

Michelle Fine, Ph.D.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Co-Chair of Examining Committee

Tracey A. Revenson, Ph.D.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Co-Chair of Examining Committee

Maureen O'Connor, Ph.D.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Executive Officer, Psychology

**Supervisory Committee:**

Susan Opatow, Ph.D.

Faye Crosby, Ph.D.

Janice Steil, Ph.D.

## Abstract

## INTIMATE JUSTICE: SEXUAL SATISFACTION IN YOUNG ADULTS

by

Sara I. McClelland

Advisers: Professors Michelle Fine & Tracey A. Revenson

Sexual satisfaction is an important indicator of individual and relational well-being. Questions remain whether this construct is adequately measured, particularly for women and men who experience limited sexual rights in the socio-political domain due to their gender and/or sexual minority status. The aims of the research were to: 1) develop a theoretical framework that acknowledges social, psychological, and relational antecedents of sexual satisfaction appraisals; 2) examine differences in sexual satisfaction among heterosexual and LGBT women and men; and 3) identify scale anchors and respondents' expectations for satisfaction when making appraisals in order to develop systematic methods for linking construct definitions with subsequent scores.

Study 1 analyzed self-report data from 8,595 young adults (ages 18-28) from the National Longitudinal Study of Adolescent Health (Add Health). Multivariate analyses indicated a crossover interaction between gender and sexual minority status: Heterosexual women and sexual minority men reported lower sexual satisfaction than heterosexual men and sexual minority women. Self-esteem and relational reciprocity moderated sexual satisfaction for women, but not for men;

moderation effects were not found for sexual minority status. The data demonstrate that person- and relational-level factors affect individuals' sexual appraisals and that the gender of the partner plays an important role in sexual satisfaction.

Study 2 investigated how heterosexual and sexual minority young adults defined sexual satisfaction. Students ages 18-28 (n=34) at an urban university completed a card sorting task, paper-and-pencil measures, including self-anchored ladder items (Cantril, 1965), and a semi-structured interview concerning sexual satisfaction. Gender differences were found in the scaling of sexual satisfaction: Women associated the low end of the scale with pain, whereas men associated low satisfaction with the absence of sex or masturbation. Interview data revealed that whereas heterosexual men most frequently defined satisfaction according to their own orgasm, women and LGBT men relied on other benchmarks, including feelings of safety and closeness, and a partner's satisfaction level. The findings from both studies suggest that when researchers study sexual satisfaction, it is critical to build sexual expectations into measures. Expectations for satisfaction are shaped by gender inequity and sexual stigma and these ultimately influence the validity of sexual satisfaction appraisals.

## ACKNOWLEDGMENTS

Over the past six years, I have had the opportunity to study and think alongside Michelle Fine, Tracey Revenson, and Susan Opatow. These three women bring a passionate and distinctive perspective to what it means to be an academic, a feminist, a writer, and a woman. I have learned how to be all of these things from them, with them, and because of them. In an effort to simply keep up with their thinking and their insights, I stretched. I worked. I didn't want to miss a word.

This dissertation is born out of sheer inspiration. I want to highlight three ways I hear their voices in this document.

First, this dissertation works to understand how oppression lives at the level of the body and insinuates itself into everyday assumptions about deservingness and what a person believes about him or herself. *It's here we see Michelle's influence.*

Second, this dissertation works to understand the effects of unequal power at the level of methods – and – the unmatched power of metrics and measures as tools to record and demonstrate inequities. *It's here we see Tracey's influence.*

Third, this dissertation works to recognize not only injustice, but adaptation to injustice over time. It argues for researchers to study the mechanisms by which inequity is maintained and consistently normalized to the point that it is invisible. *It's here we see Susan's influence.*

I am different on this side of graduate school. Having had the chance to think and write with Michelle, Tracey, and Susan has altered me permanently and I cannot

thank them enough. I am deeply grateful for their support, their unbelievable minds, and their love.

In addition, I have been lucky to have been learning and thinking alongside David Frost for six years. My work and my thinking have forever been changed by comingling minds with David. I look forward to a lifetime of scholarship and friendship with him. And while we will not always be able to share candy, we will always be able to share delicious morsels of thinking and gossip.

There have been many friends who have been instrumental in maintaining my mental health, as well as my scholarship. Meredith Theeman not only sent flowers and text cheers as I was writing, but also provided the idea for the “profile” analysis in Study 2. Many thanks as well to: Jason Van Ora, Jana Sladkova, Brett Stoudt, Sarah Zeller-Berkman, Krystal Perkins, Deb Tolman, Suzanne Ouellette, Kay Deaux, Faye Crosby, Janice Steil, Bre Fahs, Michael Grofe, Rachel Waltuch, Joanna Arkans, Karen Kennedy, and Renee Craven.

Many thanks to my newly expanded and expanding family – Rachel, Rebecca, Tristan, Laura, Xackery, and Sarah – for their love and encouragement from my home away from home.

Lastly, I want to thank my father who taught me many things, including how to think hard, not to drive too close to big trucks, how to tie knots, and to feel good about a job well done. His pride and his love are, and have always been, immense and plentiful. There is truly nothing better. For this, I am thankful and lucky in immeasurable ways.

## Table of Contents

|  |               |
|--|---------------|
| <b>CHAPTER ONE: INTRODUCTION .....</b>                       | <b>1</b>      |
| BACKGROUND & AIMS.....                                       | 2             |
| YOUNG ADULTS & SEXUALITY.....                                | 4             |
| BACKGROUND LITERATURE .....                                  | 8             |
| Conceptual Analysis in Psychology .....                      | 9             |
| History of Satisfaction Research .....                       | 11            |
| Recent Research on Satisfaction.....                         | 15            |
| Missing Elements .....                                       | 19            |
| Social Status and Satisfaction .....                         | 21            |
| SEX RESEARCH & SEXUAL SATISFACTION .....                     | 23            |
| Research on Sexual Satisfaction .....                        | 23            |
| Human Sexual Response Models.....                            | 26            |
| A Contextual Approach to Sexual Satisfaction Appraisals..... | 30            |
| THE CURRENT STUDIES .....                                    | 38            |
| <br><b>CHAPTER TWO: STUDY 1.....</b>                         | <br><b>40</b> |
| LITERATURE.....  | 43            |
| METHODS.....   | 49            |
| Sampling and Recruitment for the Add Health Study .....      | 49            |
| Sample Selection for the Dissertation .....                  | 50            |
| Sample Characteristics.....                                  | 51            |
| Measures.....  | 55            |
| Data Analyses.....   | 60            |
| RESULTS.....   | 61            |
| Research Question 1 .....                                    | 61            |
| Research Question 2 .....                                    | 63            |
| DISCUSSION.....  | 66            |
| Overview .....   | 66            |
| Study Limitations .....                                      | 72            |
| Future Directions .....                                      | 75            |
| <br><b>CHAPTER THREE: STUDY 2 .....</b>                      | <br><b>78</b> |
| LITERATURE.....  | 80            |
| METHODS.....   | 83            |
| Sample and Recruitment .....                                 | 83            |
| Study Procedures .....                                       | 85            |
| MEASURES .....   | 88            |
| Card Sorting Task .....                                      | 88            |
| Semi-Structured Interview.....                               | 88            |
| Survey Items.....  | 90            |
| ANALYSIS & FINDINGS.....                                     | 93            |
| Overview .....   | 93            |

|  |            |
|--|------------|
| Profiles of Satisfaction Scores .....                                    | 94         |
| Structures of Sexual Satisfaction .....                                  | 100        |
| Definitions of Sexual Satisfaction .....                                 | 106        |
| Benchmarks for evaluating sexual satisfaction.....                       | 108        |
| Routes to sexual satisfaction .....                                      | 114        |
| <b>DISCUSSION.....</b>   | <b>123</b> |
| Profiles .....   | 123        |
| Structures.....  | 124        |
| Definitions.....   | 124        |
| Entitlement .....  | 125        |
| Heterosexual men.....  | 127        |
| Limitations.....   | 129        |
| Future Directions .....  | 130        |
| Conclusion.....  | 130        |
| <b>CHAPTER FOUR: DISCUSSION.....</b>                                     | <b>133</b> |
| REFLECTING ON STUDIES 1 & 2.....   | 135        |
| Group differences .....  | 135        |
| The Relationship of Orgasm to Sexual Satisfaction .....                  | 138        |
| Measurement Issues.....  | 139        |
| The “Partner Effect” .....   | 139        |
| A Person x Environment Interactional Perspective .....                   | 142        |
| Reflecting on Methodological Choices .....                               | 143        |
| SEX AS A SOCIAL JUSTICE ISSUE .....                                      | 148        |
| The Exchange Model of Sexual Satisfaction .....                          | 148        |
| Sexual Satisfaction Inequity as “Natural” .....                          | 149        |
| Relative Deprivation.....  | 152        |
| An Intimate Justice Framework for Sexual Satisfaction .....              | 155        |
| A BLUEPRINT FOR BUILDING THE FIELD OF ‘CRITICAL SEXUALITY SCIENCE’ ..... | 156        |
| CONCLUSION.....  | 162        |
| <b>APPENDICES .....</b>  | <b>195</b> |
| <b>REFERENCES.....</b>   | <b>207</b> |

## List of Tables

|   |     |
|---|-----|
| Table 1. Selected sample and Wave III sample characteristics .....  | 166 |
| Table 2. Selected sample characteristics by gender and sexual minority status .....   | 167 |
| Table 3. Sexual identity labels and frequencies of same- and different-sex partners<br>for men and women .....                          | 169 |
| Table 4. Means and SDs of the number of sexual activities with most recent sexual<br>partner by gender and sexual minority status ..... | 170 |
| Table 5. Means and SDs of sexual satisfaction score by gender and sexual minority<br>status .....                                       | 171 |
| Table 6. Means, SDs, and correlations of sexual satisfaction items and orgasm<br>frequency for entire sample .....                      | 172 |
| Table 7. Means and SDs of sexual satisfaction and orgasm frequency items for<br>heterosexual and sexual minority men and women .....    | 173 |
| Table 8. Means and SDs of self esteem by gender and sexual minority status. ....  | 174 |
| Table 9. Frequencies and percentages of participants' perceived relational<br>reciprocity with their most recent partner .....          | 175 |
| Table 10. Regression of sexual satisfaction on gender and self esteem .....   | 176 |
| Table 11. Regression of sexual satisfaction on sexual minority status and self esteem<br>.....  | 177 |
| Table 12. Regression of sexual satisfaction on gender and relational reciprocity ...  | 178 |
| Table 13. Regression of sexual satisfaction on sexual minority status and relational<br>reciprocity.....                                | 179 |
| Table 14. Demographic characteristics.....  | 180 |
| Table 15. Means and standard deviations of sexual satisfaction items by gender and<br>sexual minority status .....                      | 182 |
| Table 16. Eight profiles .....  | 183 |
| Table 17. Five strategies used by study participants to organize un-marked ladder<br>items concerning overall sexual satisfaction.....  | 184 |

## List of Figures

|   |     |
|---|-----|
| Figure 1. Ecological model illustrating social and psychological antecedents of sexual satisfaction appraisals. ....  | 185 |
| Figure 2. Sexual satisfaction means for heterosexual and sexual minority men and women.....   | 186 |
| Figure 3. Self esteem means for heterosexual and sexual minority men and women .....  | 187 |
| Figure 4. Sexual satisfaction scores of men and women with lower and higher self esteem scores.....   | 188 |
| Figure 5. Sexual satisfaction scores of men and women with reciprocal and non-reciprocal emotional relationships with their most recent sexual partners ..... | 189 |
| Figure 6. The “Aligned” profile .....   | 190 |
| Figure 7. The “Unpartnered” profile.....  | 191 |
| Figure 8. The “Contrast” profile.....   | 192 |
| Figure 9. The “Liking” profile .....  | 193 |
| Figure 10. The “Orgasmless” profile .....   | 194 |

## Appendices

|  |     |
|--|-----|
| APPENDICES .....   | 195 |
| APPENDIX A. Add Health items used in analyses .....      | 195 |
| APPENDIX B. Participant Recruitment On-Line Flyer .....  | 196 |
| APPENDIX C. Participant On-Line Screener .....           | 197 |
| APPENDIX D. Semi-Structured Interview Protocol.....      | 198 |
| APPENDIX E. Self-Anchored Ladder Item .....              | 200 |
| APPENDIX F. Measures Used to Create Q Statements.....    | 201 |
| APPENDIX G. List Of Cards Used in Card Sorting Task..... | 203 |
| APPENDIX H. Card Sort Distribution Grid .....            | 206 |

# **CHAPTER ONE: INTRODUCTION**

**Sexual Satisfaction: A Review of the Construct and Its History**

## BACKGROUND & AIMS

Sexual satisfaction has become an increasingly common indicator of health and well-being in clinical, medical, and psychological research settings. For example, doctors rely on patients' sexual satisfaction ratings to indicate recovery trajectories and to guide diagnoses of sexual dysfunction and treatment (Basson, 2000; Dennerstein et al., 2006; Rosen et al., 2000, 2002; Tiefer, 1996, 2001; Tunuguntla, 2006). However, researchers have begun to question the validity of research on satisfaction both in and out of sexual relationships – particularly for women who operate with and within oppressive gender norms (Basson, 2001; Crosby, 1982; Steil, 1997, 2001; Tolman, 2001a). Similarly, researchers have argued that heterosexist institutions and social norms contribute to limited sexual expectations for lesbian, gay, bisexual, transgendered (LGBT) youth (Diamond & Lucas, 2004; Herek, 2007; Rubin, 1984). Together, these arguments raise concerns about how stigmatized sexual contexts shape expectations for sexual satisfaction. These concerns are especially salient in the lives of young adults who are in the process of developing sexual identities and expectations for an adult sexual life. In order to assess how contexts of sexism and heterosexism affect the development of young adults' expectations for sexual pleasure and satisfaction, this dissertation addresses three specific aims:

**Specific Aim 1.** *To compare levels of reported sexual satisfaction according to gender and sexual orientation, as well as the interaction between gender and orientation.* This aim focuses on the question of how men and women – gay and

straight – appraise the sex they are having. A number of studies have compared satisfaction ratings of adult heterosexual men and women, lesbian women and heterosexual women, and lesbian women and gay men (Blumstein & Schwartz, 1983; Henderson, Lehavot & Simoni, 2008; Holmberg & Blair, 2009; Laumann et al., 1994). However, few studies examine all four groups together, or search for conditional relationships among them.

**Specific Aim 2.** *To examine the influence of two contextual variables – psychological well-being and relational reciprocity – on individuals’ appraisals of their sexual relationships.* Although other researchers have examined factors that affect sexual satisfaction in adolescents 10-18 (Horne & Zimmer-Gembeck, 2005; Impett & Tolman, 2006; O’Sullivan, 2005) and for adults of all ages (Hatfield et al., 2008), we know little about the conditions that affect young men and women past the age of consent, and even less about how these conditions vary for sexual minorities.

**Specific Aim 3.** *To evaluate the conceptual limitations and assumptions in definitions and measures of sexual satisfaction.* This aim emerges from the historical tradition within psychology that encourages researchers to assess the clarity of the scientific concepts they use and to scrutinize “arguments and chains of inference for unstated but crucial assumptions or steps” (Machado & Silva, 2007, p. 671; see also Belson, 1981; Cantril & Fried, 1944; Cook & Campbell, 1979; Cronbach & Meehl, 1955). Building on this tradition of “conceptual analysis” (Machado & Silva, 2007), I evaluate the research strategies, unstated assumptions, and chains of inference that

are used to assess sexual satisfaction in sexuality and psychological research. In addition, I examine the range of meanings of sexual satisfaction that young men and women of varied sexual orientations bring to the term and evaluate qualities of the construct that remain unmeasured with existing assessment strategies.

Together, these research aims focus on definitions of sexual satisfaction and a variety of the individual and social antecedents that precede these definitions. Two studies – one a secondary analysis of a large national data set (Harris, 2008a) and the other, a qualitative analysis of interview data collected specifically for this dissertation – provide data to understand the construct of sexual satisfaction and how it is influenced by gender and sexual orientation. The findings from this research will contribute to the development of a model of sexual satisfaction that does not assume construct equivalency across individuals and groups, but instead, accounts for sexual inequalities individuals face in social and intimate settings.

## YOUNG ADULTS & SEXUALITY

Before entering the larger discussion of sexual satisfaction, it is important to set the stage for the particular population of interest in this dissertation. In both studies I am concerned with sexuality in young adulthood. Therefore, it is essential to understand how this life stage is both unique and similar to other stages in terms of sexual development, identity, and experience.

Feminist researchers have highlighted how inequities due to gender roles, norms, and expectations constrict young women's positive sexual development

(Gavey, 2005; Hyde & Jaffee, 2000; Impett, Schooler & Tolman, 2006; Tolman, 2001a; Tolman, Striepe & Harmon, 2003). One of the major research foci has been the documentation of health-related outcomes that result from gender role inequities, including decreased condom use and other “safe sex” negotiations between heterosexual men and women (Cooper, Shapiro & Powers, 1998; Warr, 2001). Many researchers have rightfully argued that a "risk" paradigm predominates in the adolescent literature, especially for young girls and young women who are largely studied as potentially “at risk” for pregnancy, STD's, and HIV (Fine & McClelland, 2006; Tolman, 2001b; Wight et al., 2008). Because there has been a nearly exclusive focus on a sexual health model that is concerned with avoiding disease, we know little about helping young people develop sexual expectations for pleasure and satisfaction (Fine, 1988) or how to measure these outcomes in research settings. This is an important gap to address in the literature on young people, but is also an important consideration in research pertaining to individuals across the life span.

In a parallel discourse, researchers studying LGBT issues have highlighted the role of sexual stigma in the sexual development of LGBT young adults (Diamond & Lucas, 2004). Sexual stigma concerns how hetero-normative public policies negatively impact the development of LGB lives (Herek, 2007). This research has largely focused on pathological outcomes for LGBT youth, including disease, suicide, and mental illness (Lindley et al., 2008; Russell, 2003; Russell, Franz & Driscoll, 2001). There has been, more recently, an effort to theorize positive sexual development alongside this interest in safety and risk management (Diamond, 2003a, 2006).

Considering these two perspectives together – feminist and sexual minority – moves the conversation ahead in important ways. Gender norms and sexual stigma are of course closely related. Both are deeply rooted in what men and women are expected to do and with whom. Critical discussions of gender roles and sexual stigma have been and should continue to be concerned with linking public policies regarding sexuality with private experiences and documenting how the public insinuates itself in intimate moments (Fine & McClelland, 2007). This is particularly true of sexual health research.

For example, in Fine and McClelland's (2006) update to Fine's articulation of the "missing discourse of desire" in U.S. public school classrooms (Fine, 1988) we examined how abstinence-only policies limited the positive sexual development of young women and LGBT youth. We proposed a theory of "thick desire" as a way to conceptualize the multi-faceted support (including familial, economic, and relational) that is required for young adults to develop a healthy and engaged sexual self. Research such as this has argued for explicitly linking public supports (and the lack of these supports) with private, intimate decisions and outcomes. Research in this vein has linked various forms of sexual oppression and called for analyses that take intersections of stigmatized positions seriously (Cole, 2008; Crenshaw, 1995, Fine, 1994; Fine et al., 2004).

Unfortunately, psychology has been slow to adopt this kind of integrative analysis. Kitzinger argued for psychologists to take this call for integration between gender and sexuality oppression more seriously in 2001:

The psychology of women/gender embodies (sometimes implicit) theories of oppression which in many ways parallel those of lesbian and gay psychology (e.g., sexism as individual pathology, as a 'chilly climate' problem, as a human rights violation). Yet despite acknowledgment of the intersections between gender and sexuality, there has been little attempt seriously to address the relationship between theories of gender oppression and sexuality oppression, or to explore the implications of these parallel approaches. On the contrary, it has sometimes been the case – both within and beyond psychology – that attempts have been made to advance women's liberation *at the expense of* lesbians (and, equally, to advance gay liberation *at the expense of* women) (Kitzinger, 2001, p. 272, emphasis in original).

Kitzinger's call for an analysis of the relationships between gender and sexuality oppression – and the implications for psychological theory and research if these are conceptualized in parallel – serves as a useful framework for this dissertation. *In the sexual domain, social and intimate experiences of sexism and heterosexism play important roles in determining what individuals expect and how they behave. Sexual satisfaction research can and must attend to this set of influences as central to our research questions and designs.*

## BACKGROUND LITERATURE

The two proposed studies draw upon a number of literatures, including feminist and LGBT psychology, adolescent sexual health research, sexuality models and theories, life satisfaction research, and discussions of construct validity and measurement in psychology. This unusually broad set of literatures is required in order to discuss a topic which is often thought to be highly specialized – sexuality – but instead of addressing sexuality within its specialized boundaries, I draw upon other diverse research in order to contribute the field of satisfaction both inside and outside sexual interactions. My interest in connecting these issues requires a review of literatures that speak to a similar set of inter-related goals, as well as pairing literatures that are not traditionally considered together.

Over the course of the following section, I discuss three areas of research: the history of the research on satisfaction; measurement strategies that have emerged from this history; and critical analyses of the assumptions within this research tradition. These three historical discussions are lodged within the larger research aim that drives this dissertation – a conceptual analysis of sexual satisfaction. I align this research with the mandate in the social sciences to critically examine concepts – what they are, the role they serve in research, and the inherent limitations of studying latent phenomenon using manifest content.

### *Conceptual Analysis in Psychology*

One of psychology's most important contributions to the social sciences has been its long standing commitment to defining terms and operationalizing concepts in a manner which makes their transformation from postulated psychological processes to measurable constructs transparent (Cronbach & Meehl, 1955). One outcome of this disciplinary project is that investigators are charged with examining their (and others') constructs, including a construct's network of meanings, unstated assumptions, and potential for incoherence or inconsistencies.

In a recent *American Psychologist* article, Machado and Silva (2007) follow in this tradition and argue that conceptual analysis is an essential, but under-valued, component of the scientific method. They argue that, "conceptual analysis can be used in psychology to clarify the grammar and meaning of concepts, expose conceptual problems in models, reveal unacknowledged assumptions and steps in arguments, and evaluate the consistency of theoretical accounts" (p. 671). The authors lodge this cluster of activities within the psychological tradition of construct validity (Cook & Campbell, 1979; Cronbach & Meehl, 1955) and argue that a researcher must evaluate the language of their science "prior to experimentation and mathematization because unclear concepts and invalid arguments cannot, by definition, achieve any form of validity" (p. 678).

Messick (1995), echoing Cronbach (1971), made the role of validity even more pointed and relevant to the current discussion when he argued that what

needs to be valid is the meaning or interpretation of the score, “as well as any implications for action that this meaning entails” (p. 741). Bringing the interpretation of the score (otherwise known as a participant’s response) front and center, Messick reminds us that scores have consequences.<sup>1</sup> A comprehensive view of validity must attend to the actual and potential consequences of score interpretation (Messick, 1995). Messick’s elaboration of classic construct validity theory is an important contribution to thinking about the consequences and implications of data; his work elegantly and insistently ties research activities to justice concerns. In sum, across this history of psychology’s commitment to construct validity, we see a number of important steps that researchers are charged with: 1) examining our own and others’ definitions and operationalizations; 2) examining participants’ interpretations of items and scores; and 3) examining the social, political, and psychological consequences of these scores.

Following in the footsteps of these and other psychologists, I examine the construct of sexual satisfaction and hypothesize that it is a site where the intimate meets the social in unseen and yet-unmeasured ways. Research on sexual satisfaction has been influenced by a host of competing discourses ranging from sexist assumptions about sexual dynamics, heterosexist definitions of sexual activity, the rise of neuroscience research in psychology (Berridge & Kringelbach, 2008), and

---

<sup>1</sup> Messick defines the term *score* as follows: “[T]he term score is used generically in its broadest sense to mean any coding or summarization of observed consistencies or performance regularities on a test, questionnaire, observation procedure, or other assessment devices such as work samples, portfolios, and realistic problem simulations” (1995, p. 741).

the steep rise in pharmaceutical research aimed at specific physiological responses, just to name a few. All of these discourses deserve to be analyzed in detail and in relationship to each other as a means to assess how the construct of sexual satisfaction has been (and continues to be) embodied in individual intimate experiences.

Validity issues, while sometimes lodged within specific fields, are relevant to all research endeavors (e.g., Babin & Griffin, 1998). Messick, for example, was concerned with educational testing data; this does not restrict his insights to educational research. As readers, we are asked to connect Messick's critiques to our research, as well as our own item construction, testing, and analysis. Below, I import Messick's and other researcher's concerns about validity into the domain of sexual satisfaction and review how researchers have defined, operationalized, and measured sexual satisfaction both historically and more recently.

### *History of Satisfaction Research*

The discipline of psychology is tasked with studying the internal processes by which individuals appraise various aspects of their lives. The field of satisfaction research has been the domain of psychologists because of the ways in which the construct of satisfaction offers invaluable insight into the realm of the individual and how that individual perceives itself and its circumstances. Satisfaction is, in many ways, the ultimate window into psychological processes since it contains within it emotional, cognitive, and physiological elements.

The construct of satisfaction has a long empirical history – dating back before the classic sociological studies of the American soldier after World War II (Stouffer et al., 1949). In psychology, satisfaction research has largely been sustained in the area of consumer satisfaction (Chen et al., 2008) and in research on well-being and happiness (Diener et al., 1999; Ryff & Singer, 2006). This research has concentrated on defining satisfaction as a measurement technique that offers a subjective rating of a specific domain (marriage, life in general, work, etc.).

Philosophers, sociologists, and psychologists showed an interest in the etiology of satisfaction at the turn of the 20<sup>th</sup> century (Karapetoff, 1903; Norsworthy & Whitley, 1918; Shaw, 1907; Thorndike, 1919). In an early piece on the development of “life satisfaction,” Karapetoff (1903) described human satisfaction in terms of the speed at which novel experiences become available to people. He argued that while humans always seek progress, they constantly seek novel experiences, and when new and exciting experiences are lacking, they feel dissatisfied. He concluded that it is the anticipation of progress that is most satisfying, not the progress itself.

Grounded in early theories about the tension within the psyche of humans, psychoanalytic theorists also took up the idea of satisfaction (Bliss, 1915; Ellis, 1913; Freud, 1920, 1950). These authors developed influential theories concerning internal and unconscious dramas as humans wrestled between wanting to satisfy “primitive” urges and wanting to fulfill social contracts that demanded repressing these urges (Bliss, 1915; Freud, 1920, 1950). The inner life of humans was imagined by these

writers as a swirling mass of urges and instincts which were continually restricted using the tools of repression and shame. Satisfaction, therefore, sat at the crossroads between the human capacity to be both instinctually-driven and civilized.

An interesting example of how satisfaction of primitive needs entered more modern psychological discourses can be seen in Sherif and Cantril's (1945) article, "The psychology of attitudes." In this piece, the authors defined satisfaction as the resolution of tension when a person's needs are met. In the following excerpt they describe the drives towards food and sex as basic, and as ultimately resolving in satisfaction:

For example, we may be very hungry and snatch a loaf of bread. After eating enough and becoming satisfied the loaf may then be pushed aside. At the time of sexual tension, a person toward whom there is no established attitude but who can satisfy the sexual need may be passionately seized, but after the need is satisfied so the tension is resolved, one may never look at the person again. In these cases the state of readiness dissolves as the satisfaction point is reached, at least for the time being (p. 303).

Sherif and Cantril distinguished satisfaction motivated by "drives, needs, or instincts" from attitudes which developed only in reference to particular subjects or objects of desire (1945, p. 302). In their discussion of attitude development, they continued with the examples of food and sex, this time noting how positive attitudes towards desired objects transformed the objects from something that merely

satisfied a basic need, to something that was treasured – even after the need had been satisfied.

Much like Sherif and Cantril's (1945) model of satisfaction described a period of satiation, psychoanalytic theorists continued to highlight the "delay between impulse and act, desire and fulfillment, hunger and satisfaction..." (Bliss, 1915, p. 239). Authors within the psychoanalytic tradition discussed the roles of expectancy, pleasurable anticipation, satisfaction, and their accompanying bodily reactions as important when moments when socialization and its rules became lodged in the psyche. Satisfaction, they argued, "implies a period of want" and human emotions developed as humans were forced to deal with the increasing time lag between desire and satisfaction (Bliss, 1915, p. 238). Postponement (or renunciation) of satisfaction became a primary focus of psychoanalytic theories, made most famous by Freud's treatise on pleasure and postponement in *Beyond the Pleasure Principle* (1950). These theories on primal or instinctual satisfaction were subsequently transformed by researchers interested in influencing and/or creating feelings of satisfaction in the marketplace.

Consumer satisfaction became of great interest to psychologists in the 1920s (Burt & Clark, 1923; Kitson, 1923, 1927; Poffenberger, 1925; Snow, 1925). Some of these writers disagreed with the literature on human "drives" and "instincts" (Freud, 1920) and offered their own explanations concerning the "fundamental nature of man" (Snow, 1925). These theories developed as psychologists tried to understand role of advertising and influence in daily life: "We must remember that we are

endeavoring to discover how the wants, desires, and needs of people arise in order to know how to guide them to satisfaction” (Snow, 1925, p. 11). In Snow’s model, desires that were regularly felt by many became “fundamental desires.” Moving away from psychoanalytic models which insisted there were only a few instinctual drives in the human condition, consumer psychology widened the net. Desires for things like candy and pretty dresses became described as “fundamental” and these needs now required satisfaction. This transition from social-emotional concerns to economic, or task-oriented ones, mirrors Deutsch’s (1982) theory of psychological orientations and signals a shift in the satisfaction literature from intimate and informal relationships, to increasingly competitive and formal relations.

Psychologists interested in understanding the mind of the consumer increasingly described satisfaction as the “good” and “pleasant” feelings one experienced at various stages of a sale (Kitson, 1927). This shift towards equating satisfaction with elevated moods – and away from the satiation of primitive urges – has had a lasting affect on the study of satisfaction. This trend is evident in theories of satisfaction in use today.

### *Recent Research on Satisfaction*

Psychologists continued to build a science around the concept of satisfaction, next moving on to the concept of life satisfaction. A set of theories were developed to get at this sense of what it means to be “satisfied.” For example, the global assessment of “life satisfaction” is often a generalized evaluation of one’s life. Some

researchers have defined life satisfaction as an assessment of progress towards one's desired goals (George & Bearon, 1980). It is often conceptualized as indicating judgments about the discrepancy between what one has and various social standards (Michalos, 1985). This description of satisfaction as an appraisal process is substantially different than the satiation models or psychoanalytic theories developed earlier in the century (Bliss, 1915; Freud, 1950; Sherif & Cantril, 1945).

As theories of life satisfaction developed over the last twenty years, the issue of how an individual assesses their "desired goals" became more elaborated. As a result, some theories conceptualize life satisfaction as the desire to "change" something about one's life. This model considers the role of regret to be an important determinant in reflecting on one's life; lack of regret is associated with a sense of satisfaction (c.f., Alfonso et al., 1996; Medvec & Savitsky, 1997; Oliver, 1980). This theoretical framework can be observed in the common use of items such as: "If I had to live my life over, I would change nothing" (Satisfaction With Life Scale (SWLS); Diener et al., 1985). In other words, life satisfaction is concerned with the contrast between "one's actual outcome and the imagined outcome that might have been" (Medvec & Savitsky, 1997, p. 1285).

Similar to this process of evaluating regret, other life satisfaction theories evaluate relationships with imagined ideals (Andrews & Withey, 1976; Weaver & Brickman, 1974). There is some controversy in the field as to *where* these imagined ideals are generated, i.e., within oneself or with the help of social expectations. In a 1985 paper on the development of the Satisfaction With Life Scale – considered by

many to be the gold standard in life satisfaction assessment – Diener and his colleagues reflected on their theoretical stance on the role of making comparisons:

Judgments of satisfaction are dependent upon a comparison of one's circumstances with what is thought to be an appropriate standard. It is important to point out that the judgment of how satisfied people are with their present state of affairs is based on a comparison with a standard which each individual sets for him or herself; it is not externally imposed" (Diener et al., 1985, p. 71).

This description of life satisfaction clearly sets the individual within a self-imposed set of criteria. The history of these criteria is not of concern to Diener and his colleagues. (We will see later in this discussion how other researchers have differently imagined the process of comparing oneself to others). Instead, the criteria are determined by the individual in idiosyncratic ways. As Diener and his colleagues explained in a 1999 article, people "evaluate conditions based on their unique expectations, values, and previous experience" (p. 277; see also Diener et al., 2003, 2006; Oishi et al., 2001; Sandvik et al., 1993).

In an effort to assess the individual's subjective experience of satisfaction, researchers often include items such as "I am satisfied with my life" in self-report scales to assess one's level of life satisfaction (Alfonso et al., 1996). This tautological characteristic (i.e., using the term satisfied to measure satisfaction) speaks to how satisfaction is taken for granted and considered to be self-evident. In other words, a participant's definition of what constitutes feeling satisfied is considered equivalent

with his or her peers, as well as naturally equivalent to the researcher's own definition of feeling satisfied. In this brief review, we have already seen a number of competing definitions and it has become increasingly clear that satisfaction is not self-evident or equivalent across individuals.

In terms of measuring life satisfaction, many theorists (e.g., Diener et al., 1999) include assessments of particular domains, including marriage, work, and family. Others have included additional domains, including sex, physical appearance, and school (e.g., The Extended Satisfaction With Life Scale, Alfonso et al., 1996). These domains are assessed within the same theoretical framework as life satisfaction. This is evident because these domains are assessed using items that are worded almost identically. For example, the life satisfaction item, "In most ways my life is close to ideal" has been transferred to the sexual domain and the item reads, "In most ways my sex life is close to ideal" (Alfonso et al., 1996, p. 294). In this way, the theoretical model that has developed around studies of life satisfaction has been directly applied to research in specific life domains.

In addition to life satisfaction research, much of the current theorizing on satisfaction has been lodged within the field of subjective well-being (SWB; Diener 1984; Diener et al., 1999). SWB is conceptualized as an overarching construct which includes satisfaction as a major component: "Subjective well-being is a broad category of phenomena that includes people's emotional responses, domain satisfaction, and global judgments of life satisfaction" (Diener et al., 1999, p. 277). Diener et al. (2003) divided the study of well-being into emotional (joy,

contentment, happiness) and cognitive aspects (life satisfaction within and across domains). In this model, satisfaction is considered an important dimension of one's well being, but is not synonymous with well-being. Satisfaction in this literature is mainly theorized according temporal comparisons – including reflecting on one's past, the conditions of one's present, and expectations of one's future.

Unfortunately, researchers working within the field of SWB often slip between satisfaction and SWB without attention to the different meanings and psychological constructs involved in both (Ryff, 1989). This makes it difficult to parse the two apart in the literature on SWB.

Positive affective, or a state of happiness, has also been conceptually linked with satisfaction. This theoretical enmeshment has influenced the development of measures. One example is in happiness research where the most commonly used item reads, "Taking all together, how satisfied or dissatisfied are you currently with your life as a whole?" (Veenhoven, 2005, p. 68). In sum, like subjective well-being, researchers use the concept of happiness as an important and sometimes equivalent marker of feeling satisfied with one's life.

### *Missing Elements*

Looking across these bodies of research, we can see that satisfaction has taken a number of forms in psychological research, ranging from an emphasis on comparing oneself to imagined ideals, to positive affect, to others, to oneself at different times, and to a dispositional quality. None of these approaches address any

pre-cursors or antecedents of the satisfaction judgment. A striking trend in these theories is the sense that individual appraisals are taken at face value, meaning that even when temporal or social comparisons are considered, the etiology of the appraisal is not considered methodologically important. In other words, a person's judgment may be qualitatively different from another's, but the judgment is allowed to stand nevertheless. *There has not been, to date, a sustained effort to measure or account for the development of satisfaction judgments as a means to more efficaciously compare individuals' scores.*

When social context has been discussed by those studying satisfaction, well-being, or happiness, disadvantaged groups are often described as "making the best of a bad situation" (Biswas-Diener & Diener, 2001), or as adaptive (Diener et al., 1999) and resilient (Lyubomirsky & Dickerhoof, 2006). High satisfaction in highly impoverished or discriminatory settings is framed within models of adaptation or resilience to try to explain why life stressors appear to have little effect on subjective well being or satisfaction (Lyubomirsky & Dickerhoof, 2006; Ryff, Keyes & Hughes, 2003). For example, in discussing "unanticipated" findings about gender discrimination, Lyubomirsky and Dickerhoof write:

All in all...women are happy, contented individuals. It is a testament to female resiliency that, in spite of numerous life obstacles, injustices, and prejudices, women...appear to be just as happy and satisfied as men (2006, p. 173).

Although these explanations may be compelling, explanations of adaptation and resilience in the face of stressors may, in fact, hide other aspects of satisfaction. Findings of high satisfaction in impoverished or discriminatory settings should encourage us to reflect back on the nets we are using to organize human emotions and behaviors (Deutsch & Krauss, 1965). Findings such as these serve to remind us that *suspicion* itself can be a tool of critical justice research (Josselson, 2004).

In sum, existing theories of satisfaction largely assume that the construct of satisfaction is *equally available* to individuals. As exemplified by Diener et al.'s (1985) comment earlier that defined satisfaction appraisals as purely subjective, the bulk of satisfaction research ignores the context of these decisions. In contrast to this history, I turn to one example of a research perspective that theorizes how history, status, and power influence how satisfaction appraisals are made. This model attends to how entitlement shapes satisfaction, and more precisely, shapes individuals' expectations to be satisfied.

### *Social Status and Satisfaction*

Campbell et al.'s seminal text *The Quality of American Life* (1976) offers a glimpse into how the construct of satisfaction was theorized 30 years ago. In particular, it offers an example of how to critically analyze data on satisfaction. In a nationally representative study of 2,164 men and women, Campbell and his colleagues found that men and women reported equal levels of satisfaction. However, the authors did not take these data at face value. Instead, they were, in

fact, suspicious of these findings and wondered about the role of history: “Women and men grow up in different cultures, develop different expectations, learn different roles, and live different lives.” (Campbell et al., 1976, p. 395). From these different lives are born expectations and aspirations, and a feeling of being satisfied when one expected obligations are met. The explained:

Who can doubt that the American culture has historically taught women to value the nurturant role of mother and homemaker and to be satisfied with obligations and rewards which are different from those it prescribes for men? And who can be surprised to find that most women seem content with a life style which has been accepted almost without question for generations? (Campbell et al., 1976, p. 442)

Along with this analysis of gendered expectations, Campbell and his colleagues utilized suspicion in the service of examining African Americans’ levels of satisfaction. They found that African Americans over 55 years old expressed a good deal of satisfaction with their lives: “Indeed, [older Blacks] form one of the most satisfied segments of the population” (1976, p. 500). With these two findings – that women reported equal levels of satisfaction to men and that older African Americans reported being even more satisfied than whites – Campbell et al. queried the meaningfulness of the construct of satisfaction across marginalized groups and made an important decision to lodge satisfaction within a set of expected outcomes. In other words, those who expect little may be satisfied with little. Campbell and his colleagues argued that researchers had to account for people’s “ignorance of

alternatives or the shrinking of aspirations through long-term accommodation to conditions which are, in any objective sense, bleak” (Campbell et al., 1976, p. 499). This insight highlights the social conditions that operate within satisfaction judgments for specific subgroups of the population. In doing so, they encourage us to question unstated assumptions about the nature of satisfaction data and our interpretations of these data.

With these insights in mind, we turn from the global construct of satisfaction to a specific domain of satisfaction research – sexual satisfaction. This move to the intimate sphere allows for a closer analysis of how individuals are imagined to experience and manifest satisfaction. When the scope of analysis shrinks to better assess the personal and intimate domains, are we still able to imagine the role of the social and political spheres within individuals and within relationships, and if so, how does this insight manifest itself in our research designs?

## SEX RESEARCH & SEXUAL SATISFACTION

### *Research on Sexual Satisfaction*

Sexual satisfaction has generally been defined in terms of positive affect, including: “the degree to which an individual is satisfied or happy with the sexual aspect of his or her relationship” (Sprecher & Cate, 2004, p. 236) and “an affective response arising from one’s subjective evaluation of the positive and negative dimensions associated with one’s sexual relationship” (Lawrence & Byers, 1995, p. 268). Others have defined sexual satisfaction more directly in terms of individual

expectations within the sexual domain, including: “the degree to which a person’s sexual activity meets his or her expectations” (DeLamater, 1991, p. 62). These definitions, like many definitions of satisfaction, identify feeling satisfied as subjective, meaning that the final decision rests within the person and emerges from their idiosyncratic experience. This does not, however, preclude the notion that there are patterns to how individuals make satisfaction evaluations. Nor, as we will see, preclude the search for objective criteria of sexual satisfaction.

Research on sexual satisfaction is still in its infancy. As of 2009, there were only 421 entries within PsycInfo that had “sexual satisfaction” as a keyword. As a comparison, the keyword “marital satisfaction” elicited 2,025 entries and “job satisfaction” produced 7,718 results. Of the 421 articles on sexual satisfaction, about three-quarters have been published since 1990. In sum, the field of sexual satisfaction is still very new and has grown very quickly in the last two decades.

*Theory and Measurement.* While some researchers have measured sexual satisfaction using individuals’ overall appraisals of their sex life (e.g., “I am satisfied with my sex life” Alfonso et al., 1997; Bridges, Lease & Ellison, 2004), most have operationalized sexual satisfaction, usually with a focus on the physiological responses during or after sexual activity, as well as positive affect associated with sexual activity. Several examples are described below in order to give a flavor of how each of these theoretical perspectives informs subsequent measurement decisions.

Sexual satisfaction is often theorized as the experience of physical fulfillment. The body and the physical experience of satiation are imagined as the primary

object of analysis from this theoretical perspective. Researchers working from this model prioritize physical and physiological responses as essential to the experience of sexual satisfaction (Brody & Kruger, 2006; Pfaus 2007). Many researchers have focused on the experience of orgasm as the most salient example of physical fulfillment (Guo, Ng & Chan, 2004; Holmberg & Blair, 2009; Young et al., 2000). As one research team wrote: “Orgasm is only one facet of the total sexual experience, and many factors influence both orgasmic capacity and sexual satisfaction...Orgasm nevertheless remains the most easily quantifiable index of sexual satisfaction” (Haavio-Mannila & Kontula, 1997, p. 401).

Other researchers have focused on more general measures of physical pleasure, relying on an item from the National Health and Social Life Survey (Laumann et al., 1994) and replicated in many studies since then (DeLamater, Hyde & Fong, 2008; Liu, 2003; Waite & Joyner, 2001), which taps the amount of physical pleasure a person reports: “...how physically pleasurable did you find your sexual relationship...?” This item is frequently paired with a second item from that taps emotional aspects of the sexual relationship: “...how emotionally satisfying did you find your relationship...?” (Laumann et al., 1994). Together, these two items are imagined as covering both the physical and emotional aspects of sexual satisfaction, although exactly what makes up these components is left undefined. Other studies, for example, have used “pleasurableness of sexual intercourse” as a dependent variable, although the parameters of pleasure are left up to individuals to determine (Haavio-Mannila & Kontula, 1997). These various theoretical models and

measurement strategies have produced findings that are often inconsistent and plagued by definitional and conceptual issues (DeLamater & Hyde, 2004; Sprecher & Cate, 2004).

### *Human Sexual Response Models*

Research on sexual satisfaction research has, in large part, relied on models of human sexual response which have been developed to organize sexual experiences. These sexual response models have been important because they guide clinical diagnoses and treatment of sexual disorders which have been translated into criteria outlined in the DSM IV (1994; see Tiefer, 2001 for discussion). Masters and Johnson (1966) developed one of the early and still heavily used models of the human sexual response cycle for men and women. Their model included four phases: excitement, plateau, orgasm, and resolution. Their intention was to define the physiological signals that marked each phase; as such, very few psychological components were included. An example of their physiological emphasis can be seen in their description of the “resolution” phase of sexual activity: “the biophysical system signals the total structure with stimulative input of a positive nature” (1970, p. 221).

Following Masters and Johnson, researchers continued to alter and adapt four phase model and in doing so, highlighted issues of context, diversity (especially gender), normative expectations, and the psychological qualities of sexual experiences. For example, Kaplan’s three phase model added the dimension of

desire preceding sexual excitement (1974). Singer and Singer (1972) argued that emotional satisfaction was an important component to women's sexual response, and that this emotional element should be measured and accounted for through studying physiological responses. Zilbergeld and Ellison (1980) organized sexual response using five components, adding the psychological elements of: interest (desire) that preceded arousal, physiological readiness (erection, vaginal lubrication), and orgasm – and finally, satisfaction (evaluation of how one feels) that followed these physiological processes.

More recently, Basson (2001) proposed a revised model of the human sex-response cycle and went on to further develop a *female* sexual response model (2000, 2001, 2002). This overall model for both men and women highlights the role of the mind “as it orchestrates the bodily response” (2001, p. 38). Basson elaborates the role of sexual interactions with a partner, focusing on intimacy motivation, and the role of emotional closeness in organizing sexual stimuli. It is non-linear model with over-lapping phases of variable order, as opposed to previous models which theorized a specific order of sexual stimuli and sexual response.

In her model of women's sexual arousal (2002), Basson addresses the division observed in some women between subjective arousal (feeling aroused) and genital arousal (physiologically responding with arousal “cues”). Basson addresses some of the critiques offered by researchers (e.g., Tiefer, 2001) by recognizing that female sexual arousal occurs alongside cognitive cues, including considerations of safety, appropriateness, and fear, however, Basson's model is focused on

determining who should be considered sexually “dysfunctional” and treated accordingly. In terms of sexual satisfaction, Basson takes a commonly seen position in sex research in which women are “biologically” determined to be less sexually driven than men and that orgasmic release is not essential for satisfaction in women (Basson, 2000). These two conclusions are repeated often in the literature and are seen as *natural* outcomes and in relationship to one another: women don’t experience sexual urges and/so/as a result, sexual release is not considered important or necessary to sexual satisfaction.

Sexual response models have been critiqued for their sexist, heterosexist, and clinical intervention consequences (Kashak & Tiefer, 2001; Tiefer, 2004; Wood, Koch & Mansfield, 2006). In response to this growing interest in medical and psychological interventions to treat “dysfunctional” sexual response, Tiefer et al.’s “New View Campaign” (Kashak & Tiefer, 2001) developed an alternative model of women’s sexuality. This model elaborates a range of potential sources of sexual problems *outside* of the woman’s body, including: sociocultural, political, or economic factors; partner or relationship issues; psychological conflicts; personal history (including a history of sexual abuse); and medical and physical problems (Tiefer, 2001). Placing all of these potential factors within a singular framework for understanding sexual problems was an important theoretical step because it de-naturalized female sexual response. Instead of taking behavioral, physiological, and psychological responses at face value and as evidence of “natural” sex differences, the New View model insists that other, un-measured, factors are at work and that

sexual research must account for these contextual factors if we are to understand behavioral, physiological, and psychological responses. The New View model encourages researchers to develop research designs and methods that are better able to account for these factors.

Other researchers in the field of sexuality have similarly developed models that address the sexual health of specific groups, including female adolescents (e.g., Tolman et al., 2003) and heterosexual and lesbian/bisexual women (e.g., Hederson, Lehavot & Simoni, 2008). For example, Tolman et al.'s model places female adolescent sexual health "in relation to multiple contexts, including dating and romantic relationships, social relationships, and sociocultural-sociopolitical factors" (p. 8). In a similar vein to Tiefer and her colleagues, Tolman et al. (2003) highlight the multiple contexts which precede individual sexual feelings, sexual entitlement, sexual identity, and sexual attitudes.

What remains less understood are how these contextual factors impact the way one evaluates their sexual experiences and relationships: *Was it satisfying?* While there is compelling evidence that there are many important factors that impact how and why people have sex, we know less about how these same factors affect how they judge the *quality* of this sex. This final stage of making a judgment of whether one's sexual experience is satisfying is an important step – both for individuals who make appraisals and for the researchers who study these appraisals. As seen in the previous work of feminist sex researchers, these too, should not be taken at face value.

### *A Contextual Approach to Sexual Satisfaction Appraisals*

In an effort to systematically describe the limitations of current research on sexual satisfaction, I present a contextual model of sexual satisfaction appraisals. This model includes four levels of antecedents (social, psychological, interpersonal, and behavioral) that potentially precede a person's judgment as to whether or not they are sexually satisfied. While not a testable model, it provides a theoretical framework that embeds sexual satisfaction appraisals within a series of proximal and distal influences. In its simplest form, sexual inequalities are translated into individual sexual expectations, which in turn influence sexual relationships and experiences, and ultimately, how sexual satisfaction is evaluated.

Ecological models, such as the one presented in Figure 1, have been forwarded by psychologists working in varied contexts (Bronfenbrenner, 1979; Lewin, 1935; Revenson, 1990). Models such as these have encouraged the development of research that emphasizes the role of cultural, political, social, and dyadic contexts in psychological phenomena. Such models are not meant to test theory, but rather to conceptually organize relationships between levels of analysis (Stewart & McDermott, 2004).

Most studies that examine sexual inequality, expectations, relationships, or behaviors have examined one or two levels within the framework pictured in Figure 1; it is more unusual to link several levels in an effort to examine the cumulative psychological consequences of social inequities. It is far more unusual to examine

this accumulation of inequity *at the level of method* (i.e., at the level of a score, to return to Messick's term; 1995). Below, I discuss exemplary research that has examined each level of the framework and, where appropriate, how researchers have made links across levels.

*Sexual Inequalities.* Experiences of sexual inequality in the socio-political realm affect how people intimately relate to one another (linking the social with the relational level). This has been studied from the perspective of sexual minorities contending with sexual stigma – a framework developed by Herek (2007) to describe “the negative regard, inferior status, and relative powerlessness that society collectively accords to any nonheterosexual behavior, identity, relationship, or community” (Herek, 2007, p. 906-7; see also Bliss & Horne, 2005; Frost & Meyer, 2009; Kertzner, 2007; Meyer, 1995, 2003a, 2003b). In addition, researchers have studied how gender norms affect the intimate and sexual relationships of young men and women (Horne & Zimmer-Gembeck, 2006; Impett, Schooler & Tolman, 2006; Kimmel 1987; Sanchez et al., 2005). In general, sexual stigma and gender roles have been found to contribute to lowered individual and relational well-being.

At the psychological level, sexual inequality (and related experiences of discrimination, stigma, and rejection) has been linked with decreased well-being in sexual minorities (Diamond & Lucas, 2004; Meyer, 1995, 2003a; Otis, Riggle & Rostosky, 2006; Rostosky et al., 2009), as well heterosexual youth (Dawson et al., 2008). Especially for those populations who are socially stigmatized due to their sexuality, gender, or age, the mechanism linking these negative social attitudes and

individual well-being is often investigated by assessing depression. Self-esteem has also been included within these frameworks, often in coordination with other measures of well-being such as depression (Weinberger & Schwartz, 1990). For example, in a study of young adults, heterosexual male youth with low self-esteem were more likely than heterosexual females to seek out intimate contact in order to enhance feelings of self worth (Dawson et al., 2008); in a different study, lower self-esteem predicted increased sexual risk taking (Wild et al., 2004). In sum, self-esteem has been found to be important factor in sexual behaviors and attitudes, but the exact nature of the relationship between these factors remains unclear.

*Sexual Expectations.* Expectations are an important and under-theorized antecedent of sexual satisfaction judgments. Sexual expectations are an individual's beliefs about his or her future sexual self, including behaviors, relationships, feelings – and importantly, the quality of these sexual experiences (Savin-Williams & Diamond, 2004). Several researchers have studied expectations solely from the perspective of expected sexual behaviors and the timing of these behaviors (Cohen & Shotland, 1996; Mongeau & Johnson, 1995). In contrast to this framework which emphasizes sexual behaviors, other researchers have studied sexual expectations by emphasizing a broader scope of what an individual expects in terms of sexual satisfaction (Hurlbert & Apt, 1993, 1994; McNulty & Fisher, 2008; Ott et al., 2006; Sabatelli & Pearce, 1986). In this latter framework, expectations are defined in terms of positive motivations for sexual experiences, including pleasure, intimacy, and increased competence (Ott et al., 2006). Overall, studies have been able to

determine that individuals expect varying outcomes from their intimate and sexual relationships, but frequently, the differential qualities of these expected outcomes has not been the focus of research. In the study of sexual expectations, the idiographic perspective has been categorized as primary and un-problematically studied in isolation from the social and political spheres in which these expectations were developed.

One example of how individual sexual expectations have been linked back to their social origins is in a study of Chinese women's sexual satisfaction where the investigators found that women reported higher levels of sexual satisfaction than their male partners, "contrary to predictions based on the cultural message that sexual pleasure is restricted to men" (Renaud, Byers & Pan, 1997, p. 399). The authors interpreted this unexpected finding as a difference of expectations between men and women:

Because women, but not men, in China have been socialized not to expect pleasure from sex, it is possible that the exchanges they experience in their sexual relationship are mediated by such expectations. For example, if a woman does not expect her sexual relationship to be at all satisfying/rewarding and yet does receive some sexual satisfaction, she may rate her relationship as more satisfying/rewarding than a man experiencing equal satisfaction but expecting his sexual relationship to be very satisfying (Renaud, Byers & Pan, 1997, p. 409).

This interpretation of the study's findings provides another example of *suspicion* as a tool of critical research. Instead of reading the results at face value, the researchers widened the scope of analysis to include a larger socio-political framework to help explain the unexpected findings of greater sexual satisfaction in women.

Another link with sexual expectations has concerned the role of sexual inequities forming lowered sexual expectations. For example, Diamond and Lucas (2004) argued that sexual minority youth often suffer from feelings of unattractiveness and undesirability due to homophobia and stigmatization. This, along with the difficulty sexual-minority youth face in finding a desirable and eligible same-sex partner, may lead them to develop few romantic relationships and negative expectations about their romantic lives (Diamond & Lucas, 2004).

*Sexual Relationships.* Sexual satisfaction has been associated with emotional intimacy between partners, desirability of partners toward one another, longevity of the relationship, and a number of other relational factors. Research consistently shows that characteristics of the overall relationship, such as relationship satisfaction, love, levels of intimacy, and the amount of physical affection, are associated with sexual satisfaction (Lawrance & Byers, 1995; Oggins, Leber, & Veroff, 1993; Renaud, Beyers & Pan, 1997). While the relationship and sexual satisfaction are often correlated, this interrelation may obscure the findings for those who have substantially different patterns of relational and sexual satisfaction.

Some studies of sexual satisfaction highlight the communication of desired activities between partners (Byers & Demmons, 1999; Haavio-Mannila & Kontula,

1997; Hurlbert & Apt, 1994; MacNeil & Byers, 1997). In other words, satisfaction is imagined as resulting from a call and response model: One calls, the other answers, and satisfaction occurs. In research with heterosexual couples, studies have found that men and women communicate differently about their desires, and as a result, report varying levels of satisfaction (McNulty & Fisher, 2008; Vangelisti & Daly, 1997). Bliss and Horne (2005), for example, found that self-assertiveness and sexual communication were associated with sexual satisfaction. This study is one of the few that describes the social context (besides marriage) as influencing sexual satisfaction. The ability to articulate desires impacts sexual satisfaction – and the ability to articulate desire is not evenly distributed amongst men and women (Sanchez, Crocker & Boike, 2005; Sanchez, Kiefer & Ybarra, 2006).

*Sexual Behaviors.* Research on sexual behaviors has been one of the most popular routes to study the phenomenon of sexual satisfaction. This has translated into an almost exclusive focus on the frequency of sexual intercourse (Kinsey et al., 1948, 1953; see Savin-Williams & Diamond, 2004 for discussion), although a few studies have focused on satisfaction with specific sexual behaviors, such as fellatio in marital couples (Apt et al., 1996; Laumann et al., 1994). In one of the most well known and most highly regarded studies in the past 20 years, Laumann and his colleagues (1994) reported on the sexual practices of a large, diverse sample of Americans. This study is well regarded for studying a wide range of sexual behaviors asked of both heterosexual and homosexual participants, including masturbation, oral, anal, and vaginal sex. In terms of oral sex behaviors, Laumann et al. (1994)

found significant cohort effects, with approximately 70% of younger respondents (born 1968-1974) reporting having experienced both active and receptive oral sex in their lifetime.

*Sexual Satisfaction Appraisals.* An appraisal is defined as an evaluation of a situation in terms of its relevance for oneself and specifically one's goals or well-being (Lazarus, 1968; Lewis, 2005), cognitive and/or emotional processes that serve an evaluative function in order to help the individual determine what is important for the self (Lewis, 2005; Lazarus & Smith, 1988; Zajonc, 1980). Sexual satisfaction appraisals can be defined then, in turn, as evaluations that are relevant to one's own sexual life. This may include, but is not dependent on, a sexual relationship with another person or persons.

In Figure 1, appraisals are located at the center of the model because they are the outcome of most relevance to psychologists. Appraisals rest on a number of emotional, physiological, and cognitive cues. In the sexual satisfaction domain, cues range from what are considered "objective" measure of sexual satisfaction (e.g., orgasm frequency), to more "subjective" measures (e.g., the degree of pleasure associated with one's sex life). Both measures capture qualities of sexual satisfaction, but with different types of data and a different level of interest in how the individual understands and evaluates their experience.

In their review of research on sexuality in relationships, Christopher and Sprecher (2000) note that frequency of "sex" is one of the most commonly measured aspects of sexual relationships. However, they also note that sex is

inconsistently defined by researchers. There is often a strong association between frequency of sex and sexual satisfaction, particularly in survey research (Cheung et al., 2008; Laumann et al., 1994; Matthews et al., 2006). However, this association tells us nothing about quality of sexual activity or how quantity and quality influence each other over time. Or, as Christopher and Sprecher note, we learn nothing about “the specific process that might mediate the association...” (2000, p. 1004). The authors go on to note that intra-couple variations may be linked to relationship-level phenomena including “balance of power, conflict, and communication.” They encourage researchers in the field to develop theories and methods that can capture these relational dynamics within couples.

There has been an emerging body of research on the meanings of sexual satisfaction across gender and across life stressors such as illness and disability. For example, in their interview study with heterosexual men and women with varying levels of illness, Daker-White and Donovan (2002) found gender-based differences in how individuals appraised and defined their sexual relationships. The authors found that men defined their sexual satisfaction in terms of intercourse frequency and the match between this frequency and their libido, while women defined satisfaction in terms of intercourse frequency, trust, and mutual enjoyment.

*Summary.* The notion of what it means to be “satisfied” is an important concept in psychology because it has the potential to signal inequality amongst individuals and groups. A person feels satisfied only when some internal benchmark of “good enough” has been met; the question remains whether those who have

limited rights within the sexual domain have a similar sense of entitlement to sexual pleasure, partnerships, and ultimately, satisfaction. If researchers are going to continue to use sexual satisfaction variables in their research, it is essential to understand what researchers mean when they study these constructs and what participants mean when they respond to these items. Otherwise we run the risk of ignoring important disparate conditions and assumptions about what people deserve to experience in their sexual lives.

While there is a developing and rich body of work which has linked two or three levels of the model depicted in Figure 1, there has been less research that links multiple levels (sexual inequities, expectations, relationships, experiences, and sexual appraisals). These linkages make it possible to theorize the development of sexual satisfaction appraisals within specific socio-cultural contexts marked by inequality – specifically, gender and sexual minority status. As a result, important gaps have remained within the literature that will be addressed by this dissertation.

## THE CURRENT STUDIES

In the Introduction, I raised meta-level issues about the construct of sexual satisfaction, with a focus on the definition and measurement of this phenomenon. Following the approach described in Figure 1, two empirical studies follow that will examine predictors and dimensions of sexual satisfaction in young adults. Within each study, I provide a more specific literature review that underlies the specific questions being asked and the methodologies used. The two studies use different

methods to examine sexual satisfaction, but share a common goal. Both studies are in the service of theoretically and methodologically linking social inequities, expectations, intimate relationships, experiences, and sexual appraisals among young adults. While all five levels in Figure 1 are not examined in unison in either study, collectively, the studies bring together the five levels in order to make conclusions about the psychological, relational, and behavioral antecedents that precede sexual appraisals.

Study 1 uses national survey data to examine the associations among sexual inequality, psychological well-being, relational equity, and appraisals of sexual behaviors. Study 2 collects original data to address sexual expectations more explicitly and link them with sexual inequality and satisfaction appraisals. Using multiple methods, including in-person interviews, standardized structured self-report measures, and a self-anchoring scale, Study 2 assesses how individuals' expectations for sexual satisfaction are shaped by their social position and sexual relationships.

In the concluding chapter, I return to the broader questions that are presented in the Introduction and discuss how the empirical data from Studies 1 and 2 have addressed these meta-level questions.

# **CHAPTER TWO: STUDY 1**

**Frequency and conditions of sexual satisfaction:**

**A national study of heterosexual and sexual minority young adults**

### Frequency and conditions of sexual satisfaction:

#### A national study of heterosexual and sexual minority young adults

Research with young adults has largely overlooked the *quality* of their sex, opting instead to study the range and onset of potential risky sexual behaviors and outcomes. This focus on risk has been especially true in studies concerning lesbian, gay and bisexual (LGB) youth. In addition to studying LGB sexuality as merely dangerous, research in this area has been hampered by heterosexist assumptions of what counts as “sex” and regularly overlooks reports of sexual behaviors that are not vaginal-penile intercourse (Rothblum 2000, 2007), thereby erasing a wide range of sexual behaviors and leaving important gaps in what we know about the sexual satisfaction of young adults.

When sexual satisfaction has been the focus of research, it has often been limited to heterosexual married couples (Cheung et al., 2008; Henderson-King & Veroff, 1994; Young et al., 1998), samples that are in crisis (e.g., drawn from those in marital therapy), or studied because of a non-normative situation, such as illness, aging, disability, or sexual dysfunction (Davison et al., 2008; DeLamater, Hyde & Fong, 2008; Kedde & van Berlo, 2006; Meston & Trapnell, 2005; Woodward, Hass & Woodward, 2002; Warkentin, Gray & Wassersug, 2006). These sampling choices have severely limited what we know about diverse sexual relationships and satisfaction.

The current study takes up Christopher and Sprecher's suggestion for more "theoretically driven research...to identify how factors associated with the individual, the relationship, and 'the environment' might interact to affect sexual satisfaction" (2000, p. 1004). One of the strongest examples of how "the environment" affects sexuality is at the level of sexual inequality in terms of gender and sexual minority status. For example, researchers have found significant associations with sexual inequality and experiences of sexual pleasure for women (Sanchez et al., 2005) and diminished sexual and relational expectations for LGBT youth (Diamond and Lucas, 2004). Implicit in Christopher and Sprecher's suggestion is an interactional model of sexuality that studies how and under what circumstances individuals' sexuality is affected by relationships and the larger social environment.

Taking an integrative approach to gender and sexual stigma, this study examines how sexual inequalities are translated into sexual contexts that operate on individual and relational levels. The current study examines group differences for men and women, gay and straight, in reported sexual satisfaction across a range of sexual behaviors. Self-esteem and perceived relational reciprocity within sexual relationships are conceptualized as moderators of this relationship.

These theoretical issues are addressed through two research questions:

*Research Question 1.* Do appraisals of sexual satisfaction among heterosexual and LGB men and women differ?

*Research Question 2.* How do self esteem and relational reciprocity moderate individuals' appraisals of their sexual satisfaction?

#### LITERATURE

In studies of overall sexual satisfaction, men and women often report being equally satisfied (Henderson-King & Veroff, 1994; Purdon & Holdway, 2006). When group differences have been found, women often report higher satisfaction than men (Colson et al., 2006; Sprecher, 2002). As but one example, Dunn et al. (2000) found that women were significantly more satisfied than men (79% vs. 70%) in a stratified random sample of individuals 18-75 years old. There is far less research on sexual minority sexual satisfaction rates, but existing research with gay and lesbian samples suggests that sex in committed relationships is similar to heterosexual marital ratings of sexual satisfaction (Deenen et al., 1994; Kurdek, 1991; Lever, 1994). Kurdek et al. (1991), for example, found no differences in sexual satisfaction among four types of couples: gay, lesbian, married heterosexual, and cohabitating heterosexuals. Researchers have found high rates of satisfaction among gay men (Peplau et al., 1997) and high correlations between frequency of sexual contact and rates of sexual satisfaction in this population (Peplau, Fingerhut & Beals, 2004; Peplau & Fingerhut, 2007).

However, a major hurdle in evaluating this research is that definitions and measurement strategies of sexual satisfaction are not consistent across studies. In the majority of studies of sexual satisfaction, sex is assumed to be or operationalized

as heterosexual intercourse (Bridges, Lease & Ellison, 2004; Frohlich & Meston, 2002; Meston & Trapnell, 2005; Pinney, Gerrard & Denney, 1987). In other studies, only an overall level of satisfaction is asked, with little or no detail on what the individual is evaluating in terms of their romantic or sexual life (Alfonso et al., 1996; Davison et al., 2008; Sprecher, 2002). Many fewer studies measure satisfaction with specific sexual activities or aspects of sexual relationships. In one notable exception, Apt and her colleagues (1996) found that approximately half of the married women in their sample (53%) described performing oral sex on their husbands as a satisfying experience.

Because of the variation of sexual activities that individuals engage in and the complexity it creates, more “objective” measures, such as orgasm frequency, are often used as proxies for sexual satisfaction because they provide a form of consistent and comparable data across individuals. Orgasm is often measured in satisfaction research because it is easily assessed by self-report (Haavio-Mannila & Kontula, 1997; Young, Denny, Young & Luquis, 2000) and is strongly correlated with self-reports of sexual satisfaction (Edwards & Booth, 1994; Haavio-Mannila & Kontula, 1997; Sprecher & McKinney, 1993; Waite & Joyner, 2001).

Other research has pursued the correlates or predictors of sexual satisfaction. Although depression has often been explored as a correlate of sexual functioning and satisfaction (Cyranski et al., 2004; Frohlich & Meston, 2002; Henderson, Lehavot & Simoni, 2008), self-esteem represents another critical element in human development (Hatfield, 1965, 1995). Self-esteem has long been

regarded as an important indicator of how individuals feel, how they think, and how they behave. It consistently predicts patterns of thinking about one's own behavior. Although gender differences are often reported, these effects tend to be small (Kling et al., 1999).

Self-esteem also has been linked to sexual development and the development of intimate relationships among sexual minorities; specifically, it has been suggested that sexual minority youth are at risk for poor emotional health because of sexual stigma and the limitations it places on their intimate and sexual development (Russell & Consolacion, 2003). Research on minority stress has particularly focused on the mental stressors due to social devaluation and stigmatization (Meyer, 1995, 2003b). While the ill effects of prejudice have been commonly theorized in terms of increased depression (Frost & Meyer, 2009), this study assesses this same question from the perspective of global self-esteem. While depression measures often emphasize aspects of specific affected behaviors and feelings (e.g., trouble eating and sleeping, feelings of loneliness; see Radloff, 1977), global self-esteem measures emphasize an individual's perceived self worth (e.g., having a lot of good qualities). This additional perspective has the potential to assess the impact of minority stress in terms of diminished self regard.

While self-esteem scales are commonly understood to reflect psychological information about individuals and not about their social identity, it is important to note that traditional measures of self-esteem have been found to be predictably associated with race – notably, African Americans consistently report higher levels of

self-esteem than other race/ethnicity groups (Hughes, Seidman & Williams, 1993; Twenge & Crocker, 2002). As the current study focuses on gender, sexual minority status, and their interaction, the decision was made to limit the analysis to these groups and the influence of race was not analyzed systematically. However, further theoretical analysis about potential associations between race, self, esteem, and sexual satisfaction is included in the discussion.

In addition to person-level indicators, a number of interpersonal relationship dimensions have been associated with sexual satisfaction. While relationship satisfaction has most commonly been theorized as an important predictor of sexual satisfaction (Sprecher, 2002; Young et al., 1998), other researchers have looked to more specific elements within the relational dynamic, such as emotional closeness and love (Kaestle & Halpern, 2007). Hill and Preston (1996) found that motivations for sex included feeling nurturing towards partner, which predicted experiencing pleasure in vaginal, oral, and anal intercourse. Waite and Joyner (2001) found that relationship investment – measured in terms of how long the relationship was expected to last – was significantly associated with physical pleasure for both men and women above and beyond any demographic or background characteristics.

Taking this emotional factor one step further, researchers have investigated emotional reciprocity between partners, or the perceived equality of emotional investment by both individuals. Daker-White and Donovan (2002) described this as a “mutual exchange of intimacy.” Some have theorized sexual satisfaction in terms of the perceived equality of one’s own and one’s partner’s levels of rewards and costs

(Lawrence & Byers, 1995) – a theoretical move that has built on the extensive literature concerning relationship equity, equality, and perceptions of fairness in romantic relationships (Hatfield et al., 1982; Hatfield, Rapson & Aumer-Ryan, 2008; Traupman et al., 1981; Traupman, Hatfield & Wexler, 1983; Utne et al., 1984). Studies from this body of research have found that equity consistently mediates relationship satisfaction (Hatfield, Rapson & Aumer-Ryan, 2008; Utne et al., 1984), but the evidence is more inconsistent in terms of its relationship to sexual satisfaction (Hatfield et al., 1982; Traupman, Hatfield & Wexler, 1983). More recently, there has been research which extends the equity model to women in same-sex relationships and has found that women who experience their relationships as unequal also report decreased relationship satisfaction (Horne & Bliss, 2009).

A related, but conceptually different body of research concerns relational reciprocity which assesses the degree to which individuals' investments are reciprocated by romantic partners (Braun, Gavey & McPhillips, 2003) or friends (Vaquera & Kao, 2008). Of interest in this body of research is the equal degree of the investment, not the overall perception of fairness or level of contribution within the relational dyad. While we understand a great deal of how gender and equity are related in relationships, we know less about how reciprocity is understood across gender and sexual minority status.

In order to examine the research questions in Study 1, a secondary analysis was conducted using data collected during Wave III of the National Longitudinal

Study of Adolescent Health (Add Health).<sup>2</sup> Add Health is a national survey study of adolescents that is considered to be the largest data set of its kind (Bearman, Jones, & Udry, 1997). It includes a series of detailed questions concerning sexual behaviors and outcomes that are not available in other large datasets. Thus, it offers the opportunity to test models that have high explanatory power, even for subsamples that are over-looked in smaller studies.

Although many researchers have utilized the Add Health dataset to investigate sexual risks and negative outcomes related to sexual activity, few have examined positive sexual outcomes for young adults. Sexual outcomes have included pregnancy and STD risk (Ford & Lepkowski, 2004; Ryan, Franzetta, Manlove, & Schelar, 2008), sexual behaviors (Kaestle & Halpern, 2007), sexual transition from virgin to non-virgin (Halpern, Waller, Spriggs, & Hallfors, 2006), sexual attitudes (Cuffee, Hallfors, & Waller, 2007), condom use (Santelli, Lindberg, Abma, McNeely, & Resnick, 2000), and intimate partner violence (Whitaker, Haileyesus, Swahn, & Saltzman, 2007). Much of this research has used data collected during Waves I and II, when the respondents were in 7-12<sup>th</sup> grade.

---

<sup>2</sup> This research uses data from Add Health, a program project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by a grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, with cooperative funding from 17 other agencies. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. Persons interested in obtaining data files from Add Health should contact Add Health, Carolina Population Center, 123 W. Franklin Street, Chapel Hill, NC 27516-2524 (addhealth@unc.edu). No direct support was received from grant P01-HD31921 for this analysis.

In contrast to these risk-based studies, Dennison and Russell (2005) argued that the Add Health data can and should be used to increase our understanding of positive sexual development. That is, adolescent sexuality must not only be framed in terms of risk and danger (Fine & McClelland, 2006; McClelland & Fine, 2008), but must include qualities of sexual well-being, including entitlement to pleasure, efficacy in achieving pleasure, subjective experiences of enjoyment (Diamond, 2006; Horne & Zimmer-Gembeck, 2005; Rostosky et al., 2008; Russell, 2005a, 2005b; Wight et al., 2008).

In this study, data from Wave III were used. By Wave III of the Add Health study, respondents are no longer adolescents but young adults – out of high school and no longer considered minors. This design decision allows for an analysis of young adult sexual relationships – relationships which may or may not reveal the effects of developing sexual expectations within a social environment that is narrowly focused on sexual risk and the potential for damage. The current study takes Dennison and Russell’s call for “new empirical conceptualizations and measurement strategies” (2005, p. 57) seriously by analyzing how young adults appraise the quality of their sexual relationships.

## METHODS

### *Sampling and Recruitment for the Add Health Study*

The Add Health sample was constructed by compiling a list of the 26,666 U.S. high schools in 1994 that were listed in the Quality Education Database. This list was

sorted by enrollment size, school type, region, location, and percent of white students and then divided into groups for sampling. Eighty high schools were systematically selected from this list with probability proportional to enrollment size. In addition, 52 feeder (middle and junior high) schools were selected in order to provide student samples for those high schools without 7th and 8th grades. A single feeder school was selected with probability proportional to the percentage of the high schools' entering class that came from the feeder school. Students from this sampling frame were eligible for selection into various panels, including in-school questionnaires (Wave I) and at-home interviews (Waves I, II, and III). In the first wave of data collection (1994-95), students were stratified by grade and sex and about 17 students were randomly chosen from each stratum so that a total of approximately 200 adolescents were selected from each school. In Wave I, the participants ranged from 7<sup>th</sup>-12<sup>th</sup> grades.

#### *Sample Selection for the Dissertation*

The data for this dissertation are drawn from Wave III of the Add Health Study.<sup>3</sup> By Wave III (2000-01), the minimum age was 18 and participants were no longer in high school. Two intertwined criteria were used to create the sample for

---

<sup>3</sup> The Add Health dataset is available through contractual release from the Carolina Population Center at the University of North Carolina at Chapel Hill and is commonly referred to as the "restricted use" dataset. A public version of the dataset is available which contains half of the in-home core sample and is referred to as the "public use" dataset. For this dissertation, IRB approval from the Graduate Center, CUNY and permission from Carolina Population Center were obtained for analysis of the restricted use dataset.

the dissertation, one based on age and the other on sexual partner. Add Health collected data on multiple sexual partners. I chose to focus only on the most recent partner in order to explore sexual experiences that happened relatively recently instead of summing across relationships that may have happened as long as six years ago. Participants had to be at least 18 years old when the sexual relationship with the most recent partner began. This allowed for adult sexual relationships to be examined, avoiding a comparison of sexual experiences across varying developmental stages. Eighteen was chosen as the minimum age because it is the age when a person is no longer a minor and is able to consent to sex in all states. It therefore offers a relatively stable way of defining “adult” sexual relationships. Using these two criteria, the sample for this dissertation included 8,595 respondents, or 60% of the Wave III sample.

### *Sample Characteristics*

Because Add Health used a nationally representative study design, the sample was demographically diverse. The demographic characteristics of the sample used for the dissertation are included in Table 1, and mirror this diversity. Analyses (t-tests and Chi  $\chi^2$ ) indicated that the sample drawn for this dissertation did not differ from the total Wave III sample on most key variables. There were, however, two exceptions. The dissertation sample was significantly younger (22.2 vs. 21.9 years old) and had a slightly higher percentage of white participants (57.2% vs. 54.4%) and slightly lower percentage of Black/African American participants (19.9%

vs. 21.5%). Overall, the sample selected for the dissertation was 52% female with a mean age of 22 years old (range 18-28). Slightly over half (57%) were White, 20% Black or African American, 15% Hispanic or Latino, 7% Asian or Pacific Islander, and 1% American Indian or Native American. In terms of the four groups of interest in this study – heterosexual and sexual minority men and women – there were several significant differences amongst the four groups, however, these differences were generally small (see Table 2 for specifics). The largest group difference was in terms of participants' race/ethnicity: there were significantly more Black/African American heterosexual females than sexual minority males (21.6% vs. 13.5%).

Socioeconomic status was assessed by a summed score of seven possible economic hardships. These items were chosen because they addressed experiences that were relevant to both the younger participants who still lived at home with their families and the older participants who lived on their own. The hardships included not having enough money to pay rent/mortgage, being evicted from your house or apartment, and not seeing a doctor or dentist because you or someone in your household could not afford it. Approximately one third (32.6%) of the sample reported experiencing at least one economic hardship in the previous 12 months and the majority of the sample (96.3%) reported less than four economic hardships in the 12 months previous to data collection in 2000-2001 ( $M=.62$ ,  $SD=1.13$ ).

*Sexual Minority Status.* In the Add Health data set, many participants who identified as lesbian, gay, or bisexual had different-sex partners and many participants who identified as heterosexual had same-sex partners. This required

that a specific decision be made concerning the definition of sexual minority participants. Past studies have found a high lack of concordance between sexual identity, behavior, and orientation (Diamond, 2003b; Laumann et al., 1994; Rothblum, 2000; Savin-Williams & Ream, 2007). There are a number of debates in the field of LGB studies as to how to define sexual orientation, including strategies such as same-sex sexual identity (Fergusson et al., 1999) or same-sex sexual contact (Faulkner & Cranston, 1998). In terms of sexual minority youth, self-identification is considered a problematic strategy due to youth and labeling practices (Cohen & Savin-Williams, 1996), as well as sexual stigma related to being “out” (Frost & Bastone, 2007).

In this study the term “sexual minority status” is used to describe participants who have either identified as LGB or have had sexual experiences with a same-sex partner. The term “sexual minority” has been used by other researchers in the field of LGB studies who have argued that the term more accurately captures the broadest range of experiences associated with sexual stigma due to an individual’s sexual identity, orientation, or same-sex sexual behaviors (Russell, 2003; Savin-Williams & Diamond, 2004). In this study, sexual minority participants were defined as those youth who identified as “100% homosexual,” “mostly homosexual,” and bisexual” or those whose most recent sex was with a same-sex partner. This definition allowed the study to include those individuals who did not claim an LGB identity, but still engaged in same-sex relationships, as well as those individuals who identified as LGB, but whose most recent partner was a different-sex partner. Both

of these groups had the potential to have experienced stigma related to their identity and/or their sexual behaviors and it is in this context of stigma that is of interest in this analysis.

Although there was a chance this decision resulted in including individuals who had mainly heterosexual relationships and had never experienced any sexual stigma, this potential cost was outweighed by the assurance that this sub-sample did not exclude individuals who were engaging in both same-sex and heterosexual relationships and avoiding an LGB identity due to fears or experiences of sexual stigma. Because my research questions concern experiences of sexual stigma and the fact that stigmas can affect identity and sexual behavior choices in unknown ways, it was more important to err on the side of over-inclusion rather than exclude potentially relevant individuals from the sample.

Details on participants' sexual orientation and the gender of their most recent sexual partners are presented in Table 3. These data illustrate that a similar, but small, number of heterosexual participants reported a same-sex recent partner (15 men, 16 women). A larger number of lesbian-identified participants reported their last sexual partner was male ( $n=51$ ); this group was nearly ten times the number of gay men who reported a female sexual partner ( $n=6$ ). This finding replicates Diamond's findings of female sexual fluidity (Diamond, 2008b), and like Diamond's sample of women who identified as same-sex oriented, this fluidity was more frequently observed amongst women who self-identified as "homosexual" rather than women in general. Participants who identified as "asexual" were

eliminated from analyses because it was impossible to clearly categorize them as either sexual minorities or as heterosexual (n=21).

Sexual minorities make up about 4% of the sample (n = 337). Other studies using population based survey designs in both the U.S. and Europe have found similar (or lower) rates of endorsement of a gay, lesbian, or bisexual identity (Laumann et al., 1994; Mays & Cochran, 2001; Sandfort et al., 2001). This number may be negatively impacted by the participants' relatively young age, given what we know about the developmental process of adopting a sexual identity (Diamond 2008a; Savin-Williams & Cohen, 2007). The decision to include only participants that had been sexually active may have additionally decreased the number of LGB participants included in the sample. Sexual minorities may have been less sexually active with partners or the item about sexual relationships may have been interpreted differently by heterosexual and non-heterosexual youth because of its wording ("Have you had sexual relations with <partner>? By 'sexual relations' we mean vaginal intercourse (a man inserts his penis into a woman's vagina), oral sex (a person puts his or her mouth on another person's sex organs), or anal sex (a man inserts his penis into his partner's anus or asshole)" (see Rothblum, 1994, 2000, 2007 for discussion of heterosexist measurement bias and effects on LGB samples).

### *Measures*

The data were collected using Computer-Assisted Personal Interview and Audio Computer-Assisted Self-Interviewing technologies in order to optimize

confidentiality and to minimize interviewer or parental influence during the in-home interviews (Bearman, Jones & Udry, 1997). A few caveats are needed up front regarding the measurement of sexual outcomes in this dissertation. First, the Add Health investigators were mainly concerned with structural inequities including schools, communities, and the development of risky behaviors. LGB youth were not a focus of the original study and only a few items regarding positive sexual outcome items, e.g., liking oral sex, were asked of LGB participants.

Second, the Add Health survey asked the majority of its sexual outcome items within a specific relational context. The survey asked the participant to name all of his or her sexual or intimate partners over the last six years. The respondent was then asked to evaluate various sexual activities, behaviors, and outcomes in terms of each partner named. As mentioned earlier, the current study selected only the *most recent* sexual relationship for analysis.

Third, there were no complete scales included in the Add Health survey in an effort to minimize participant burden (Udry, 2001). However, there is a substantial literature using the abbreviated scales in similar ways as proposed here; these abbreviated scales have been shown to have good reliability in previous studies (Consolacion, Russell & Sue, 2004; Daniels & Leaper, 2006; Russell & Consolacion, 2003).

*Sexual Satisfaction.* Sexual satisfaction was defined as subjectively experienced positive sexual outcomes. No specific item asked about sexual satisfaction directly, but five items reflected participants' appraisals of their

experiences with their most recent sex partner. These five items assessed how much the participant liked specific sexual activities, including vaginal intercourse, performing and receiving oral sex, and performing and receiving anal sex. These items were each scaled from 1 (*dislike very much*) to 5 (*like very much*).

A summed score representing each participant's mean sexual satisfaction was created. The Add Health survey design, however, did not ask every participant all five sexual activities items. The four subgroups were asked different subsets of the five items and for some participants, certain items might have been marked "not applicable" (i.e., women were not asked about performing anal sex). While heterosexual men were asked all five items, there are zero responses to the receiving anal sex item because in the current study, heterosexual men were defined as having an opposite sex partner; if a participant had a same-sex partner he was defined as a sexual minority. As a result, heterosexual men responded only to four items (all except for receiving anal sex). Heterosexual women were asked four items (all except for performing anal sex). Sexual minority men were also asked four items (all except for vaginal intercourse). Sexual minority women were asked only three items (all except vaginal intercourse and performing anal sex). Table 4 provides frequency data on the reported number of sexual activities among the four sub-samples. Across the five sexual activities, participants reported engaging in two to three sexual activities ( $M=2.51$ ,  $SD=.92$ ) – although this mean should be interpreted with caution because, as explained above, the number of sexual activities queried differed among the four sub-samples. When only the oral sex behaviors are

considered (as every participant was asked these questions), an analysis of variance revealed that there were no significant differences in the number of sexual activities reported among the four groups ( $F(1,6164)=2.80, p=.09$ ). These findings replicate Kaestle and Halpern's finding that Add Health participants had engaged in a broad range of sexual behaviors (2007).

Because of the differential item sets and subsequent response patterns, an average score, *sexual satisfaction*, was calculated for each participant based on the number of sexual behavior items that each person was allowed to report. Data for the satisfaction scores are presented in Table 5. The means were quite high, ranging from 4.31 to 4.60 (with a possible scale range of 1-5).

*Orgasm frequency* was measured by a single item: "When you and your partner have sexual relations, how often do you have an orgasm—that is, climax or come (1 = *never/hardly ever* to 5 *most of the time/every time*). This item was asked only of heterosexual participants. While frequency of orgasm is often used as a proxy for satisfaction (Young et al., 2000), in this study, it was analyzed separately due to the low to moderate correlations with the other satisfaction items (ranging from -.04 to .29; see Table 6) and the modest correlation with the overall sexual satisfaction score ( $r=.26, p<.01$ ). Conceptually, it was of interest to consider orgasm frequency and sexual satisfaction separately in order to examine the relationships between the two and whether there were differences at the sub-sample level.

*Moderators of Sexual Satisfaction.* *Self-esteem* was measured using a four-item version of the Rosenberg Self-Esteem Scale (Rosenberg, 1989). The items tap

participants' evaluations of their good qualities, pride, liking themselves the way they are, and whether they feel they are doing things "just about right." Participants rated the frequency with which they experienced such thoughts and feelings on a 5-point scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). Scores were reverse coded so that higher numbers indicated more self esteem. Internal consistency for scores on the 4-item Rosenberg Self-Esteem Scale was .79, consistent with prior studies that used this same scale (e.g., Daniels & Leaper, 2006).

*Relational reciprocity* was measured by two items: the amount the participants loved their partner and how much they perceived this partner loved them (1 = *not at all* to 4 = *a lot*). The two scores were combined into a dichotomous variable that measured whether the participant perceived their feelings to be reciprocated by their partner: reciprocal (1) or unequal (0). In sum, 82.9% of participants perceived the same level of relational investment between them and their partner, while 17.1% of the sample reported an unequal level of investment. Researchers using Add Health data have studied the relationship between love and sexual behaviors using these same items (Kaestle & Halpern, 2007). Of interest in the current study, however, was not the degree to which the participant felt loved (i.e., a lot vs. a little), but whether or not the participant perceived that the relationship was reciprocal, meaning that both partners were similarly invested. This decision was made in order to investigate the role of reciprocity and a shared degree of emotional investment – even if that degree of investment was low. Overall, the level and the direction of the love were of less importance in the current study. The

focus of this study, instead, was the relational contexts in which the two partners were perceived to be either similarly or differentially invested in the relationship.

### *Data Analyses*

SPSS 16.0 was used for coding and data management. While the Add Health sample used a complex sampling design, in this dissertation only unweighted percentages and means are presented and design effects are not accounted for. While these corrections are considered necessary in analyses due to the clustered and stratified nature of the Add Health sample (Chantala, 2006), by Wave III participants were no longer in the schools from which they were originally recruited seven years earlier, in 1994-95. As a result, their responses can be considered to be more independent and not clustered to the same extent as in earlier waves. Because this analysis decision risks the inflation of significant findings and overestimates degrees of freedom, a more robust significance level ( $p < .01$ ) was used to assess significant associations. As a result, these findings are limited in their generalizability since the unweighted sample cannot be considered representative of the U.S. population of young adults.

Univariate distributions were examined for outliers and multicollinearity to determine whether they conformed to assumptions of normality and homoscedasticity. The sexual satisfaction score was found to be negatively skewed (skewness = -1.76, SE = .03); however, this was considered within acceptable limits for a large sample (Tabachnick & Fidell, 2007). In order to check the potential influence

of this non-normal distribution, an inverse-reflection transformation was computed, as this technique is recommended for severe negative skew (Tabachnick & Fidell, 2007). The subsequent regression analyses were conducted using both the non-transformed and transformed score; the transformed score was not found to make any significant differences to the overall amount of variance explained or the individual regression coefficients. Thus, for simplicity, only the non-transformed scores are reported.

Research Question 1 was analyzed using univariate analyses of variance (ANOVA). The moderational effects of self-esteem and relationship reciprocity for Research Question 2 were tested using hierarchical regression with centered variables (Aiken & West, 1991).

## RESULTS

### *Research Question 1*

*Do levels of sexual satisfaction among heterosexual and LGB men and women differ?* Table 5 presents the means and standard deviations of the sexual satisfaction scores for heterosexual and sexual minority men and women. A two-way analysis of variance (ANOVA) was conducted to investigate whether there were sexual satisfaction differences among participants. There was a significant main effect for gender ( $F(1,6831)=4.94, p=.03, \text{partial } \eta^2=.001$ ), with men ( $M = 4.59, SD=.60$ ) reporting greater sexual satisfaction than women ( $M = 4.32, SD=.75$ ). The main effect for sexual minority status was not significant ( $F(1,6831)=.024, p=.88, \text{partial}$

$\eta^2=.000$ ). However, there was an interaction between gender and sexual minority status, ( $F(1,6831)=17.37, p<.001$ , partial  $\eta^2=.003$ ).

As depicted in Figure 2, for heterosexuals, men reported higher sexual satisfaction than women, but, for sexual minorities, this was reversed: Sexual minority women reported higher sexual satisfaction than men. In sum, this finding reflects that the two groups who were reporting on sex with a female partner (heterosexual men and sexual minority women) also reported higher satisfaction than their counterparts who were reporting on sex with a male partner.

Because orgasm frequency was asked only of heterosexual-identified participants, a one-way ANOVA was conducted to test for gender differences. Analysis revealed a significant difference between heterosexual men and women ( $F(1,2566)=326.76, p<.001$ , partial  $\eta^2=.11$ ). Men ( $M=4.72, SD=.77$ ) reported significantly more frequent rates of orgasm than women ( $M=3.93, SD=1.27$ ).

Although the overall sexual satisfaction score provides data on how participants reported on their overall sexual satisfaction (and is, therefore, relevant to sexual satisfaction research which takes a similar global perspective), the data on specific sexual activities provide another type of useful insight. Data for the five sexual activity items that make up the sexual satisfaction score are presented in Table 7. The means suggested that participants reported very high scores for all five sexual activities, with the highest scores reported for vaginal intercourse ( $M=4.77, SD=.59$ ) and receiving oral sex ( $M=4.66, SD=.69$ ).

Examination of these data illustrates both important differences and important similarities within the sample. For example, heterosexual men and women reported high rates of satisfaction with vaginal intercourse (men:  $M=4.81$ ,  $SD=.54$ ; women:  $M=4.75$ ,  $SD=.63$ ), although women's satisfaction with vaginal intercourse was significantly lower than men's ( $t(4602)=3.86$ ,  $p < .001$ ). In terms of oral sex, participants reported significantly ( $t(5065)=35.94$ ,  $p < .001$ ) higher levels of satisfaction with receiving oral sex ( $M=4.66$ ,  $SD=.69$ ) than performing oral sex ( $M=4.19$ ,  $SD=.97$ ). In terms of anal sex, heterosexual men reported relatively high satisfaction with performing this sexual activity ( $M=4.13$ ,  $SD=1.04$ ), while heterosexual women's evaluations of being on the receiving end of this same activity ( $M=2.96$ ,  $SD=1.41$ ) were significantly lower ( $t(1230)=16.42$ ,  $p < .001$ ). Further comparisons of performing anal sex demonstrated men of different sexual minority statuses rated the activity significantly differently ( $t(75)=6.15$ ,  $p < .001$ ), with sexual minority men reporting higher satisfaction ( $M=4.72$ ,  $SD=.61$ ) than heterosexual men ( $M=4.13$ ,  $SD=1.04$ ). This finding perhaps highlights the different social and sexual expectations regarding this sexual activity within each of these groups. Similarly, sexual minority men reported significantly higher satisfaction ( $F(2,718)=10.62$ ,  $p < .001$ ) with receiving anal sex ( $M=3.88$ ,  $SD=1.27$ ) than heterosexual women ( $M=2.96$ ,  $SD=1.41$ ) and sexual minority women ( $M=3.39$ ,  $SD=1.43$ ), again, perhaps highlighting different social evaluations of engaging in anal sex for these three groups.

### *Research Question 2*

*How do self esteem and relational reciprocity moderate individuals'*

*appraisals of their sexual satisfaction?* Four regression equations were computed to test the potential moderators of self esteem and relational reciprocity. In both cases, the predictor (either gender or sexual orientation) and the moderator (either self-esteem or relational reciprocity) were entered on the first step of each equation. The interaction of the two predictor variables was entered together on the second step. The moderator variables were mean-centered in order to eliminate multicollinearity (Aiken & West, 1991). Tables 8 and 9 provide the descriptive data for self-esteem and relational reciprocity; Figure 3 illustrates the self-esteem scores for the four groups of interest. Tables 10-13 provide the *F*s, *B*s, *β*s, and significance levels for each of the final equations. When interaction terms were significant, the regression lines were plotted using the procedures outline by Aiken and West (1991). These are each presented as bar graphs due to the dichotomous nature of the grouping variables.

*Self-Esteem.* The first equation (see Table 10) tested self-esteem as a moderator of the relationship between gender and sexual satisfaction. The full equation was significant, as were the main effects for gender and self-esteem. Mirroring the bivariate analyses, men were more satisfied than women ( $\beta = -.19$ ), and those with higher self-esteem were more satisfied ( $\beta = .07$ ). The gender x self-esteem interaction term was significant; as shown in Figure 4, self-esteem was not related to sexual satisfaction for men. However, self-esteem was related to sexual

satisfaction for women: women with lower self-esteem reported significantly lower sexual satisfaction than women with higher self-esteem.

The second equation (see Table 11) investigated whether self-esteem moderated the relationship between minority status and sexual satisfaction. The full equation was significant, as was the main effect for self-esteem, however, the main effect for sexual minority status was non-significant. Those with higher self-esteem were more satisfied ( $\beta = .12$ ), but there was not a difference between heterosexuals and sexual minorities ( $\beta = .01$ ). The sexual minority status x self esteem interaction was not significant. In sum, self-esteem moderated the relationship between gender and sexual satisfaction: levels of self esteem did not make a difference for men of either group, but did make a difference for women in both groups.

*Relational reciprocity.* The first equation (see Table 12) tested relational reciprocity as a moderator of the relationship between gender and sexual satisfaction. The full equation was significant, as were the main effects for gender and relational reciprocity. Mirroring the bivariate analyses, men were more satisfied than women ( $\beta = -.31$ ), and those with higher relational reciprocity were more satisfied ( $\beta = .12$ ). The gender x relational reciprocity interaction term was significant; as shown in Figure 5, relational reciprocity was not related to sexual satisfaction for men. However, relational reciprocity was related to sexual satisfaction for women: women with non-reciprocal relationships reported significantly lower sexual satisfaction than women with reciprocal relationships.

The second equation (see Table 13) investigated whether relational reciprocity moderated the relationship between minority status and sexual satisfaction. The full equation was significant, as was the main effect for relational reciprocity, however, the main effect for sexual minority status was non-significant. Those with relational reciprocity were more satisfied ( $\beta = .14$ ), but there was not a difference between heterosexuals and sexual minorities ( $\beta = -.03$ ). The sexual minority status x relational reciprocity interaction was not significant. In sum, relational reciprocity moderated the relationship between gender and sexual satisfaction: relational reciprocity did not make a difference for men of either group, but did make a difference for women in both groups. Women with lower relational reciprocity reported significantly lower sexual satisfaction.

## DISCUSSION

### *Overview*

In sum, this diverse sample of young adults reported very high rates of sexual satisfaction. Among heterosexuals, women reported lower rates of sexual satisfaction than men. Sexual minorities reported being as sexually satisfied as heterosexuals, a finding that replicates both older and more recent research which has also found no differences (Holmberg & Blair, 2009; Kurdek, 1991; Laumann et al., 1994). Among sexual minorities, women reported higher satisfaction than men. This “crossed interaction” (Cohen, Cohen, Aiken & West, 2003) is of interest because it highlights a shared characteristic of the two groups reporting the highest sexual

satisfaction: heterosexual men and sexual minority women – both of which are reporting about sexual experiences with female partners – also report the highest levels of satisfaction. On the other hand, heterosexual women and sexual minority men reported lower levels of satisfaction with their male sexual partners.

This finding, as well as other related findings discussed below, highlights an important and under-theorized distinction in sexuality research: the gender of the *partner* may be as or more important than the gender or the sexual minority status of the participant in sexuality research. Sexual activities are often comprised of two individuals. While research has examined gender and sexual minority status differences from the perspective of the person who is marginalized (including this study), this perspective has not fully appreciated the differently sexed and gendered bodies belonging to sexual partners. Men as sexual partners may be the more influential factor in sexual satisfaction research than the gender or sexual minority status of their female and gay or bisexual male partners. This is an area ripe for future research questions, methods, and analytic strategies to be developed which can better account for this “partner effect.”

*Oral sex.* In terms of the specific sexual activities included in this study, there were important differences in levels of enjoyment. Participants reported enjoying *receiving* oral sex more than *performing* oral sex. This asymmetrical finding reflects a view of performing oral sex as what Kimmel referred to “akin to some kind of community service” (Seligson, 2009) within sexual relationships. Apt et al. (1996) found that approximately half the wives in their sample reported enjoying

performing oral sex on their husbands. Similarly, the current study found that heterosexual women reported that they “somewhat liked” ( $M=3.99$ ,  $SD=1.02$ ) performing oral sex on their male partners and that they liked this activity the least out of the four groups of interest in this study. This finding potentially mirrors or expands on the “partner effect” described above: the act of performing oral sex on a partner is distinctly sexed – in other words, the activity differs greatly depending on the sex of the body of the partner (penis vs. vagina). In addition, this finding of oral sex differences may reflect gender-related stereotypes associated with women performing oral sex on men – an activity that is stereotypically described in terms of sexual inequity (Plante, 2005). This imbalance may be isolated to only heterosexual women who are contending with explicit power inequities during sexual activities. While sexual minorities are required to negotiate sexual inequities in the political and social spheres, they (and their sexual satisfaction) may be somewhat protected from negative stereotypes associated with oral sex.

*Orgasm.* Heterosexual women reported experiencing orgasm less frequently than heterosexual men, a finding that has been replicated many times and under many different relationship conditions (Lloyd, 2005). The exact nature of the relationship between orgasm and sexual satisfaction remains to be seen, however. In this study, the two variables were only moderately correlated, suggesting that orgasm frequency is an insufficient proxy for sexual satisfaction. This lack of strong correlation replicates many prior studies, going back thirty years to Hite’s finding of no association between reported enjoyment of sex and frequency of orgasm (1976).

This observed lower rate of orgasm frequency should not be interpreted as a “natural” gender difference. Women do not naturally experience fewer orgasms than men, although socio-biological models would argue that this lower frequency has positive evolutionary outcomes (Alcock, 1980; see Lloyd, 2005 for discussion). What this study demonstrates is that women report high levels of sexual satisfaction and their orgasm rates seem only moderately related to this satisfaction evaluation. What remains unknown is the degree to which the female orgasm was elusive, necessary, unattended to, forgotten, or demanded within the sexual relationships analyzed in this study.

*Sexual identities.* This national-level study replicates Diamond’s longitudinal findings concerning female sexual fluidity (2008b). In this sample, 2.7% (n=120) of the female participants who identified as bisexual or “homosexual (gay)” also reported that their most recent partner was male. Of the heterosexual women in the sample, 0.4% (n=16) reported a female sex partner. While a similar percentage of heterosexual men reported a recent male partner (n=15), there were much smaller rates of cross-category partnering among bisexual and gay male participants reporting recent sex with a female partner (less than 0.5%), suggesting that women experienced more fluidity in terms of their sexual partner choices than men.

*Contexts of sexual satisfaction.* This study found that the individual and interpersonal contexts in which sex occurred impacted the way that women evaluated their sexual satisfaction, but these same contexts did not affect men’s evaluations of their sexual experiences. Women with lower self-esteem and lower

relational reciprocity reported lower sexual satisfaction. These same moderating contexts were not found to affect the relationship between sexual minority status and sexual satisfaction. However, this study did find that sexual minorities – and sexual minority women in particular – reported significantly lower self-esteem than sexual minority men or heterosexuals. This finding replicates and adds to the research on sexual minority stress (Meyer, 2003b), as well as the research on gender and self-esteem (Hatfield, 1995). Hatfield has argued that self-esteem indicates a person's "own basic quiet confidence that he or she deserves love and that others are likely to provide it" (1995, p. 140). This interpretation, along with the findings from the current study, helps explain how social and sexual stigmas may be translated into person-level experiences of themselves and expectations for sexual satisfaction.

While gender and sexual orientation were the groups of interest in this study, it is important to consider the within-group variations that were present in the sample, including race/ethnicity and socioeconomic diversity. Research has shown that these demographic factors – particularly race – may be powerful influences in shaping the nature of self-esteem data. For example, the substantial literature concerning the association between race and self esteem (Hughes, Seidman & Williams, 1993; Knight & Hill, 1998; Twenge & Crocker, 2002) directs us to consider the potential role that race may have played in the findings concerning the moderating relationship of self esteem on gender and sexual satisfaction.

With this question in mind, a preliminary analysis was conducted in order to examine the relationship between race and self-esteem in this sample. Analysis revealed that there were the predicted race differences in self-esteem, with Black/African Americans reporting higher levels than the other four race/ethnicity groups. This finding is included in this discussion because it raises an important potential parallel question to the research question that guided the current study: when groups report high levels of well-being – for example, sexual satisfaction or self-esteem – under conditions that are less favorable to that group (due to discrimination, sexual inequities, or other factors), we as researchers have a number of choices in how we interpret these findings. We can choose to interpret these data at face value: this choice can be seen in the literatures concerning, for example, resilience within marginalized groups (Lyubomirsky & Dickerhoof, 2006). Or we can choose to critically evaluate these findings and question the construct validity and measurement of the construct in diverse populations: this choice informs the current dissertation project as a whole. A number of researchers have taken up this second option – a useful example can be seen in the women and depression literature (Cosgrove & McHugh, 2008). Future research interested in understanding how self-esteem moderates the sexual satisfaction of individuals should also carefully consider the role that race plays in this relationship.

In addition to the role that self-esteem played in moderating the relationship between gender and sexual satisfaction, this study found that relational reciprocity played a role as well. While other researchers have found that feeling loved affects

the sexual behaviors people engage in (Kaestle & Halpern, 2007), the current study was not concerned with feelings of love, but the perception of the participant that his or her emotional investment was mirrored and equal to that of their sexual partner. Kaestle & Halpern (2007) found that the degree of love (i.e., “a lot”) was associated with specific sexual behaviors (e.g., increased rates of anal sex). The current study, however, was interested in sex that occurred within a wide range of relationships, regardless of the amount of love. Love in this case was not the issue, reciprocity was and for heterosexual women, this reciprocity was found to affect their levels of sexual satisfaction. In contexts where the participant perceived there to be unequal amounts of love (more or less than their own degree of love), sexual satisfaction was negatively effected. This same effect was not observed in the sexual minority sample. There are surely other measures which would elucidate the power imbalances experiences within LGB relationships, but these were not them. Future research would be required to better isolate those contextual variables which affect the sexual satisfaction of sexual minority individuals.

### *Study Limitations*

Because the sample size was so large, significance levels of  $p < .01$  were easily reached and thus become somewhat meaningless. Thus, it is important to examine effect sizes (Cohen, 1968). The effect sizes in this study were generally small at the model level ( $\eta^2$  and  $R^2$ ), ranging from 0.001 to 0.11. This may be an indication that the factors being studied are only minimally related to sexual satisfaction scores.

However, as others have argued (McCartney & Rosenthal, 2000; Ozer, 1985) interpreting the variance explained may under-estimate the magnitude of the relationship. The intention behind this study, ultimately, was not focused on the goal of explaining variance. Rather, the goal was to examine the relationships between variables that may be potentially related to the phenomenon of sexual satisfaction, as well as explore the capacities and limitations of commonly used indicators to reveal patterns and group differences in the population.

There are an additional set of limitations related to measurement issues that come with any secondary data analysis. Although secondary data analyses with Add Health data offered the opportunity to work with a rich set of variables and multiple levels of data collection, there were important limitations in how the data served the research questions in this study.

There was no direct assessment of sexual satisfaction in the Add Health survey. Instead, common proxies for sexual satisfaction were used, including frequency of orgasm and enjoyment of several sexual activities. As with any operationalization of a construct, there were important gains and losses with this decision. The measure used in this study combined satisfaction levels across several different sexual activities. While this measure did not provide information about how an individual evaluated their overall sexual life, it did offer a grounded perspective on satisfaction that draws upon explicit sexual acts and locates sexual satisfaction within sexual experiences, thus not conflating it with more generalized good feelings about a partner or an overall satisfaction with life. However, one

important limitation to this measurement is that sexual experiences were limited to genital sexual activities. This genital focus may be inappropriate for some groups. For example, researchers have found that women, and particularly lesbian women, may derive satisfaction and pleasure from non-genital sexual activities such as kissing or caressing their partner (Holmberg & Blair, 2009; Iasenza, 2002). Research designs have been shown to miss important aspects of lesbian sexuality by defining sexual activity solely in terms of genital contact (Morrow et al., forthcoming; Peplau, Fingerhut & Beals, 2004; Rothblum, 1994, 2000). Items that can capture this wider range of potentially satisfying sexual activities are necessary in order to more accurately describe diverse sexualities.

In addition, this measure asked participants about the degree to which they “liked” each of these sexual activities. While liking and enjoyment are frequently used in sexual satisfaction research (e.g., Sanchez, Crocker & Boike, 2005), it is important to note that liking a sexual activity may be conceptually distinct from feeling sexually satisfied as a result of this activity, satisfied with the quality of the experience, or satisfied with the frequency of this activity. These conceptual distinctions are important to consider as we consider what types of data are meaningful and appropriate to draw conclusions from. Additionally, the Add Health study asked the majority of sexual outcome questions in terms of a relationship with a partner. This means that measures of sexual satisfaction in this study were always relational and did not allow for analysis of the respondent’s sexuality in terms of the person outside of a dyadic interaction.

Importantly, the Add Health study was not concerned with many aspects of sexual minority romantic relationships beyond sexual risk behaviors and condom use. This was evident in the limited number of questions that were asked of LGB participants. The comparatively small sample size of the sexual minority group made sub-sample analyses difficult. Thus, the analyses with sexual minorities should be considered exploratory. While Add Health researchers have either chosen to use other measures of lifetime same-sex attraction to enlarge the sample sizes (Russell, Franz & Driscoll, 2001) or have eliminated LGB participants altogether due to the small sample (Kaestle & Halpern, 2007), the current study represents a step towards using these data to explore positive outcomes for sexual minorities.

Lastly, due to survey administration decisions of the Add Health investigators, the inclusion of participants who were asked items concerning sexual satisfaction may have been less random than the rest of the Add Health sample (Raley, Crissey & Muller, 2007). Therefore, the generalizability of these findings may be limited and should be considered exploratory in nature.

### *Future Directions*

There are a number of important next steps to take in this research area, both in terms of the potential of the Add Health dataset and in terms of studying sexual satisfaction more generally. The fact that the Add Health dataset includes three (soon to be four) waves of data present opportunities to study the developmental pathways that lead to positive sexual outcomes. The Wave I survey,

for example, included a single item that measured participants' positive attitude towards sex: "If you had sexual intercourse, it would give you a great deal of physical pleasure." Although this item has been studied in terms of associations with safe sex behaviors, (e.g., Bay-Cheng, 2003) it could also be an important predictor of later sexual satisfaction.

Additionally, in future research it would be essential to examine potential race/ethnicity and socioeconomic status differences in sexual satisfaction. While a detailed analysis of these relationships was beyond the scope of this study, it is imperative that we understand how other forms of discrimination affect the ways that individuals evaluate their sexual lives outside of risk paradigms. Preliminary data showed no significant effect of race/ethnicity or socioeconomic status on sexual satisfaction. This finding, however, does not account for other factors that may have preceded sexual evaluations, such as different rates of engaging in sexual behaviors. Kaestle and Halpern (2007), for example, found that Black and Hispanic males and females had lower odds of engaging in oral sex than their white counterparts. These differences alert us to the fact that sexual relationships are impacted by many factors that precede sexual satisfaction and that these factors are important to consider when analyzing sexual outcome data.

In terms of studying sexual satisfaction generally, it is important that researchers do not simply overlook positive sexual outcomes, or worse yet, avoid including items that ask about positive outcomes, in exchange for merely measuring sexual risk and damage. Principal investigators are asked and even sometimes

required to limit their research questions to those involving sexual risk assessment (Harris, 2008b). As a result, the quality of sexual relationships is sacrificed, even though research that tells us that quality and satisfaction are important factors to consider in sexual health and risk management (Tolman, Striepe & Harmon, 2003). With this in mind, it is important for survey researchers to both develop and use items that ask participants about the quality of their sexual interactions or we risk ignoring important aspects of individuals' sexual lives and the development of healthy sexual attitudes and behaviors.

## **CHAPTER THREE: STUDY 2**

**“What does feeling sexually satisfied mean to you?” A multi-method study of  
sexual satisfaction in a sample of young adults**

“What does feeling sexually satisfied mean to you?” A multi-method study of sexual satisfaction in a sample of young adults

Sexual satisfaction is an important component of sexual health and contributes to overall good health and well-being (Beckman et al., 2008; Mulhall et al., 2008a). However, little attention paid to how individuals’ definitions of and expectations for sexual satisfaction are influenced by demographic factors such as gender and sexual orientation. While researchers have found, for example, that adherence to gender norms was associated with diminished sexual satisfaction (Sanchez et al., 2005), authors often assume that sexual satisfaction is defined the same way by heterosexual and LGBT men and women. What do different data collection and analysis methods reveal about the construct of sexual satisfaction and the variations within the construct?

The current study is an investigation into the variety of meanings and expectations that individuals have regarding their own sexual satisfaction. Of particular interest are the range of meanings and expectations that individuals draw upon when they indicate their level of sexual satisfaction in research settings. While the term “satisfied” may seem self-evident, this study examines whether in fact people mean the same thing when they invoke the term. As the determinants of sexual satisfaction change over the life course (Delamater et al., 2008), this study, similar to Study 1, focuses on young adults (ages 18-28) in order to understand how

gender and sexual orientation influence the construct of sexual satisfaction and its measurement at this crucial developmental stage.

## LITERATURE

Unfortunately, there is a paucity of research on the sexual satisfaction of young adults. The sexual lives of young adults are most frequently studied in terms of their frequency of sexual activity, onset of coitus, number of sexual partners, attitudes about marriage and premarital sex, and the occurrence of sexually transmitted diseases. Building from the positive adolescent sexuality movement by researchers working with younger samples (Diamond, 2006; Horne & Zimmer-Gembeck, 2005; Impett & Tolman, 2006; Russell, 2005; Tolman, Striepe & Harmon, 2003), there has been more attention paid to this developmental stage of young adulthood when individuals are past adolescence, but still developing sexual subjectivities and relationship patterns (Wight et al., 2008).

In terms of theorizing sexual satisfaction, researchers have asked if sexual satisfaction is defined differently across demographic groups. Early studies found that physical satisfaction was prioritized by men, while women consistently prioritized emotional closeness and intimacy when evaluating their sexual satisfaction (Laumann et al., 1994). Others, however, have raised questions about potential gender norms that may explain these differences and have argued that gender norms should not be conflated with gendered definitions of sexual priorities

(Frith & Kitzinger, 2001; Gagnon & Simon, 1970; Oliver & Hyde, 1993; Sanchez et al., 2005).

More recently, Bliss and Horne (2005) found different variables emerged as important for men and women and argued that the concept of satisfaction was highly influenced by gendered identities and sexual orientation. Scholars in the field of LGBT studies have taken this argument one step further and examined several mediating mechanisms that play a role in determining how individuals appraise their intimate experiences and relationships. Diamond and Lucas (2004), for example, found that sexual minority youth developed low expectations for satisfying and fulfilling romantic relationships. The authors argued that contexts of homophobia and discrimination create “negative expectations about romantic problems, and [feelings] that they have little control over their romantic lives” (p. 315).

What remains unknown is the extent to which factors such as sexism and heterosexism persistently affect individuals’ definitions of sexual satisfaction and whether these contexts are sufficiently captured in existing measures. Given that data on sexual satisfaction are often collected using close-ended measures and only within specific intimate relationships, questions remain concerning the range of dimensions, the valence of these dimensions, and the potential relationships between these dimensions for individuals when they make these evaluative decisions.

While there are large bodies of scholarship devoted to analyzing the validity and translation of psychological measures (Lacey et al., 2008; Podaskoff et al., 2003),

this literature has been focused on achieving measurement equivalence among diverse populations. Rather than concerns about translation or equivalence, however, the current study is within the tradition investigations of construct validity forwarded by Cronbach & Meehl (1955). Cronbach and Meehl argued that construct validity “must be investigated whenever no criterion or universe of content is accepted as entirely adequate to define the quality to be measured” (1955, p. 282). In terms of sexual satisfaction, it remains to be seen whether there are criterion that adequately define the quality of being satisfied.

Drawing from this measurement literature, the current study investigates the construct validity of sexual satisfaction using a series of methods that examine scores, scaling, and dimensions of the construct. While the methods used in this study are not traditionally associated with validity testing, they are focused on similar questions of construct and concept analysis. Instead of assessing correlation matrices and factor structures of a scale, the current study approaches the construct as a whole and investigates the psychology of sexual satisfaction.

Using an “exploratory design” (Clark, Creswell, Green & Shope, 2008), this study aimed to use mixed methods to study the prevalence of satisfaction dimensions (using quantitative measures) and also to study how these dimensions were defined by participants (using qualitative measures). Three data collection methods were used – a card sorting task, a semi-structured interview, as well as open- and closed-ended survey items. This combination of methods was designed to accomplish three objectives: (1) test the criterion variables used by researchers to

evaluate sexual satisfaction; (2) assess how individuals organized and defined what is sexually satisfying to them; and (3) examine whether there were discernable patterns due to gender and/or sexual minority status. In sum, the methods in this study were designed to test and deconstruct assumed stability in the construct sexual satisfaction in a sample of young adults.

## METHODS

### *Sample and Recruitment*

Participants were recruited from the Psychology research pool at an undergraduate college in New York City. Potential participants responded to an on-line ad for a study concerning “dating and relationships.” The ad specifically did not mention sexual satisfaction in order to reduce potential sampling bias in the case that only those who were highly satisfied or dissatisfied would decide to participate. In addition, the call for participants explicitly named LGBT and straight relationships and stated that participants did not need to be in a current relationship to be eligible to participate (see recruitment flyer in Appendix B). This decision was made in order to not limit the sample to individuals who were engaged in sexual relationships; masturbation was considered a relevant form of sexual expression in this study.

One of the most important dimensions of diversity that was considered important to this study was sexual identity. Because of this study’s interest in the role of social and relational stigmas in the sexual domain, every effort was made to recruit as many sexual minorities as possible. In order to recruit as large a sample as

possible who identified as LGBT or who were (or had been) in same-sex sexual relationships, a broader recruitment strategy was employed: in addition to recruiting through the Psychology research pool, flyers were posted throughout the college. These additional recruitment strategies did not produce any additional LGBT participants however.

Eligibility criteria were: over 18 years old, able to speak and write English fluently, and self-identified as straight/heterosexual, lesbian, bisexual, or gay in the screening process. In all, 386 people were screened, 375 were eligible, and 79 individuals were invited to participate in the study. In order to ensure diversity in the final sample, participants were selected from among eligible individuals using a case quota sampling method (Shontz, 1965). Four demographic characteristics were considered during this process: gender, sexual identity, race/ethnicity, and age, with target recruitment rates of 50% women, 50% LGBT, less than 50% White, and varied representation of ages 18-28.

Thirty four individuals were recruited to participate in the study (see Table 14 for demographic characteristics of the final sample). For qualitative studies involving heterogeneous samples, researchers have recommended 6-12 participants for each group of interest (Guest et al., 2006; Morse, 1994). With these guidelines in mind, approximately eight participants were sampled for the four main groups of interest (men/women and LGBT/heterosexual). However, recruiting participants from marginalized populations was not a perfect science. Consistent with other research that has found that LGBT youth often reject or avoid gay identity labels (Savin-

Williams, 2005), only one woman in the recruited sample of 34 identified as a lesbian; eight women identified as bisexual/undecided, five men identified as gay, and two as undecided/queer. The bisexual women were sometimes involved in same-sex romantic relationships, but were most often partnered with men.

### *Study Procedures*

Once participants consented to be a part of the study, they completed the three parts of the study in a fixed order: card sorting task, interview, and written survey. Interviews were held in an office with a closed door and only the investigator and participant in the room. All participants completed informed consent forms before participation began. The card sorting procedure (Kitzinger, 1986; Meston & Heiman, 2000; Stainton Rogers, 1995) asked participants to rank order a set of 63 elements that were important to them when they evaluated their own sexual satisfaction along a nine-point scale ranging from “most agree” to “most disagree.” Following the sorting task, each participant was interviewed by a single female researcher (the PI). Interviews typically lasted about 25-35 minutes, were audio recorded and transcribed for analysis. Following the interview, participants filled out a paper and pencil survey on their own while the interviewer was in the room. The entire meeting lasted one hour. Participants received one credit for participating in the study. Surveys and interviews were identified only with ID numbers in order to protect the identities of participants. Participants remained anonymous and only basic demographic details were collected.

Sex was defined broadly and included masturbation, fondling, caressing, intercourse, oral/genital contact, and genital contact with another person(s).<sup>4</sup> This definition was crafted in order to ensure that intercourse was not assumed to be the only form of sexual expression relevant in the study. This decision was made so that all participants, regardless of sexual orientation, would consider non-vaginal intercourse activities as potentially relevant to the study. Participants were reminded of this broad definition both in writing and out loud at the beginning of each of the three tasks they completed (card sorting, interview, and survey).

In a multi-method study, it is important to articulate the rationale behind each data collection method, their order within the data collection process, and how each methodological choice relates to the research questions that drive the study. The three tasks were presented in a fixed order: card sort, interview, survey. This sequence not only created a uniform experience for all participants, but also served a methodological function. Starting with the card sort encouraged participants to think globally about the construct of sexual satisfaction and gave permission to hold contradictory and ambivalent experiences, attitudes, and opinions. If the close-ended items had been first, participants may have felt obliged to maintain the non-ambivalent attitudes that survey items often require. In addition, the card sorting procedure allowed participants to think about the topic of sexual satisfaction on their own before beginning the interview section of the meeting. This cognitive

---

<sup>4</sup> The exact wording of this instruction was as follows: "Throughout this study, the word "sex" will be used. By sex, we mean any of the following: masturbation, kissing, caressing, fondling, intercourse, genital contact, and/or oral/genital contact."

space to think about the topic before being interviewed about it has the potential to allow participants to develop a sense of comfort with a topic that is not often publicly discussed and where there is minimal language available to describe one's own experience (McClelland & Fine, 2008).

While findings from the card sorting task are not presented here due to space limitations, the method is briefly described below and included as part of the overall methods in this study. The card sorting task was important and remains relevant to the findings described here because it provided a forum for participants to think about their sexual satisfaction and because the interview immediately followed the sort, participants sometimes referred to the cards and the sorting process when they reflected on the interview questions. In sum, while the findings are not here, the methodological imprint remains on the study and is therefore described in the methods section.

During the interview portion of the study, the researcher and participant were positioned side by side. This is different than most interview situations in which interviewer and interviewee are face to face (usually across a table from one another). This interviewing position was chosen because it allowed participant to have control over how much they wanted to visually engage with the interviewer and allowed for moments of "visual privacy." This is especially important given the intimate nature of the research. During the survey portion of the study, the participant sat at a table while the researcher sat away from and not facing the

participant in an effort to ensure as much privacy for the participant as possible given the space restrictions of the office space used for the research.

## MEASURES

### *Card Sorting Task*

Using the 63 cards, participants were asked to define their own sexual satisfaction using the following prompt: "*What is important to you in determining your own sexual satisfaction? Distribute the statements from those that you most agree with to those you most disagree with.*" Each person was given the stack of 63 randomly ordered cards with typed statements describing various aspects of sexual feelings, interactions, and behaviors and asked to sort all of the cards according from *most disagree* (-4) to *most agree* (4), with a mid-point of *neutral* (0) [See Appendix G for the list of cards]. Participants were instructed to sort the cards using a quasi-normal distribution which restricted how many cards they could place in each of the nine categories (see Appendix H for the card distribution grid). This decision was made in order to create an iterative ranking process: each card was evaluated in relationship to the other 62 cards. The order of each sort was systematically recorded on paper by the investigator.

### *Semi-Structured Interview*

Semi-structured interviews were conducted following the card sort. The semi-structured approach was used in order to collect participants' experiential data

and to enable participants to feel comfortable describing their own experiences with intimate relationships and sexual activities. The interview protocol contained a number of specific questions, but rather than follow a strict set of probes, the interviewer responded to each participant's stories and explanations with questions designed to elicit each person's idiosyncratic definitions and experiences (Conrad & Schober, 2008). The interview questions did not ask participants to elaborate specific sexual experiences, but instead, to describe the way that they interpreted these experiences (past and present) and to describe how their experiences helped them distinguish satisfactory from unsatisfactory sexual experiences.

The interview protocol was developed by the investigator in order to better understand the criteria individuals use to evaluate their own sexual experiences. The protocol was pilot tested with six individuals (not included in the final sample) and included questions pertaining to participants' definitions of sexual satisfaction, criteria they use to decide if they are sexually satisfied, previous or current sexual experiences that influenced their sexual development, what they expect in terms of sexual relationships, any developmental changes they have observed in themselves in the recent past and any changes they anticipate in the future (see Appendix D for the interview protocol). If the participant had been sexually involved with (or imagined themselves involved with) more than one gender, they were asked to describe if and how they experienced (or imagined experiencing) sexual satisfaction with differently gendered partners. Sample questions included: "Do you think about your own sexual satisfaction in your life?" and "How do you determine what is

satisfying from unsatisfying?” Questions were followed by prompts for the participant to discuss how often they thought about what is sexually satisfying, and under what circumstances. If they thought about their own satisfaction, they were asked to discuss how long have they have thought about it, whether these definitions have changed over time and if so, when, and were there were circumstances that prompted these changes. Interviews were audio-recorded and transcribed verbatim for analysis.

### Survey Items

Participants were asked three open-ended and three close-ended survey items using a pencil and paper format. Frequency of orgasm was measured using the same item used in Study 1 (Harris, 2008a): *“When you and your partner have sexual relations, how often do you have an orgasm – that is, climax or come?”* Responses ranged from 1 (*never/hardly ever*) to 5 (*most of the time/every time*). A new response category was added that allowed participants to note that there was “no sexual contact between us that would lead to orgasm” in the event that participants were involved in intimate partnerships but were not engaging in activities that aimed for orgasm as the outcome of these activities. The decision to add this response was in order to not conflate the infrequency of participants’ orgasms with other relational factors. Because this item was included in order to replicate the measure used in Study 1, this item was asked of participants who indicated that they

had a partner with whom they had intimate contact. As a result, these data are limited to only the 24 partnered participants.

The extent to which participants reported liking sex was measured using an item very similar to the liking item used in Study 1, so is similarly limited to partnered individuals. Participants were asked “*How much do/did you like having sex (of any type) with your partner?*” Responses ranged from 1 (*dislike very much*) to 5 (*like very much*) and again, a new response category was added if there was “no sexual contact between us.” Unlike the Add Health items on which this item is based which measure liking separate sexual behaviors (vaginal intercourse, receiving oral sex, etc.) this item was revised to be a more general measure of liking sex.

Overall sexual satisfaction was measured using a modified version of Cantril’s Ladder (Cantril, 1965). As is done with this measure traditionally, participants were asked to evaluate their overall sexual satisfaction using a self-anchored 10-point scale (resulting in a single close-ended response) and then to describe what the low, middle, and high ends of this scale meant to them (resulting in three open-ended responses from each participant). This type of measurement captures the participant’s level of sexual satisfaction, as well as the participant’s interpretation of the construct.

The prompt for this question was originally stated in a single short prompt, but in pilot testing it was found that participants were easily confused by this task. The prompt for this item was then elaborated in further pilot testing until all

participants found the directions understandable and easy to follow. The final prompt was as follows (see Appendix E for the exact presentation of this item):

In the following question, you will see a scale without any words telling you what the points on the scale mean. This question is asking you to complete two tasks: 1) answer the question by marking an “X” where you think it should go on the line; 2) in the spaces below each scale, explain what the low, middle, and high points of the scale meant to you when you made your “X” on the line. This is an unusual task – scales usually fill in the meanings for you. These three questions ask for you to describe what you think the worst, middle, and best are in terms of your own life.

This psychological measurement tool, sometimes known as “the ladder of life,” was developed to measure overall well-being and quality of life (Cantril, 1965) and has more recently been a popular measurement strategy in health psychology where researchers are often interested in within-individual changes over time due to diminished health or quality of life (Schwartz & Sprangers, 2000). In these settings, participants rate their current life satisfaction on a ladder that ranges from 0 to 10, where 0 reflects the “worst imaginable life satisfaction” and 10 reflects the “best imaginable life satisfaction.” Respondents are first asked to describe these two anchors and then to rate their current life satisfaction on this ideographically-anchored continuum (Schwartz & Sprangers, 2000, p. 88). This type of method attempts to make the concerns of the person central to defining and measuring relevant quality of life domains for that individual (Schwartz & Sprangers, 2000). It is

important to note that, conceptually, this is different purpose for using a self-anchored measure than my intentions in the current study. While most models using the self-anchored scale emphasize within-person changes, I am interested in measuring between-person differences at a single point in time.

## ANALYSIS & FINDINGS

### *Overview*

Survey items provide a consistent data collection method that presumes everyone experiences an item in the same way. In this study, methods and analyses were designed to examine how well this assumption stands up under scrutiny. Of particular interest were whether there were inconsistencies in approaches and definitions of the construct, whether there were multiple interpretations within the sample of the construct, and the use of reference points when deciding on how to make evaluative judgments of one's own satisfaction.

The analysis and findings are presented in three sections. Each section used a different type of data and analysis. In Section 1, numerical frequencies were examined: two survey items and the close-ended portion of the ladder item were analyzed in order to examine whether participants' responses to commonly used indicators of sexual satisfaction were consistently reported. In Section 2, the structures of sexual satisfaction were examined using the open-ended responses to the ladder item. The qualitative data were analyzed to understand what dimensions were reported along the satisfaction scale and how these dimensions were placed in

relationship with one another. Lastly, in Section 3, participants' definitions of sexual satisfaction were examined: semi-structured interview data were analyzed in order to examine the variety of meanings participants relied on when imagining the components of their own sexual satisfaction. The details of each analysis are described in the sections below.

At its root, this study was concerned with how contexts of sexism and heterosexism shape individuals' understanding of sexual satisfaction: were there overall patterns in how participants described and evaluated their sexual satisfaction and did these patterns differ by gender and sexual minority status? These analysis questions encouraged an analytic strategy that examined group differences, as well as variations within the groups. This dual attention – to the between as well as the within – has been a methodological move recommended by many psychologists who have argued strongly against the search for simple group differences and for the importance of not essentializing marginalized groups only in terms of their gender or their sexual orientation (Hegarty & Pratto, 2004). The software packages Atlas.ti, Excel, and SPSS 16.0 were used in tandem for data management and analysis.

### *Profiles of Satisfaction Scores*

This analysis concerned the relationships among three dimensions of sexual satisfaction: orgasm frequency, liking sex with one's partner, and overall sexual satisfaction. The question that guided this analysis concerned the extent of and the pattern of relationships among the three scores. Scores were collected from each

participant using three separate items measuring qualities of sexual satisfaction. Two of the survey items mirrored the Add health items used in Study 1 (orgasm frequency and liking sex with partner); the close-ended rating on the ladder item was used exclusively in Study 2.

Means and standard deviations were calculated for the sample. As Table 15 illustrates, lesbian and bisexual women reported the lowest overall sexual satisfaction ( $M=6.78$ ,  $SD=1.92$ ). Of note, of the four sub-samples, heterosexual men reported the highest orgasm frequencies and the highest rates of liking sex with a partner, however it was heterosexual women who reported the highest level of overall sexual satisfaction in the sample. LGBT participants reported strikingly lower rates on all three indicators of sexual satisfaction.

In order to more systematically assess the patterns that existed *between* these scores, these scores were analyzed for their relationships with one another. In other words, did participants who reported high orgasm frequency also report high sexual satisfaction? In order to make the scores relative to the sample and to each other, each score was coded as low and high using the sample mean for that item as a cut-point. Scores above the mean on that item were coded as high and below the mean were coded as low. See Table 15 for the means of each item.

The high, low, and the N/A scores (for those participants that were not currently partnered) were then analyzed for shared patterns. This analysis resulted in eight conceptual profiles. In other words, participants whose responses were of similar patterns were grouped together (e.g., “high” orgasm frequency, “high” liking

sex with partner, and “high” sexual satisfaction were grouped together). See Table 16 for group names and descriptions. Because of the small sample, these profiles should not be considered exhaustive, but they serve as conceptual possibilities of how individuals imagine the relationships among sexual satisfaction dimensions among diverse sample of young adults.

Among the eight profiles, three groups emerged. The first was the “Aligned” group which was characterized by the three scores being in alignment with one another. The second was the “Unpartnered” group (who reported only the sexual satisfaction item) which was characterized by this unpartnered quality. The third group was characterized by unaligned scores (e.g., the three items were answered differently). There were three patterns observed within this group: the “Contrast” profile was characterized by a sexual satisfaction score that was in contrast the orgasm and liking scores; the “Liking” profile was characterized by its single high score on the liking sex with a partner item; and the “Orgasmless” profile was characterized by its single low score on orgasm frequency. See Figures 6-10 for graphic representations of the eight profiles.

The most prominent pattern in the sample was the “Aligned” profile which accounted for 41% of the sample. The ‘Aligned: satisfied’ profile described the case where all three scores were high (n=12). This pattern is consistent with the assumption in the literature that the three dimensions of orgasm, liking sex, and sexual satisfaction are related and equivalent with one another. Similarly, the pattern in the ‘Aligned: unsatisfied’ profile demonstrated this same assumption

(n=2), meaning that the scores in this group were low, but in alignment with one another. See Figure 6 for the graphic representation of these two profiles.

The two “Unpartnered” profiles accounted for 32% of the sample. The ‘Unpartnered: unsatisfied’ profile (n=7) reported low overall sexual satisfaction, which may be due to the absence of a sexual partner or due to other factors. In contrast, the ‘Unpartnered: satisfied’ profile (n=4) reported high overall sexual satisfaction and were currently unpartnered. This second pattern is in stark contrast to the existing literature which has consistently assumed high sexual satisfaction is necessarily embedded within a romantic relationship. This group reported being satisfied outside of a relationship. See Figure 7 for the graphic representation of these two profiles.

Together, the “Aligned” and “Unpartnered” profiles accounted for 74% of the sample. The remaining 26% of the sample demonstrated patterns in their scores where the three dimensions of sexual satisfaction were not in alignment with one another.

The “Contrast” profile accounted for 12% of the sample. The ‘Contrast: unsatisfied’ group (n=3) reported high orgasm frequency and liking sex, but low overall sexual satisfaction. The ‘Contrast: satisfied’ group (n=1), while small in size, was discernible due to the pattern of reporting high sexual satisfaction in spite of low orgasm frequency and low levels of liking sex. The contrast pattern seen in both of these groups is of interest because it indicates that the sexual satisfaction score for some individuals is unrelated to orgasm or liking sex with a partner – and may

even be in contrast to these other two dimensions. See Figure 8 for the graphic representation of these two profiles.

The final two profiles are noteworthy because one dimension was in contrast with the other two dimensions. This pattern accounted for 15% of the sample. The “Liking” profile (n=3) reported high scores on liking sex, but low scores on the other two dimensions. In other words, they liked sex with their partner, but reported low orgasm frequency and low overall sexual satisfaction. The “Orgasmless” profile (n=2) reported low orgasm frequency, but high liking and high satisfaction scores. In this case, orgasm appeared to be unrelated to how much they liked sex or felt satisfied by it. See Figure 9 and 10 for the graphic representation of these two profiles.

These profiles were further analyzed for demographic characteristics. Two findings related to the sexual minority status of the participants: three quarters of the ‘Aligned: satisfied’ group was heterosexual (n=9) and three quarters of the ‘Contrast’ group were bisexual/gay (n=3). These two findings direct us to consider that the theoretical model which equates orgasm, liking sex with a partner, and sexual satisfaction may be more appropriate for heterosexual individuals than for those who identify LGBT, as most of those individuals who followed this pattern were heterosexual and most who diverged from this pattern were LGBT.

In addition to being heterosexual, 71% of the ‘Aligned’ participants were also female (n=10). This finding indicates that the alignment model may be more appropriate for women in addition to heterosexuals. In contrast to this finding, however, analysis indicated that 100% of the participants in the ‘Orgasmless’ profile

were also female (n=2). This finding highlights the fact that many women never or rarely experience orgasm (Lloyd, 2005); while some women experience orgasm and sexual satisfaction as inter-related, others experience these two dimensions as distinct and unrelated. Finally, in terms of the 'Unpartnered' profile, male participants comprised 82% of this group as a whole, and all (100%) of the participants in the 'Unpartnered: satisfied' group were male (n=4) and 75% of these were heterosexual men (n=3). This last finding, while certainly conflated with the overall male-ness of the group, indicates that perhaps heterosexual men experience sexual satisfaction as a phenomenon that is not rooted in relational dynamics, but rather, as something that exists in their bodies regardless of being partnered, being single, having sex, or being abstinent.

Overall, these data demonstrate that there were relationships among the three scores, but not always in the pattern that is assumed in the literature. While about 40% of the sample answered in the expected pattern of alignment (i.e., where the three items were answered similarly), there were other patterns present in the sample. These divergent patterns indicated that there a number of other response patterns that potentially underlie the construct of sexual satisfaction.

Overall, there were three observed patterns: one, for some individuals, the three dimensions of orgasm, liking sex with a partner, and sexual satisfaction were conceptually equivalent. Two, one need not be partnered to be sexually satisfied. This unpartnered state may be characterized by sexual interactions outside of relationships, masturbation, or abstinence (or any combination of these and other

related scenarios). Three, and perhaps most importantly, sexual satisfaction appraisals sometimes are un-related to (and sometimes in spite of) how frequently an individual experiences orgasm or how much they like sex with their partner.

The sample in this study was small, but demographically diverse. The eight profiles described here demonstrate that there were discrepancies in how individuals interpreted three dimensions commonly assumed to be equivalent to each other and to sexual satisfaction. The sample was too small to systematically assess the demographic characteristics of these patterns, but preliminary analysis indicated modest relationships between an individual's gender and/or sexual minority status and their interpretation of their own sexual satisfaction. The profiles observed in this study suggest potential patterns that require further verification. Researchers interested in these patterns should examine how these patterns stand up in larger samples, as well as samples that are diverse by other demographic characteristics including race, ethnicity, socioeconomic status, and immigration status.

### *Structures of Sexual Satisfaction*

Psychological constructs are often assessed to assure their consistency in research settings, in other words, do people define the word the same way (e.g., Sanders & Reinisch, 1999)? Less frequently examined are the *structures* of psychological constructs. A structural analysis includes studying the way an idea is organized and ordered by individuals (Rogler, 1999). With this model in mind, the

second phase of analysis examined the cognitive structures of sexual satisfaction. There were two areas of particular interest: first, how participants organized the range of sexual satisfaction when the range was not specified for them and second, how they imagined the progression from low to high satisfaction.

*The Range of Sexual Satisfaction.* The majority of sexual satisfaction scales ask participants to rate their degree of satisfaction, ranging from less satisfied to highly satisfied, using a Likert scale (as seen in Study 1; Alfonso et al., 1996). Participants are usually asked to interpret what these levels of satisfaction imply; in other words, they are asked the implicit question, “less satisfied than what?” The task requires them to decide where they fall within the range provided by the researcher. The question remains how participants cognitively organize their own definition of satisfaction and whether individuals use the same strategies. If divergent strategies exist, this would highlight potential measurement discrepancies and reduce the validity of some survey measurement designs.

In order to answer this question, the open-ended responses to the Cantril’s ladder item (n=33) were examined to see how participants organized a scale that did not provide guidance on how to interpret the low, middle, and high ends of an unmarked 10-point scale of overall sexual satisfaction (see Appendix E for the item). Participant responses were analyzed at the person-level for how each participant structured the three points. In other words, the analysis focused on the measurement strategy each person used to imagine the range of sexual satisfaction and how it increased from low to high. A grounded-theory analytic approach was

used for this analysis (Glaser & Strauss, 1967) because there was very little existing theory on the cognitive strategies used in this domain.

Analyses revealed that participants used five distinct cognitive strategies to organize the unmarked sexual satisfaction scale. While a small portion of the participants imagined the scale according to degree of satisfaction (i.e., less to more satisfied), there were four other discourses of measurement (see Table 17 for descriptions and examples). In addition to degrees of satisfaction, participants reported using time to judge their satisfaction level (i.e., 50% of the time), sexual outcomes such as orgasm (i.e., when my partner has an orgasm), emotional outcomes (i.e., when I feel loved), and the type of sexual partner involved (i.e., random sexual partners are less satisfying than regular partners). These organizing frameworks demonstrated that participants brought implicit and unmeasured measurement strategies to the item. While this item was unusual because it did not provide any range instructions at all, these data highlight the possibility that participants' organization strategies may over-ride frameworks that are provided by researchers.

*The Progression of Sexual Satisfaction.* A related analysis of these same data concerned the anchors and mid-point of the scale – translating roughly to low, middle, and high satisfaction. The descriptions of the three points of the unmarked ladder were examined for the quality and valence of the descriptions. These data were used to identify how and under what conditions the participant imagined progressing from low to high satisfaction. Analysis of these data highlighted specific

patterns in how participants imagined the end-points of the scale and how each related to the other. Again, a grounded theory approach was used to code these qualitative data, meaning that the codes were derived from the data themselves and were not developed prior to data analysis. Issues relating to gender and sexual minority status were forefront in the analysis, as were variations within these groups.

Analysis revealed that the majority (85%) of female participants described the low end of the scale in extremely negative terms, using terms like “depressed,” “emotionally sad,” “sick,” “he just cared about himself.” Some female participants went further and described the low end in terms of “pain,” “hurt,” and “degradation.” No male participants used terms with this degree of negative affect. Negative terms used by male participants included phrases such as “having negative emotions prior to orgasm,” “not having anyone to have sex with,” or “person not experienced.” The more common descriptions used by men addressed issues such as, loneliness, having an unattractive sexual partner, and insufficient sexual stimulation.

These data revealed that men and women imagined a very different low end of the sexual satisfaction scale. While women imagined the low end to include the potential for extremely negative feelings and the potential for pain, men imagined the low end to represent the potential for less satisfying sexual outcomes, but they never imagined harmful or damaging outcomes for themselves. This finding is not completely surprising given the fact that women’s sexual vulnerability is well

documented (Blackman, 1989; Phillips, 2000). For the purposes of research, however, this finding alerts us to the fact that the low end of the scale may be very differently interpreted by men and women. When a woman is asked to rate her sexual satisfaction and she is presented with a scale that ranges from “low” to “high,” a woman’s comparison point when evaluating “low” may be qualitatively different than a man faced with the same item. For women, low sexual satisfaction signals the potential presence of pain associated with sex, while for men low sexual satisfaction signals the absence of good or plentiful sex.

An examination of the mid- and high-points of the scale also revealed a gendered pattern. Women largely described the mid-point of the scale in terms of being physically but not emotionally satisfying, with the highest possible sexual satisfaction was in the unison of these two experiences. Descriptions of the mid-point that were typical for women included, “no connection with the person,” “nothing special,” and “no orgasm.” The move towards the high-end was additive, meaning that the high end included both people having orgasms and feeling “connected” to one another. For men, the mid-point often included “normal” sex, “just plain ol’ orgasm,” or masturbation. On the high end, men often described their partners’ satisfaction, with phrases such as, “she was pleased,” “a close relationship with the person,” and “both participants enjoyed, neither was left unhappy,” but it was mostly in the high end where the men included their partners.

When the high-end responses were examined, there was an interesting parallel to the observed low-end pattern. Women’s high-end descriptions mostly

included images of both partners having an orgasm and feeling connected. Men, interestingly, included descriptions of the high point as “beyond imagination,” “best ever,” and “mind blowing.” No women used descriptions that included this type of “extraordinary” outcome. This inclusion of the extraordinary high end in men’s responses speaks, again, to the unequal ranges of the scale for men and women. In sum, the low-end was imagined by women to include more extreme negative potential in the form of possible abuse and pain, while the high-end of the scale was imagined by men to include the potential for far more positive events, feelings, and outcomes.

The patterns observed in this structural analysis serve to demonstrate that participants used different frameworks to organize the progression of low to high satisfaction and that the anchors of the scale, usually identified as “not at all satisfied” and “very satisfied” are interpreted very differently depending on the social position of the participant. Some satisfaction researchers would see this variability as non-problematic due to the subjective nature of satisfaction judgments. Recall that Diener and his colleagues argued that the appropriate comparison when making a satisfaction appraisal is oneself:

It is important to point out that the judgment of how satisfied people are with their present state of affairs is based on a comparison with a standard which each individual sets for him or herself; it is not externally imposed” (Diener et al., 1985, p. 71).

These data make this process explicit – as a result, we see that individuals imagine very different comparisons and that these comparisons differ in predictable ways depending on one’s social position and more specifically, the socialization one has received in terms of sexual experiences, fears, violence, and pleasure.

### *Definitions of Sexual Satisfaction*

The dominant paradigm in sexuality research has been to use physiological indicators, such as orgasm frequency, and psychological measures as a means to assess sexual satisfaction. In addition, researchers have often assumed that the cognitive patterns used to organize sexual satisfaction are universal and shared across individuals. These two assumptions – of term equivalence and concept stability – were assessed using the qualitative interview data. The 34 semi-structured interviews were content coded for participants’ descriptions of what they prioritized in their evaluations of satisfaction. The analysis was not concerned with the frequency of words or descriptions as is the case in some content coding analyses (Prior, 2008). Instead, the analysis focused on the decision process: what benchmarks were used to decide whether sexual activity was satisfying? What dimensions were named as important in these decisions? One way of examining the potential pattern of distortion is through an analysis of what Podsakoff et al. (2003) describe as “illusory correlations” and “implicit theories.” These are the assumed covariation participants believe exists between traits, behavior, and outcomes and which systematically distort data (Podsakoff et al., 2003, p. 882). In other words,

what do participants assume are necessary components (or covariates) of sexual satisfaction?

During analysis, each transcript was thematically coded – meaning that the units of text that were coded were thematically associated with the several theoretically-derived terms of interest (Krippendorff, 2004) – including orgasm, partner, and trust. The levels of association with these terms could be explicit (e.g., the participant talked about her orgasm) or implicit (e.g., the participant talked about what her body felt like after sex). From this first level of coding, a thematic analysis was conducted which examined the coded material for empirically-derived emergent themes (Glaser & Strauss, 1967). In other words, theory guided the first level of coding which organized the data into units based on descriptions of terms often associated with sexual satisfaction. The second level of coding was guided by the data themselves and the analysis was focused on those themes that emerged from the interviews. This combination of theory and data as a two-step process allowed for several dominant assumptions in the field to be interpreted and described by participants as they negotiated these terms and ideas in their lives, on their own and with sexual partners.

Two groups of findings are presented. The first concerns the types of benchmarks that participants used to determine their level of satisfaction. The second concerns the routes that participants described on the way to feeling satisfied – meaning the developmental pathways they described as contributing to their sexual satisfaction. Participant descriptions are included when their interviews

are excerpted; individuals' self-identified genders, sexual minority status, race/ethnicity, and age are provided using the verbatim description that each participant provided.

### *Benchmarks for evaluating sexual satisfaction*

Sexual satisfaction research largely assumes a consistent set of benchmarks are employed when an individual rates their level of satisfaction. The presence, frequency, and quality of orgasms have often been used to operationalize sexual satisfaction (Holmberg & Blair, 2009; Young et al., 2000). The interview data revealed that while the presence of orgasm was used as a benchmark, it was by no means the only benchmark used by participants. The other three benchmarks described here are highly embedded – not only within relationships, but within the partners themselves. Partners' satisfaction was used as a proxy for one's own satisfaction, how close one felt with a partner was often used as a means to evaluate the quality of the sexual relationship, and “doing a good job” was used as a benchmark for assessing whether the sexual activity was considered successful – an alternative reading of satisfying. In total, four types of benchmarks were elaborated in the interviews.

*Orgasm.* When orgasms were discussed, there were important gender differences in how men and women talked about the priority and presence of this experience in their sexual lives. Among male participants, having an orgasm was considered an important benchmark for their own sexual satisfaction. A good

example of this in the following exchange when a male participant was asked how he judged whether he was sexually satisfied: “I mean basically, having an orgasm basically.” Other men described the exchange of orgasms between partners (both over the course of singular sessions or over the course of the relationship) as important:

And it was very satisfying, and because I, I felt like it was a good balance, it was satisfying for both of us, it was, like, we both were able to have orgasms, like that was, it was equal, and that, that felt good to me [*male, gay, white, 22 years old*].

In contrast, women rarely used their own orgasm as a benchmark for their sexual satisfaction, even when having an orgasm was relatively “easy” and frequent. For some, sexual activities themselves were described as satisfying, and for others orgasm was not used as a benchmark for satisfaction, but it did add an element above what would have already been considered satisfying:

A: And I mean, it’s not like I don’t have orgasm, and it’s not like necessary for me to be satisfied. But when I do achieve one it’s...I think it’s great.

Q: Is it more satisfying if you are able to have an orgasm than if you’re not?

A: Yeah, I think it is. It is definitely [*female, straight, white, 27 years old*].

For the women in the sample who never, rarely, or only occasionally experienced orgasm, two distinct discourses emerged as alternative benchmarks for their own satisfaction: feeling close with a partner and their partner’s orgasm. One female participant described this alternative benchmark in terms of their male

partner's orgasm being a benchmark that was possible – while her own orgasm would have provided an untenable benchmark:

Well, right now, like, I've never had an orgasm, and it's not, I guess, just from not knowing what it feels like, it's just like, oh, ok, whatever, I mean, its not that big of a deal. ... Well, I just, I like to know that the person that I'm with that, like, they're satisfied. You know, at least that they're having an orgasm and that I can satisfy whatever it is that they want [*female, straight, Latina, 19 years old*].

Alternatively, other women did not prioritize their orgasm even if it was present, but instead, found that the closeness they experienced with partners after sex provided a more important benchmark for how they evaluated their satisfaction:

A: I mean, right now I'm pretty satisfied, so...

Q: How do you know?

A: I guess physically. Well, during sex, if it's good, and if you have an orgasm, and then, I think the after, like, effect of it, you feel close to that person, if you could just kind of lay there and cuddle, I think that adds a lot to it. Because it gives it, like, a personal touch [*female, straight, white, 19 years old*].

In sum, the presence of an orgasm was used mainly by men, both heterosexual and LGBT, as the criteria by which to decide their satisfaction level. Women, on the other hand, did not rely on their own orgasm as their main criteria,

but instead used their partner's orgasm or relied on less physiological indicators to judge their level of satisfaction.

*Partner's satisfaction.* When individuals are asked to rate their own sexual satisfaction, researchers assume an *intra*-individual reflective process occurs in which the person looks inward and decides how satisfied they feel. Interview data revealed that this process is far more *inter*-individual than previously thought. When individuals report on "my sexual satisfaction" this response represents more than just a singular "me" for some. This shift in perspective results in responses that are determined by a combination of me, them, and us.

As seen in this woman's description, since sex isn't important to her, she uses her partner's satisfaction as a proxy for her own. This is related to the example described above where a participant used her partner's orgasm as a benchmark for herself, but in this case, we see that the partner's satisfaction is considered more broadly here. It is a more generalized partner-based benchmark that comes into play not because an orgasm is "missing" or hard to achieve, but because the quality of the sex is decided by the partner who is more interested in having it:

Um, I don't really think that much about sex I guess so, yeah, for me I mean getting sexually satisfied isn't a bigger priority for me. It's mainly him I guess. The number one priority is for him to be sexually satisfied. Not for me. I guess it's easy for me to be sexually satisfied, since like if he's sexually satisfied then I'm sexually satisfied [*female, straight, Asian, 18 years old*].

This same sentiment of wanting to satisfy a partner was expressed by many participants, sometimes with a similar explanation that their partner's satisfaction was used as the primary benchmark and sometimes with a more varied set of influences which also ultimately placed the participants' satisfaction in their partners' hands. The following excerpt demonstrates that this dynamic also includes fulfilling a partner's expectations as a means to evaluate the level of sexual satisfaction. This male participant describes how it is his "job" in his relationship to fulfill his partner's wishes – at another point in the interview he described himself as the feminine partner and associated his responsibilities in terms of an opposite-sex gender dynamic within a same-sex sexual relationship:

So, I feel that if I can, if I can do what's expected of me, I feel that I have been rewarded something...I feel like as a partner, as being someone's boyfriend, as someone's significant other...I feel like it's my duty, or that its their duty as well, to satisfy one another. But mostly I feel like it's my job to do so. I want to see that my partner is happy, I want to see that my partner is feeling great, that they're satisfied [*male, all [sexualities], Latino, 19 years old*].

When participants use an inter-personal benchmark such as their partner's sexual satisfaction in order to determine their own satisfaction levels, this is conceptually different than research which has shown that sexual concerns are influenced by relational factors. The findings described here, rather than illustrating a relational dynamic, are more aligned with a perspective where the person uses another's satisfaction *instead* of their own. This seems to be less relational and more

akin to substitution. These perspectives are conceptually distinct and the exact nature of these decisions would be obscured if these types of appraisals were simply categorized as dyadic in nature.

*Doing a good job.* The reference to sex as a job was mentioned by several male participants, not in terms of a negative attribute, but rather in the sense that it was something that could be judged or evaluated by a partner. This was especially true of sexual minority men who described sexual experiences often using the language of work and performance. Often their satisfaction was linked to making their partner happy and satisfied and importantly – being credited as an expert. The following excerpt illustrates this quality of doing a good job, as well as how sex links with aspects self-esteem – a relationship that was examined in Study 1:

[The relationship] was really sexually satisfying for me...he was really attractive for the people that I've been with, and so, and, and I'm really adjusting my self confidence to where I'm like, "ok, I'm not that bad," you know, whatever. So, with that relationship I really was like, "oh, he's really attractive, I have to, I really kind of let loose and I had to be on." I had to perform, I had to be on, and I really did like, my best work, or I did a good job...[*male, gay, white, 22 years old*].

Given the dyadic nature of sexual relationships, it is not surprising that participants would describe wanting to make sure that their partner was happy and that an individual would to some extent rely on a relational dynamic to evaluate their own satisfaction. What was surprising, however, was the extent to which

participants embedded their own satisfaction within their partners' sexual experiences and expectations. *This was particularly true of heterosexual women and LGBT men who described using their male partners' bodies, orgasm, and happiness as the primary benchmark for what was considered satisfying and satisfactory.*

#### *Routes to sexual satisfaction*

Sexual satisfaction is usually theorized as an end point, a summary judgment. However, this final evaluation is made up of a series of evaluations and motivations in which an individual prioritizes aspects of their sexual life in order to achieve satisfaction. The interview data highlighted the trajectories participants imagined *towards* sexual satisfaction. These trajectories were not universally held throughout the sample and were at times even contradictory within a single individual.

By taking a perspective that was wider than just the point when a participant retrospectively reflects on their satisfaction, this analysis took into account the way that individuals built up what would eventually become satisfaction for them. While any of the building blocks described here could (and have) been assumed to be an end point, when assessed from a wider angle, these building blocks can be seen as routes used to create the necessary environments and feelings that make sexual satisfaction more likely.

*Emotional closeness as route to satisfaction.* While research has consistently shown that women prioritize the relational and emotional aspects of sex over physical outcomes such as orgasm (Basson, 2000; DeLamater, 1987; Hatfield et al.,

1988; Hite, 1976), the interview data revealed that this prioritization has a number of motivations. Emotions were often described as a gateway to more physical pleasure and not as the sole objective. The following woman described having an emotional connection with a partner as contributing to the potential she would experience orgasm since she would feel less self conscious about her body:

You need to be relaxed and like, really let your mind go and sort of climax to an orgasm, and I think that if you had that connection with somebody, you're not so much nervous, like, 'oh my God, is he looking at me this, oh, does he notice my flaws,' but more relaxed and enjoying the situation as a whole, so that they can, I think they have a better chance of climaxing that way than they would just randomly having sex with somebody [*female, bisexual, white, 21 years old*].

Other female participants described a similar set of relational factors – feeling attached, being connected, having an emotional bond with a sexual partner – but they placed these emotions on the way to sexual satisfaction, not always as the equivalent of sexual satisfaction. As one woman explained, the closeness with a partner enabled her to move towards physical enjoyment: “It's just, I guess because of that emotional bond I am more able to let myself go, so I can actually, I can enjoy the physical aspect of it more” [*female, bisexual, white, 22 years old*].

This temporal distinction ( $A + B = C$ ) would potentially go un-observed in close-ended measures of sexual satisfaction which often ask participants to rate their emotional and physical satisfaction separately or ask them to pick which

dimensions is more important to them. These data demonstrate this would miss the additive quality of these descriptions. In addition, this quality of emotions as a *vehicle* rather than as an *ideal*, challenge gender difference theories that have consistently positioned women as only relationally oriented (Gilligan, 1982) or as restricted by available sexual scripts (Plante, 2007). While these theories still hold promise for understanding aspects of gendered behavior, findings from this study interrupt the picture of women as unable or unwilling to be guided by aspects of their own physical pleasure. This finding reminds us that sexual satisfaction does not cleanly divide into two mutually exclusive dimensions of emotional and physical satisfaction.

*Safety and absence of fear as route to satisfaction.* A second major route towards sexual satisfaction was elaborated through linking feelings of safety with feelings of sexually satisfaction. Sometimes safety was interpreted along traditional definitions of “safe sex;” as one woman stated, “there’s no way I could enjoy sex of any kind if I was fearful of that or putting my body at risk in any way” [*female, straight, white, 26 years old*]. In this case, condom use was not in and itself sexually satisfying, but was a necessary (pre)condition of satisfaction.

In addition to condoms, still other participants interpreted safety in terms of being free of violence and coercion in sexual encounters. This was particularly true of participants who had experienced violence and now required that their sexual experiences were not only violence-free, but determined by the participant to be safe – which again, like condoms, became a necessary condition for satisfaction.

Several women described sexual violence in their past and how this affected how they organized and evaluated current sexual experiences. For example, this female participant described how she couldn't have sex with someone if she didn't feel safe as a means to control the panic attacks she has during sex:

I've had some issues with sex. So, I had some anxiety for a while. If I had sex I would have panic attacks, so I can't really, I will still sometimes have little backlashes of that if I'm feeling ill at ease, so I really have to feel at ease with someone and really feel like I can trust them and know, and I have to know who they are, and know, I just have to feel safe. So, I literally can't have sex if I don't feel safe with someone [*female, bisexual, mixed race/ethnicity, 18 years old*].

In this study, safety was described as an essential ingredient of satisfaction only by female participants. In the two interpretations of safety that emerged – condom use and absence of fear – women spoke about bearing the weight of physical outcomes of “unsafe” sex, i.e., getting pregnant and experiencing sexual violence. Women spoke about having to be vigilant about their safety; this vigilance then became folded into how the young women defined their ideal sexual encounters. While it was primarily female participants that spoke about safety in this sample, they were not the only group to be affected by safety in sex or to prioritize safety in sex.

*Dominance & aggression as route to satisfaction.* In contrast to those participants who interpreted “safe” sex in terms of condoms or feeling emotionally

protected, there was a third way that safety was interpreted. The theme of dominance and feeling unsafe was described as an additional route to sexual satisfaction – particularly by women and gay/bisexual/queer men. Heterosexual men did not describe aspects of power or dominance in their sex lives, although this doesn't mean that these elements weren't important to this group. Social desirability and concerns about sounding as if they were equating violence and pleasure may have prevented them from talking about these issues with a female interviewer. Aside from this group, many other participants did talk about the role that power and dominance played in their sexual satisfaction. Safety, in these cases, acted as a sort of mirror to satisfaction: pushing the edge of what felt "safe" required individuals to consider what they wanted sexually and required that they communicate this to a partner. Various power dynamics – ranging from very mild to more extreme aggression – allowed participants to explore parts of themselves, their sexuality and their partner that they were not able to do otherwise.

Dominance was described in terms of power exchange ("I want to share the power, you know, not necessarily leave it towards one person" [*male, gay, mixed race/ethnicity, 19 years old*]), as well as being taken over by another ("I like to feel dominated and stuff...I like to feel weak and just like, as if someone was like, in control of me, almost" [*female, straight, Latina, 19 years old*]). The quality of feeling understood by their partner was described by many participants as an important route to their sexual satisfaction. This understanding could be achieved by multiple means. This particular participant associated domination with being understood by

one's partner: "I like to feel dominated, I like to feel like, hey, someone gets me for a change. Let someone do the work for me, you know" [*male, gay, white, 20 years old*].

For the women and gay/bisexual/queer men who talked about these dynamics, the satisfaction came through various routes: it extended the "wanting" period; it created tension that could be physically enacted and released; and it ensured that the partner was paying attention. The following excerpt comes from a female participant who was describing her ambivalent relationship with power in her relationship with a male partner. She refers to handcuffs as a method that restricts her sexual desire, and as a result, she is able to feel "wanting" in a way that is more difficult when desire is immediately satiated.

Because I was just thinking of handcuffs and like handcuffs at first may seem more violent, but it also can be a feeling...like if you're comfortable with a partner, enough, it's like a feeling of, you know, just that like wanting. It brings out that feeling of like, um, what I was describing before, like the – like you can't get enough, you know? [*female, bisexual, white, 25 years old*].

Other participants took the sense of domination further and linked the importance of emotional safety and physical safety. Feeling dominated by a partner did not mean that safety was not also essential – it was the presence of both that was necessary and satisfying. This participant describes this thought process as she was deciding where to place certain cards during the card sorting task earlier in the study:

I think at some point [in the card sorting task] I put slightly agree that being dominated by a partner during sex is important for me to feel satisfied and then I also put feeling safe [was important]... I need to feel safe in order to be sexually satisfied, which is kind of contradictory...Because I can be dominated by a person that I feel safe with. I'm allowing them to dominate me. Which is different [*female, bisexual, mixed race/ethnicity, 18 years old*].

A theme emerged in the interview data in which participants referred to "animalistic" sex being very satisfying. This reference was most frequently used a means to describe sexual activities in which the person felt they could "let go," often described as the ability to be less self-conscious during sex. This animalistic quality, however, was usually tempered with the requirement that the "animal" aspect cease when the sex ended. Two participants specifically talked about the post-coital phase of emotional bonding as important, not because of what it provided emotionally, but for what it signaled – that the animal quality was not going to stay as part of the relational dynamic. For many, the animalistic element was considered sexually satisfying in bed, but not outside of the bedroom:

I like to be held afterwards. Holding is nice. Little kisses. So that its not like, its not, as like, animal like, as, because sometimes during sex, you just get so into it, that its like, this animal instinct and then like, when you're done, its like, back to calm, relaxed, humane, feeling [*female, straight, white, 19 years old*].

In contrast to this being a satisfying quality, other participants were more ambivalent about the animalistic aspect of their sexuality and saw this leading to hurtful outcomes that were satisfying in the short term, but not in the long term:

A: I'm aware, you know, I am capable of having animalistic impulses, and have a feeling of the need to follow through with that satisfaction, but I know from like, just, I just know, from my life and my experience that that doesn't have the same retribution, which isn't as satisfying in the long run, so...

Q: Tell me what you mean by retribution.

A: Retribution. Is that what I said? I just, it doesn't feel good afterwards. I don't, the emotional pitfall after plain animalistic sex is less – it's more hurtful than it is satisfying in the long run [*female, bisexual, white, 18 years old*].

Several of the LGB male participants were more explicit about the role of aggression in their sex lives. One participant interpreted the link between sex and aggression in his own life as rooted in feeling shamed for his sexual preferences as a child by his family and peers. He associated the anger that built up over those years as now intimately tied to how he expressed himself sexually. When he has sex with other men now, the shared aggression is important and the mutual nature of the dynamic is what helps make sex satisfying:

Definitely the happier sexual experiences that I've had and the more satisfying ones were ones where we were mutually aggressive. But definitely like, especially like, early on if, if it was mutual, that aggression was so hot

and so like, made everything so much better...it was with another person who understood a lot of what was going on, and I could just be who I was at that moment. Afterwards, I felt like, guilty for doing it, or ashamed of the behavior, like, during that like, that's where I was able to, I guess you could call it aggression, like, just be, you know, get some, it wasn't anger, because I wasn't angry, it was always a good experience, it was always like, nice [*male, gay, white, 22 years old*].

It is important to state that while the women and LGBT-identified men in this study were describing qualities of dominance and aggression, they were not inviting dominance into their relationship dynamic more generally – many were emphatic that these were experiences that were sexualized only. These narratives should not be read as indicators that sexual violence is desired. They do, however, indicate the degree to which sexual dyads are negotiating power both within and outside of sexual encounters and the degree to which of violence narratives are normalized within heterosexual relationships (Wood, 2001).

The complex relationships between power, sex, and domination have been addressed by feminist scholars for the past three decades (Bartky, 1990; Phillips, 2000; Snitow, Stansell & Thompson, 1983; Vance, 1984). Given the process of crafting a sexual self amidst the threat of sexual violence and coercion – what Vance (1984) referred to as the tension between sexual danger and sexual pleasure – it is not surprising that elements of domination become sexualized. The eroticization of power expressed in these interviews also lived alongside ambivalence about these

issues, but more importantly an insistence that aspects of domination be contained within the erotic sphere. It is interesting to note how participants described the erotic *use* of power in contrast to the *abuse* of power and did not confuse the two.

Describing components of sexual satisfaction as enabling conditions, rather than desired end-points, is an additional important linguistic and methodological shift. In this study, women described various routes to sexual satisfaction. Elements such as emotional closeness were described not as the ultimate goal of the sexual encounter, but as a condition which enhanced the potential for physical pleasure. Women are sometimes described as “confusing” love and sex (e.g., Gray, 1992). However, in this study, women did not confuse love or other emotional qualities with sexual activity, but instead, described these as necessary conditions for *better* sex.

## DISCUSSION

### *Profiles*

Three dimensions of sexual satisfaction were examined for their response patterns – orgasm frequency, liking sex with a partner, and overall sexual satisfaction. While these three are often assumed to be equivalent indicators, findings revealed that in fact there were eight distinct patterns in how participants responded to these items. Out of the eight response profiles found, five of them contained patterns that were unexpected in terms of how participants responded to the items. The ‘Unpartnered: satisfied’ profile indicated that individuals who are un-

partnered may still report being sexually satisfied. The two 'Contrast' profiles indicated that orgasm frequency and liking sex may be directly opposite of an individual's sexual satisfaction score. The 'Liking' profile indicated that an individual may report liking sex with a partner, but experience orgasms infrequently and also report low satisfaction. Finally, the 'Orgasmless' profile indicated that even with low rates of orgasm, an individual may nevertheless report low levels of liking sex and overall sexual satisfaction.

### *Structures*

In the majority of research, when scores are analyzed, there is an assumption that the anchors are equivalent among participants – for example, that a "0" or a mid-point on a scale means the same thing for individuals answering the scale item. This assumption is what makes comparisons of scores possible. However, finding from this study demonstrated that a "0" is not translated equivalently by participants. In fact, interpretation of the anchors varied widely – and predictably according to gender. In this study, it was unclear whether there were differences in anchoring due to sexual minority status because of the small number of LGBT men and women, but this remains an area for further research.

### *Definitions*

Analyses of the interview data revealed that individuals employed many types of standards by which to judge their sexual satisfaction. While this finding may

sound like common sense on the one hand, it is of concern as these various standards remain outside of the scope of research and measurement (Vangelisti & Daly, 1997). In this study, there were a number of important alternative benchmarks that were described, including ambiguity found in the “who” and “what” is being satisfied. Overall, the ambiguity in the yardsticks being used directs us to consider the varying size and scope of individuals’ standards.

Holland et al. (2004) reported similar findings in their interviews with young women in which they found that young women defined their own sexual satisfaction in terms of a “general contentment with the relationship, in which her sexual satisfaction is limited or regarded as unnecessary” (p. 110). They described this phenomenon as “male-in-the-head,” which they define as that which “regulates the expectations, meanings and practices of both men and women” (p. 156). There is some evidence in the current study that some of the sexual expectations, particularly as observed in the young women, may be evidence of heterosexist assumptions concerning the primacy of male pleasure. However, a model which describes this as a simple internalization of social expectations does not adequately capture or do justice to the complexity of the descriptions participants used when describing the criteria they used to decide on their sexual satisfaction. A model which accounts for entitlement in the sexual domain better describes the psychological processes observed in this study.

### *Entitlement*

When considering the remarks of several of the participants, especially those who state that their partners' satisfaction was more important than their own, one might see a stark similarity between these comments and comments reported in Hite more than thirty years ago (1976). They are also similar to findings more recently found by Holland et al. (2004) where the authors found young women also prioritized the sexual fulfillment of their male partners:

These young women clearly express the point of sexual encounters as being penetrative sex for men's pleasure in which women can find fulfillment primarily in the relationship and in giving men pleasure, and only secondarily in their own bodily desires or in communicating with their partner about shared pleasure (2004, p. 111).

Some may interpret these decisions by those who seem to sexually "sideline" themselves to be "cognitive adjustments" – defined as psychological maneuvers which allow an individual to restore the perception of equity in their relationships (Hatfield, Walster & Berscheid, 1978). Another possible interpretation is that any model of sexual satisfaction where one does *not* sideline him or herself could be considered hyper-individualistic to the extent that others are considered secondary to one's own satisfaction. This reversal of the traditional satisfaction model has the potential to reframe the relational perspective as less inherently feminine and instead, a model of high dyadic functioning. Regardless of how one interprets the intention behind the relational aspects of sexual satisfaction observed in this and

other studies, what is more important is that the variety of these structures, benchmarks, and definitions are not being adequately captured in research designs.

Justice theorists have reflected on similar findings in research on close relationships, marital satisfaction, and labor equity (Crosby, 1982; Major, 1994; Steil 1997). Steil (1994), for example, reviewed numerous studies and found that gender imbalances in terms of women's higher contributions to household labor, infrequently translated into women feeling a sense of grievance. This leaves an important question for sex and justice researchers alike: at what point should the unequal distribution of goods or outcomes be considered an individual's "choice" and when should it be considered a matter of injustice?

#### *Heterosexual men*

These findings have highlighted the definitions of satisfaction from the perspectives of women and LGBT men – this represents only three quarters of the sample – heterosexual men are less represented here. This was because heterosexual men described the dominant model of their own orgasm as equivalent with satisfaction. This meant that they described far fewer alternative benchmarks and did not elaborate "routes" towards satisfaction. Theirs was a more direct and linear relationship between sexual experience, orgasm, and appraisal. The benchmarks and routes described here emerged here because they differed from the dominant model.

This is not to say that heterosexual men do not use many different types of benchmarks or that orgasm is a perfect proxy for their satisfaction. In this study, women and LGBT men had much more elaborated stories and descriptions of what they found satisfying; when asked whether they thought about their sexual satisfaction regularly, women and LGBT men replied consistently and emphatically that they gave this aspect of their life a good deal of thought and often expressed what an important role it played in their lives. Heterosexual men, on the other hand, most often expressed that they did not often think about their satisfaction. They described an unproblematic relationship between pleasure, orgasm, and satisfaction. There were worries about their female partners' experiences of pleasure and descriptions of efforts made to ensure that she "got something out of sex." Others defined satisfaction in the exchange of pleasure and their partner's orgasm was as important as their own. But, as evidenced by the relative silence of their voices in this analysis, they did not often elaborate the types of decision criteria or developmental pathways we saw in the descriptions of women and LGBT men.

What is interesting is how the men in the sample also did not mirror the language that is predominantly used to describe male sexual function and the benchmarks used in that field. This may have been due to their young age, but there is very little else about young men's sexual satisfaction outside of the sexual function literature. So, the difference may not be surprising, but it is nevertheless noteworthy. For example, Mulhall et al. (2008b) measured male sexual satisfaction

in terms of hardness of erections, duration of erections, level of desire, overall sexual activity, and ability to control ejaculation. During the card sorting process and the interview, none of these dimensions was mentioned by male participants as important. This may be due to a number of factors, including the presence of a female interviewer and social norms about talking about erections in a university research setting, but is interesting and noteworthy nonetheless.

### *Limitations*

Women in this sample were less defined by their sexual minority status because there were very few identified lesbians in the sample and the bisexual women were mainly partnered with men at the time of the study. This may have reduced the social stigma related to sexual identity for the women in the study – and it makes the heterosexual women and the bisexual women potentially more alike than they would be in other samples. This is a limitation and future research would benefit by investigating whether the profiles, structures, and definitions found here are relevant or added to when more lesbian-identified women are also considered. As the sample size was small, these findings should be considered exploratory; however, the multiple types of data and in-depth quality of the data provide enormous insight into the research question at hand: what do people mean when they indicate that they are sexually satisfied?

### *Future Directions*

These data and the methods described may be useful to those studying sexuality, relationships, and satisfaction more broadly. Future research should continue to develop more strategies that allow for quantitative and qualitative assessments of the limits and strengths of measurement strategies that are currently available and as new measures are developed. One area where this is already becoming controversial is in the comparison of physiological measures (considered “objective”) and more “subjective” measures of sexual arousal (Meston et al., 2004). As physiological and psychological measures are increasingly becoming paired in lab research, it is even more imperative that diversity for subjective assessments be already included in validated scales and in commonly used items. In terms of sexual satisfaction research, further research is needed on how sexual and relational expectations shape subsequent appraisals. These data were able to demonstrate that there are differences and some of the qualities of these differences, but not enough is known about sexual expectations and how they vary by sexual minority status, age, gender, race, etc.

### *Conclusion*

The data collected over the course of this study allowed for a comparison of three types of data that concerned the same question – how do participants report and define sexual satisfaction? Triangulating amongst these data, it is possible to see trends, the potential for measurement bias, and which groups may be most affected

by these biases. The method of pairing data from mixed methodologies is increasingly considered an essential contribution to research on sensitive topics such as sexuality (Clark et al., 2008).

Techniques such as multi-trait multi-method and confirmatory factor analysis have been considered powerful antidotes to measurement bias (Podsakoff et al., 2003). Methodological interventions such as these offer the researcher the opportunity to statistically control for potential biases, but they don't allow for the opportunity to understand how psychological constructs vary – for how experiences translate into persons. Rather than avoiding these biases, there should be an equal push for analyzing how ideas are interpreted and translated by research participants. The methods described in this study were designed with the aim of measuring bias in measures of sexual satisfaction *and* understanding the nature of this bias.

In sum, this study relied on several types of analyses, ranging from a purely positivist analysis of survey responses, to an increasingly constructivist analysis of the types of information that are embedded within a survey response. These types of analyses are often conducted separately, often with either positivist or anti-positivist aims. The current study takes both positivist and constructivist approaches simultaneously with the overall intention to understand what people mean when they say they are sexually satisfied. These data revealed a number of trends: in sum, participants used significantly different strategies and definitions when appraising

their own sexual satisfaction, with more extreme differences found in the descriptions of heterosexual and sexual minority women and sexual minority men.

# **CHAPTER FOUR: DISCUSSION**

**Reflections on Science, Critical Science, and Critical Sexuality Science**

## Reflections on Science, Critical Science, and Critical Sexuality Science

This dissertation is lodged within two distinct research paradigms: on the one side stands the tradition of empiricist researchers aiming for unmediated access to individuals and their experience (e.g., Cunningham, Preacher & Banaji, 2001). On the other side stand generations of deconstructionist and critical researchers who aim to describe the continual influence of dominant discourses on individuals (e.g., Gergen, 1985). At the intersection of these two, lies the scientific search for construct validity, a space where a researcher aims to empirically investigate and critically analyze simultaneously. To develop research that takes data at face value as it also documents how representational systems mold and shape data is what Lather has referred to as “doubled science” (2007). It is doubled because it is science in the midst of a radical critique of science.

This project aims to land in this doubled science space. I have not aimed to discover an unmediated route into sexual satisfaction, but instead to document how social and sexual inequities create patterns and “differences” – in data and in people. Documenting injustice in the sexual domain (as in any domain) requires insight and documentation into patterns of group differences and patterns of unevenly distributed expectations. A reader of doubled science is asked to consider both types of insight for what they highlight and for what they hide. My job as a producer of doubled science is to aid in the analysis of this “difficult knowledge” (Pitt & Britzman, 2003 cited in Lather, 2007) and to describe the paradox facing feminist

research: to document differences as we simultaneously deconstruct the validity of difference-focused research. In this project I have taken up the question of sexual satisfaction: a field fraught with theoretical, methodological, construct validity issues. In this work, I have queried science as the study of people *and* science as the study of scientific method.

Therefore, in the following Discussion, I discuss five areas of interest which move back and forth between empiricism and reflections on empiricism: first, I discuss the empirical findings from Studies 1 and 2; second, I discuss the limitations and evolution of my earlier ideas in light of these empirical data; third, I reflect on methodological choices I made in Studies 1 and 2; fourth, I discuss the benefit of importing the relative deprivation framework into sexual satisfaction research as a means to reflect on current findings and current theoretical models. Lastly, I conclude with a number of recommendations for researchers, informed by the empirical and theoretical work of this dissertation.

## REFLECTING ON STUDIES 1 & 2

### *Group differences*

Findings from Study 1 showed that women reported lower rates of sexual satisfaction than men. When sexual minority status was considered, this finding was reversed: sexual minority women reported higher rates of satisfaction than sexual minority men. When the gender difference finding is viewed through the lens of Study 2, this difference appears to become even more dramatic. When evaluating

the potential range of a sexual satisfaction scale, women in general imagined a more negatively valenced low end, while men in general imagined a more positively valenced high end. This may mean that women avoid the low end of the scale to a greater extent than men. Extending this finding of scaling discrepancy from Study 2 to the findings of lower satisfaction in women in Study 1, it may be that this group's lower sexual satisfaction might actually be more extreme if we were to take this gendered scaling difference into account. For women, a rating of "low satisfaction" may be much lower than the same rating for men.

Study 2's finding that individuals use a variety of organizing frameworks when considering a sexual satisfaction scale has further implications for the scale used in Study 1. In the first study, participants rated their satisfaction on a scale that ranged from *disliked very much* to *liked very much*. Findings from Study 2 indicate that these item response options may have been interpreted differently by participants. Some may have interpreted the stem in terms of the degree to which they liked the sex, how much of the time they liked the sex, how much they liked their partner overall, or how often they experienced an orgasm or safety/violence in a sexual relationship. The impact of these potential interpretations remains unknown in Study 1.

Both Study 1 and 2 considered the conditions under which sexual activities and sexual appraisals took place. Study 1's findings indicate that conditions of self-esteem and relational reciprocity are influential for women and their sexual satisfaction; this same influence of conditions was not found to affect men's or

sexual minorities' satisfaction to the same extent. However, the dramatically lower self-esteem rates of sexual minority women found in Study 1 give pause when reflecting on their relatively higher rates of reported sexual satisfaction. While the sample in Study 1 did not allow for further investigation into this mechanism, this finding warrants further study.

In Study 2, this discussion of "conditions" was expanded in much greater detail. And like Study 1, findings indicated that the affect, cognitions, and behaviors surrounding sexual encounters influenced how individuals evaluated their sexual satisfaction. In particular, Study 2 found gender differences in the importance of emotional closeness and perceived safety with a sexual partner, with more women reporting these as necessary conditions for their sexual satisfaction. There was evidence that sexual minority men and women of different sexual identities imagined their sexual partners' level of satisfaction as a benchmark for their own – highlighting that this process may be less about the gender of the participant and more about the gender of the partner. In other words, heterosexual men may be the only group who did not measure their own satisfaction in a metric that incorporated their partner's pleasure. This is not to imply that their partner's pleasure was not important to heterosexual men; however, men did not generally evaluate their own satisfaction via that of their female partner.

### *The Relationship of Orgasm to Sexual Satisfaction*

Both Study 1 and 2 investigated group differences in terms of orgasm rates, as well as the conceptual overlap between orgasm and sexual satisfaction. In terms of group differences, when orgasm rates were considered for heterosexuals in Study 1, women reported significantly fewer orgasms than men. This is not a surprising finding given the well-documented orgasm gap (a gap not in desire for orgasm, but in attainment) between men and women (Lloyd, 2005). Study 2 highlighted the fact that while orgasm was certainly relevant to sexual satisfaction appraisals, its relationship was inconsistent across individuals.

In terms of their conceptual overlap, the data from both studies indicate a few possible interpretations. In Study 1, for both men and women, orgasm frequency and sexual satisfaction were only moderately correlated, meaning that individuals did not consistently respond to these items in the same way. In Study 2, it was generally heterosexual women who responded similarly across the three items (orgasm, liking sex, and satisfaction) – as seen in the ‘Aligned’ profile – while the other demographic groups did not consistently respond across the three items. Additionally, in Study 2, there was evidence that for some women, their own orgasm was not at all related to their sexual satisfaction. These findings indicate that the two concepts may be related for some groups or individuals and not for others, but that continued use of orgasm as a proxy for satisfaction is inadequate and misses important differences, particularly in terms of variations within women.

### *Measurement Issues*

The “ceiling effect” (very low variability and extreme negative skew) found in the measure of sexual satisfaction in Study 1 should be of interest to those who study sexual evaluations, as well as those interested in measurement of sensitive issues in other fields. The items in this study asked about the degree to which a participant liked specific sexual activities with their most recent sexual partner. The wording of this item (e.g., “How much do/did you like having vaginal intercourse with <partner>?”) may have been interpreted by participants in such a way that a low degree of liking was equated with having participated in coerced or forced sex (i.e., if I didn’t like it, why would I have sex with this person?). This conflation of *not liking sex* with *participating in unwanted sex* is an important measurement issue. These, and other similarly worded items, do not adequately capture the observed variation of sexual quality; in other words, low satisfaction is not being adequately measured. Researchers who study satisfaction and related topics need to develop scales and items that are able to systematically represent variation in sexual satisfaction among individuals. Without adequate means to observe this variation, we risk interpreting sexual satisfaction data with an implicitly truncated scale and conflating high scores with high satisfaction.

### *The “Partner Effect”*

Findings from Study 1 and 2 highlighted how those reporting on sex with men differed from those reporting on sex with women. Across both studies, this

“partner effect” demonstrated that the gender of the sexual partner may be more important than the gender of the person. In both studies, individuals reporting on sex with male partners, reported lower sexual satisfaction and used a set of relational strategies that were not present in the group reporting on sex with female partners. This finding reveals that a significant move away from theorizing demographically-based discrimination at the level of the person (i.e., do women experience less satisfaction?) may be necessary in order to better understand the nature of discrimination in sexual relationships. It may be more important to theorize the influence of discrimination at the level of the dyad – and focus on the gender interaction (person x partner) rather than the person as characterized by his or her demographic groups.

There are precedents for this finding, sometimes referred to as the “power of the situation” (Lewin, 1936; Rusbult & Van Lange, 2003). For example, Aries’ (1976) research on group processes demonstrated that the genders of group members were more influential on a person’s behavior than their own gender. In other words, that there was a person x group interaction that was more important than person and their gender alone. More recently, Conley (forthcoming) found that while classic research paradigms have consistently found a large “sexual desire gap” between men and women when approached by strangers for sex (e.g., Clark & Hatfield, 1989), men and women in these scenarios were considering very different potential sex partners. As the Conley argues, “scholarly examinations of the Clark and Hatfield paradigm have assumed that women rejecting casual sex offers from *men* is

functionally equivalent to men rejecting sexual offers from *women*” (p. 12, emphasis in original). Using a revised paradigm that de-coupled the gender of the person from the gender of the potential sex partner, the authors found that the “desire gap” disappeared when participants were considering sex with “familiar or safer” potential sexual partners. In other words, the gender effect (women desire sex less than men), which has been so often repeated that many have it assumed it to be common sense, may be more a function of the partner than a function of the group being studied.

Researchers have too often limited the scope of interpretations to the demographic group of interest and attributed the findings to that group alone. These prior research findings, in addition to the empirical work presented in Studies 1 and 2, should encourage researchers to enlarge our scope to consider various aspects of the environment in which sexual activities (as well as desires, appraisals, function, etc.) are occurring. If our observations are too narrowly focused on the person, even when we are guided by the intention to document discriminatory environments, the “partner effect” can serve to remind us that the demographic characteristics of the person may in fact be secondary to the characteristics of the dyad or the group. It is essential to invent new language for power analyses that accounts for both demographic *and* relational power inequities – inequities that can occur on their own and in interaction with one another.

### *A Person x Environment Interactional Perspective*

Across the findings in Studies 1 and 2, there was a consistent theme which I had not anticipated. While I had theorized that an individual's sexual satisfaction appraisals were influenced by a sequential set of social, psychological, and relational factors (as depicted in Figure 1), the results of the empirical studies tell a slightly different story.

Lewin's field theory (1943) encouraged researchers to consider the psychological field, or life space, in which the person and the environment are viewed as one constellation of interdependent factors (see also Deutsch, 1982). Reflecting on the results of Studies 1 and 2, I return to Lewin's insight and his image of the psychological field. While I had theorized four levels of social and psychological antecedents to the sexual satisfaction appraisal (see Figure 1), I had under-theorized the extent to which the person and the environment interact each of these levels. In other words, what I had originally theorized as person- and social-level precursors to satisfaction, were actually always interacting, never just psychological and never just social. For example, while orgasms are generally defined as person-level sexual outcomes, Study 2 demonstrated that this definition is too limited. While satisfaction appraisals are generally considered to be the result of an intra-individual reflection, both Studies 1 and 2 demonstrated that inter-personal dynamics can be highly influential, sometimes to the exclusion of the individual him or herself. These are just two examples of how the data suggest that sex – even when enacted alone – is profoundly social.

Research at these intimate levels has something important to teach those of us who are interested in social psychological processes. While “social” is often interpreted in macro-level forms (i.e., inter-group processes), in sex research, the social tapers to the biographic – challenging the notions we have about what counts as social and what counts as person. In fact, it becomes difficult to see where the “social” stops and the “person” starts. Orbuch and Harvey (1991) made a similar point when they argued that sexual relationships are just another social psychological process by which to study how “individuals are influenced by the real, imagined, or implied presence of others” (p. 9, citing Allport, 1968). Social psychologists can learn something from this extreme narrowness of the social – it requires that we develop definitions that better live up to Lewin’s interactionist model and account for the continuum that becomes more evident when we see the categories blur into one another (Rusbult & Van Lange, 2003). This observed fusion between the intimate and the social is not new. In fact, it is one of the primary premises of feminist research (Holland et al., 2004). I comment on it here because it is an example of how feminist and social psychological theories mutually inform research design, methods, and findings.

### *Reflecting on Methodological Choices*

My aim in this project was to assess the measurement of sexual satisfaction. Both Studies 1 and 2 were designed in order to observe how satisfaction appraisals were consistently influenced by social and psychological contexts. While Study 1 was

a secondary analysis (and therefore limited to the available data), Study 2 was designed in order to test some of the assumptions I was making in Study 1 and to develop research methods with the aim of investigating construct validity writ large. With this aim in mind, reflections on the methods I chose are warranted. Specifically, four methodological decisions I made during the design phase of the Study 2 may be of use to researchers working in this and other related fields.

First, the seating arrangement during the interview was side by side and not face to face as is the case in most interview research settings. In her critique of the semi-structured interview, Driver (2007) questioned the insistence on individual-focused data collection methods and suggested that this framework may serve to inhibit participants rather than encourage them to discuss intimate subjects with their (feminist) interviewers. Acknowledging this limitation and critique, I broke the traditional frame of two people seated across a table from one another, locked in a quasi-intimate embrace discussing intimate matters. Instead, I sat to the side of participants. This seating arrangement, while a seemingly minor change on the surface, established a dynamic in which participants could opt in or out of the intimate space by simply facing forward instead of having to decide to maintain or to break eye contact with me. One participant commented during the interview, when talking about something that he described as embarrassing and particularly revealing about himself, "I can't look you in the eye and tell you that. It's really awkward [laughter]." He was able to turn away and face forward while talking about himself. I, too, could opt in or out of the research dynamic, which again, while

seemingly minor, is important to consider when studying the intimate. Female researchers in the field have often discussed how their own bodies become implicated and sexualized in research settings (Fields et al., 2008; Zurbriggen, 2002). Having the power to move towards and away from the participant meant that I was not positioned as unconditionally available, but as an individual with boundaries of my own.

Second, one of the most useful questions during the interview was when the participant was asked to reflect on what their friends or peers thought about sex, satisfaction, and orgasm. This move to a reference group outside of the room introduced broader discourses into the conversation that allowed participants to talk about what might have been considered socially undesirable when talking about sex with a female interviewer. The opinions of others could more freely enter the conversation and be discussed for their merits and limitations without having to be defended as vigorously as one's own. This conversational maneuver allowed participants to reflect on others' behaviors and opinions so that undesirable, controversial, or "extreme" answers didn't rest on their shoulders at all, or could at least be shared with friends "out there" in the world. Much like the discussion of focus groups as a research method which allows sexual discourses to "float" rather than rest on individual bodies (McClelland & Fine, 2008), relying on outside voices that aren't in the room can provide a flexible frame for research participants to exist within and still communicate about prominent sexual discourses and their proximity and/or distance from these discourses.

Third, each interview ended with the question: “Do you have any questions for me?” This question signaled the end of my questions and the potential for role switching. I often observed that this role switch provided a space for reflection and curiosity that had not been available to participants during the interview. Taking a page from Lewin’s attitude (as described in Deutsch, 1982) towards participants’ “verbal reports,” this period of the interview invited participants to describe what the topic of sexual satisfaction meant to them. Many participants newly empowered with the right to poke through the established “third wall” of research, questioned word choices, design decisions, and reflected back how well they thought the study captured aspects of them, their ideas, and their sexuality. These periods of reflection were not any more “true” or “unmediated” than the other parts of the interview, but they invited participants to be curious along with me about the topic of sexual satisfaction.

An important part of this methodological decision was that I also answered whatever questions they asked. Most questions concerned the overall intention of the study, but others posed much more difficult and revealing questions that ranged from “What does it feel like to be in love?” and “Do you think bisexuality is wrong like my mother does?” I did not dodge these more difficult questions, but found myself in the midst of wanting to mirror the honesty I saw in participants and wanting to respect the fact that these questions were firmly embedded in family structures, cultural roles, and the inter-subjective/transferential nature of the interview that was beyond the scope of my expertise. With these factors in mind, I

answered questions as best I could and also invited participants to tell me what they thought about the issue they had raised. I've include this level of methodological detail, as well as some of the unintended outcomes, in order to describe the complicated nature of studying people, studying sex, and studying young adults.

Lastly, risk and safety are catch words that are used consistently in sex research. In this literature, risk is theorized almost exclusively in terms of HIV, STD, and pregnancy risks. In Study 2, I made two important decisions in order to invite a broader definition of sexuality, risk, and satisfaction: one, I did not ask participants to describe or report on specific sexual behaviors (i.e., "what did you do?") and two, I did not ask them about risk prevention (e.g., "did you wear a condom?"). Side-stepping these commonly asked questions – and inviting reflections about qualities that are enjoyed and aspects of their evaluation – provided unusual and unexpected spaces for these young adults to reflect on their sexual lives and the development of the criteria they used to judge its quality. Importantly, it allowed participants to describe their sexual lives as more than simply a series of risky (or about- to-be-at-risk) sexual behaviors. The combination of these factors and the inclusion of what Rubin (1984) labeled as behaviors falling low on the sexual hierarchy (i.e., statements concerning power and domination in sex) that were phrased in the positive and not in the more socially acceptable negative phrasing, allowed participants to imagine that there would be less judgment around sexual behaviors, likes, and dislikes than in research that is interested in evaluating risk and condom use.

While these methodological reflections are not traditionally given this much consideration, these data are important when considering the development of research methods that can further a critical sexuality science.

## SEX AS A SOCIAL JUSTICE ISSUE

### *The Exchange Model of Sexual Satisfaction*

One of the popular models that have used to evaluate sexual satisfaction has been the social exchange model, which developed from earlier equity theory research (Thibaut & Kelley, 1959) and relationship research (Hatfield, Walster & Berscheid, 1978; Sabatelli & Pearce, 1986). Equity researchers in these fields argued that individuals perceive situations to be fair when their rewards are seen as proportional to their inputs. Hatfield, Rapson and Aumer-Ryan (2008) described this as follows: “people feel most comfortable when they are getting exactly what they deserve from their relationships – no more and certainly no less” (p. 413). Like the relationship model, the sexual model defines satisfaction as a balanced equation between sexual rewards, costs, comparison levels, imagined alternatives, and equality within the sexual area of the relationship (Byers, Demmons & Lawrence, 1998; Byers & MacNeil, 2006; Byers & Wang, 2004; Lawrence & Byers, 1995; Renaud, Byers & Pan, 1997).

The social exchange model has inspired a great deal of research and consistently found that perceptions of equity are integral to individuals’ sexual satisfaction evaluations. In their handbook chapter, Byers and Wang reflect on the

overall findings in the field concerning the role of equity: “It appears that the precise rules governing the exchanges (i.e., equity or equality) are relatively unimportant as long as partners perceive their exchanges to be balanced” (2004, p. 207). This point – that the perception of balance is primary – highlights the role of expectation within the sexual domain. Indeed, Lawrence and Byers (1992) found that sexual rewards were compared to a “general notion of how rewarding a sexual relationship should be” when evaluating their levels of rewards. Another influential researcher has explained: “Sexual satisfaction refers to the degree to which a person’s sexual activity meets his or her expectations” (DeLamater, 1991, p. 62).

However, the general notion of how rewarding sexual relationships “should be” is determined within highly inequitable social circumstances: the influences of gender and heterosexism, and sexual stigma are all but ignored in these models, as precursors and antecedents to sexual expectations. The limitation of the exchange model has been that individuals’ perceptions are theorized only at the person-level and lacks the ability to also understand how rewards, punishments/violence, and contexts are differently (and perhaps) unequally assessed. Feminist researchers have long argued that men and women use very different and unequal guidelines by which to judge what count as rewards and costs – especially within a heterosexual relationship context (Dion & Dion, 2001; Holland et al., 2004; Steil, 1997; Vangelisti & Daly, 1997).

*Sexual Satisfaction Inequity as “Natural”*

One of the unintended outcomes of research using social exchange models has been that group differences in sexual outcomes are interpreted as natural. This is most easily seen in naturalized interpretations of infrequent female orgasm (Lloyd, 2005) and the rise of evolutionary theories of human sexuality, such as Sexual Strategies Theory (Buss, 1994, 1998; Buss & Schmitt, 1993). This research paradigm interprets manifest behavior and affect as natural outcomes of mate selection; for example, the Clark and Hatfield (1989) study mentioned earlier which involved confederates asking participants whether they would have sex with them is often referred to as evidence of men's greater desire for sexual variety (Buss, 1998). More recently and more prominently, this trend was observed in a front page *New York Times* Magazine article titled "What do Women Want?" where one of the researchers interviewed weighed in on female sexual satisfaction with the following assessment: "being desired is the orgasm for women" (Bergner, 2009). *Research paradigms that look only at the manifest content of men and women's physiological and behavioral responses and ignore the social and historical production of those responses will continue to reinforce sexual inequality as a "natural" outcome.*

The perception of sexual inequity as naturally unequal, hetero-normative, and unsatisfying for some, while always satisfying for others, is translated into popular perceptions of what should be expected within sexual encounters. For example, Holland et al. (2004) include an interview with a young woman who describes typical heterosexual sex: "I mean they've [men] got to be very lucky to give you an orgasm, 'cos they've got to hot something quite a few times" (p. 111).

This and similar images of women's sexuality as inherently "complex" enforces and encourages a systematic ignorance on the part of men and permissiveness on the part of women, ultimately with the outcome that women's sexual satisfaction is often considered "too difficult" to achieve (Fishman, 2004; Tiefer, 2001). These discourses take on this difficulty as not only natural, but meaningful –and even beneficial – to women as they seek a long term partner; women's sexual "complexity" is reframed as a set of tests for male partners to pass in order to prove their effectiveness as a mate and their loyalty to potential off-spring.

Given this backdrop, we return to sexual satisfaction and its development. In 1994, Laumann and his colleagues reported on what is still considered to be one of the largest national studies of sexual relationships. Their definition of sexual satisfaction captures the level of ambivalence researchers have felt in defining what individuals should expect in terms of outcomes. Fairness is invoked, but the distribution of satisfaction "cannot be measured" according to the investigators:

[Sexual satisfaction] can be seen as a good, produced in a sexual dyad, with a resulting distribution of variable equity. Unlike some goods, however, no currency exists by which the fairness of the distribution of sexual satisfaction can be measured. Despite the uncertainty and incommensurability, however, individuals nevertheless judge the equity of a sexual relationship partly on the basis of perceptions of the relative distribution of sexual satisfaction. These subjective assessments, in turn, inform the ongoing process of sexual negotiation and exchange (Laumann et al., 1994, p. 111-112).

Justice frameworks, such as the one invoked by Laumann and his colleagues, have been applied to intimate relationships for more than thirty years (e.g., Lerner & Lerner, 1981). And while justice researchers have regularly studied how partners in intimate relationships perceive conditions of fairness, it has been the work of feminist psychologists which has looked behind considerations of fairness and assessed exactly who defines what is “fair” and how durable disparities are normalized and reframed as natural (Opatow, 1990).

### *Relative Deprivation*

“When do those with less feel that they have been unjustly treated and when do they feel that they are simply inadequate? What, in other words, regulates feelings of self-blame?” (Carillo et al., forthcoming, p. 28). In order for a group to recognize that there is discrepant quality, they must first recognize that the differences are not naturally occurring. This is an early step in recognizing relative deprivation.

A relative deprivation framework offers a way to theorize the limits of sexual satisfaction models, much as it has guided understanding the limits of satisfaction in other domains (Corning, 2000; Crosby 1976, 1982, 1984; Steil, 1997, 2001; Steil & Hoffman, 2006). While a number of researchers developed models of relative deprivation that described various factors as necessary to feeling deprived (Davis, 1959; Hopper & Weyman, 1975; Morrison, 1971; Runciman, 1966; Stouffer et al., 1949; Walker & Smith, 2001), Crosby’s model (1976, 1982) explicitly engaged

considerations of entitlement and deservingness as the necessary preconditions to feeling deprived and made the link from deprivation to gender explicit. In a more recent articulation of relative deprivation, Crosby and her colleagues explain the potential and power of this theory to interrupt normalized disparities: “if people blame themselves for their own failures, then they are unlikely to feel deprived, angry, or dissatisfied (except with themselves)” (Carillo et al., forthcoming, p. 14).

In her early research on employment satisfaction, Crosby found what she called the paradox of the “contented female worker” (1982). Employed women reported being as satisfied with their pay as their more highly paid male colleagues. Women reported feeling more positively about all aspects of their jobs, including their lower pay. This finding reflected a trend found in women’s reported levels of satisfaction in the workplace (Deaux, 1979; Desmarais & Curtis, 1997; Ebeling, King & Rogers, 1977; Major, McFarlin, & Gagnon, 1984), despite lower wages and documented sexual discrimination. Crosby demonstrated how gender norms restricted female workers’ sense of being deprived and led to unequal expectations for satisfaction within the workplace (1982). With these data, Crosby fashioned a model of relative deprivation that highlighted the interlocking influence of both wanting something and feeling entitled to it. Without these as preconditions, an individual is not likely to experience dissatisfaction and is likely to report feeling satisfied. Echoing Campbell et al.’s (1976) findings described in the Chapter One, Crosby used her findings to re-theorize the construct of satisfaction – using a model of relative deprivation as her organizing framework.

Moving this theoretical model into the intimate domain, Steil has similarly argued that gender norms play an important role in determining the extent to which individuals feel entitled to satisfaction within their intimate relationships (1997, 2001). As Steil noted in 1994, social exchange models are insufficient because they fail to account for gender differences in terms of entitlement and deservingness. She defined entitlement as “a set of attitudes about what a person feels he or she has a right to and what he or she can expect from others” (Steil et al., 2001, p. 403). Kahn (2001) similarly argued that entitlement to satisfaction was a necessary precondition for women and that “high entitlement in the sexual arena need not imply selfishness or a lack of traditionally positive female characteristics, but rather a heightened awareness of one’s own needs and desires and the affect and motivation to try and satisfy them” (p. 7).

Research models such as these made two important contributions: they applied social psychological models to social environments involving two people and argued that relative deprivation, which until then had been a macro-level argument, still applied on the much smaller meso-level of the intimate relationship. This recognition of the social construction of “fair” and “just” is an essential contribution not only to sexuality research, but to justice research more generally. It is not enough to ask whether outcomes are perceived to be distributed equally; we must also inquire as to the nature of the benchmarks being used, the history of the groups and individuals being assessed, and evaluate how each is deciding what is “good enough.”

*An Intimate Justice Framework for Sexual Satisfaction*

With these empirical findings and theoretical models already existing in the literature, it is imperative that a similar critical interpretation of satisfaction in the sexual domain be developed. As others have already aptly demonstrated – and now with the empirical findings from Study 2 – sexual satisfaction scores may stand in for a range of other experiences, including feelings of deservingness, entitlement, and expectation within that domain. This requires that a sexual satisfaction be considered as a social justice issue.

An intimate justice framework for sexual satisfaction is two-pronged (and “doubled”): it encourages us to look for group differences and it insists that we also examine how individuals define what is “good enough.” When a person decides that something is good enough, he or she is establishing demarcations for themselves and for others. These demarcations indicate where demands will be made: “below this threshold is not enough and I will demand more, above this threshold is enough.” If these thresholds are dramatically different, our demands are also dramatically uneven and this should be documented, analyzed, and not mistaken for being simply “diverse,” or worse yet, “natural.” In the debates over gender differences and sexuality, we must not lose sight that diversity is one thing, but demanding less is another. Sexual satisfaction is, therefore, an especially trenchant topic for consideration and an intimate justice framework required: “When failed by

societal norms, how do partners decide what they have a right to expect from one another?" (Desmarais & Lerner, 1994, p. 43).

#### LOOKING AHEAD:

##### A BLUEPRINT FOR BUILDING THE FIELD OF 'CRITICAL SEXUALITY SCIENCE'

Satisfaction as a general psychological construct relies on assumed, but unmeasured, similarity amongst or within groups. Within psychology, the question remains how to effectively study human behavior, taking personal experiences seriously, while still accounting for the continuous role of the social. How, then, can we combine the power of research that reveals group differences and still account for the social construction of the ideas being studied?

This dissertation raises two important questions for researchers to consider: Can survey items adequately represent the diversity of sexual experience and if so, how should they be developed? These questions emerge from the findings presented in Studies 1 and 2 and from feminist standpoint theory's concerns with social and political inequalities and the effects of these multiple and unequal standpoints on knowledge production (Haraway, 1988; Hartsock, 1983; Harding, 1986; Hill Collins, 2000). The two studies presented in this dissertation demonstrate how sexual satisfaction is moderated to varying degrees by contextual factors and defined differently and predictably depending on gender and sexual minority status. Both studies provide empirical data that illustrate standpoint theory's concerns with position and inequality; they also extend standpoint theory's concerns by linking

these findings with the generative goal of item and scale development. The aim of the two studies is not merely critique, but science.

Returning to the “doubled science” metaphor that opened this chapter, I return to the middle ground between empirical data and a position of radical not-knowing. In a preliminary attempt to bridge the two, I have proposed a set of methods that capture variation within item responses using different research designs and analyses. Studies 1 and 2 demonstrate what quantitative and qualitative investigations can look like when the focus is item and sub-sample variability, as well as construct validity. These methods are, of course, limited in their scope and their capacity to tap the extensive dimensions and variability within sexual satisfaction appraisals. They nevertheless provide methodological procedures for studying item responses and provide researchers with data and tools to create better items that attend systematically to issues of position and inequality. What are the implications for psychological measurement when shifting standpoint theory from a post-hoc *analysis* perspective to include a research *design* perspective? This is the aim of critical science and critical sexuality science.

Critical sexuality science is concerned with developing research questions, designs, and analyses that mirror the “doubled” quality of pursuing psychological research, recognizing the power of standardized data – and – never confusing standardized data with equivalent psychological experiences. In order to accomplish this second point, it is crucial to develop systematic data collection methods that allow for doubled findings to emerge: allowing researchers to collect systematic,

generalizable survey data, as well as account for potential processes guiding participants' responses. This could be in terms of scale development similar to the function of social desirability scales (i.e., Marlowe-Crown scale) or it could include bringing construct validity back to the forefront of psychological science (Machado & Silva, 2007).

One popular method for considering diverse standpoints has been to test items and scales with demographically diverse participants to test if these group differences emerge in items response patterns and validity across populations in terms of measurement equivalence (Cronbach et al., 1972). While this effort to include diverse participants is a crucial step forward, it is not enough. As Studies 1 and 2 demonstrate, as well as the scholarship on entitlement and relative deprivation, item responses may appear to be consistent, but these responses may be artificially consistent and hiding unequal levels of entitlement: "a set of attitudes about what a person feels he or she has a right to and what he or she can expect from others" (Steil, 2001, p. 403). In other words, testing scales and items with diverse samples and assuming that this diversity will "show up" in responses is not enough.

A crucial step is to bring elements of suspicion (Josselson, 2004) into all methods – both quantitative and qualitative – as a means to import critical justice concerns into research designs and interpretations. Suspicion has been a guiding principle throughout this dissertation as a means to look beyond the face value of data. Josselson's articulation of a hermeneutic of suspicion (2004) relied on

Ricoeur's earlier use of the term (1970) which had relied on the earlier work of Marx, Nietzsche, and Freud. Josselson has defined a hermeneutic of suspicion as animated by a "skepticism of the given" (p. 3). It is the use of interpretive efforts to seek out what is latent and hidden rather than relying solely on manifest content. Suspicion, in this framework, is not a route to truth, but, as Josselson explains, it creates "new relations that may enlarge conceptualization or theory" (2004, p. 15).

Building from this scholarship which has been carefully attuned to inequality, position, and suspicion, as well as the empirical research described in Studies 1 and 2, I propose four guidelines in an effort to create a blueprint for researchers studying sexual satisfaction. These guidelines encourage researchers to ask questions and use methods that address social, relational, and political inequities while studying the intimate.

*(1) Measure entitlement to sexual pleasure alongside sexual satisfaction.*

A number of researchers have developed methods for linking individuals' expectations with subsequent ratings. For example, Sabatelli and Pearce (1986) studied relational expectations and the covariates of expectation levels as a way to evaluate the dimensional qualities of marital satisfaction. Raphael and his colleagues (1996) developed a quality of life measure for adolescents that blended how 'important' a domain was to the individual with how 'satisfied' they were in this domain. This model holds enormous potential for measuring how these two dimensions are related; as the investigators explain, "Importance scores serve as a

weight for converting satisfaction scores into quality of life (QoL) scores” (Raphael, 1996, p. 368). For example, in this research design, a low satisfaction score weighted by a high importance score, results in a low QoL score.

Conceptually, while importance is not equivalent to entitlement, this model offers a first step in measuring satisfaction as relative to an integral dimension concerning an individual’s expectations within that domain. However, even if researcher were to include measures of entitlement or importance in their studies of sexual satisfaction, this would only be a first step. Findings would still need to be analyzed alongside dominant discourses of what ‘important’ means to specific groups, for example, with considerations of the costs of imagining sexual satisfaction as important for some, the potential burdens of sexual identification for others, etc. With these limitations in mind and the complexity that would be required, I nevertheless recommend sexual satisfaction be measured alongside additional dimensions, such as entitlement, importance, or “level of aspiration” (Lewin et al., 1944), which would offer investigators necessary insights into the otherwise flat sexual satisfaction scores.

*(2) Beware of floor and ceiling effects.*

As discussed above, the measure of sexual satisfaction used in Study 1 suffered from extremely limited variability. Participants responding to items concerning how much they “liked” sex with their partner may have felt that responses near or on the low end of the scale implied nonconsensual sex, or an

otherwise negative sexual event rather than low levels of liking. Items concerning levels of consent, wanted-ness, and coercion in sexual relationships (Gavey, 2005; Peterson & Muehlenhard, 2007) are equally necessary and important, but these different constructs should not be implicitly measured in unison. This potential conflation serves as an example of the kind of “implicit theory” that researchers concerned with validity warn against (Podsakoff et al., 2003). Analysis of survey items relies on variability around the mean; researchers in the field of sexual satisfaction must develop items that invite participants to imagine the full range of the scale as possible when evaluating their satisfaction. This means that both floor and ceiling effects must be considered. Researchers must anticipate whether the low and high ends of a scale are equally available – and – consider possible what types of meanings each might have for differently positioned participants.

*(3) Attend to construct validity issues.*

Psychology has a long history of examining its operationalizations and the limitations of any measurement strategy (Cronbach & Meehl, 1955). Construct validity is an assessment of how well you have translated your ideas or theories into actual measures (Trochim, 2006). This history requires us to be attentive to the relationships between our constructs and our operationalizations. In the field of sexual satisfaction and function, the move to physiological indicators has revealed problematic translations from theory to method. For example, vaginal plsyomography (which measures blood flow to the vaginal area) is used as a measure of arousal in

women (Levin & Wylie, 2008; Wouda et al., 1998). In men, the presence of an erection is equated with sexual desire and satisfaction (NIH, 1993; Rosen et al., 1997). However, there is reason to believe that blood flow to the genital region is not the same as arousal or desire – these may be indicators of these states, but are not equivalent (Basson, 2007; Ferenidou et al., 2008; Wood, Koch & Mansfield, 2006). Definitional issues, operationalizations, and examination of proxies used in research settings are essential (Sanders & Reinisch, 1999).

*(4) Remember that sexuality and sexual satisfaction do not require partnered sex.*

While many have assumed that sexuality is a necessarily dyadic process, we know from research in developmental psychology and public health that individuals are born with and develop sexuality regardless of whether they ever experience partnered sex (Pluhar, 2007; Tolman & Szalacha, 1999). Similarly, researchers have long assumed that sexual satisfaction requires a partner. Data from Study 2 demonstrate that a partner is not necessary for high satisfaction – as evidenced by the ‘Unpartnered: satisfied’ profile. Research is needed that allows for satisfaction appraisals across a wide range of sexual expressions including when alone, with a regular partner, or across multiple partners (Bockting & Coleman, 2003; Dahs, 2007).

## CONCLUSION

Twenty five years ago, Webster wrote, “While the rejection of deprivation in other areas of women’s lives has been the agenda of the feminist movement, *sexual*

*deprivation* has not been theorized to any great degree” (Webster, 1984, p. 393, emphasis added). In the intervening decades, many feminist scholars have contributed important theories concerning elements of sexual deprivation, particularly those elements related to the development of female adolescents’ sexual desire (Fine, 1988; Tolman 1994, 2001a, 2005; Ussher, 2005). However, a comprehensive theory of sexual deprivation has itself remained missing. Instead, we have seen sexual deprivation become framed by medical discourses of sexual function/dysfunction – theorized as evidence of physiological failure, and as decidedly unrelated to feminist concerns related to inequity, violence, and deprivation.

In an effort to return to Webster’s call for a theory of sexual deprivation, this dissertation has developed an analysis of sexual satisfaction. Satisfaction and deprivation exist as conjoined twins – each always casting a shadow over the other. Sexual satisfaction must account for qualities of sexual deprivation, just as any theory of deprivation must account for how people evaluate what they find satisfying. In this dissertation, I initially theorized a more linear relationship between these two, with deprivation as an antecedent to satisfaction, but the empirical findings in Studies 1 and 2 encouraged me to think about their relationship as far more dynamic. Sexual deprivation must continue to be theorized *in relationship to* sexual satisfaction judgments. It is up to us who study satisfaction (across all domains) to account for various forms of deprivation that precede satisfaction appraisals, as well as those that are enmeshed in these appraisals.

The findings presented here are relevant to psychologists studying satisfaction outside of the sexual domain as well. Any study of satisfaction must account for what people are working against or the limited opportunities some people are choosing between when deciding whether something is “good enough” or “satisfying.” We have not yet done justice to theorizing the diverse inequalities of alternatives that people face when they decide whether they are satisfied with what they have. Viewing satisfaction appraisals through the lenses of justice research (Opatow, 1990), relative deprivation theory (Crosby, 1976), and entitlement (Steil 1994) enables the satisfaction researcher to not only theorize these factors, but to also empirically study what is captured and what is missing from a satisfaction judgment.

How individuals make decisions about what is “good enough” is an essential psychological process that has implications in intimate, social, and political spheres. Sexual satisfaction decisions carry with them important information about how much individuals feel they deserve; intimate and sexual appraisals are affected by *and eventually affect* all appraisals of what a person believes to be “good enough.” An intimate justice framework builds upon previous research on relative deprivation and entitlement and adds to this literature by arguing for the development of research methods that are able to systematically observe, using standardized measurement tools, the unequal distribution of power and expectations for sexual pleasure within intimate encounters and how these inequities are translated into

research findings. An intimate justice framework asks us to consider empirical science and the critiques of empirical science simultaneously.

For women and sexual minorities, evaluations of what is “good enough” in their sexual encounters are especially treacherous. For these groups, the very act of being sexual is too often assumed to be dangerous, dirty, contagious, and illegal. For women of all sexual identities and for sexual minority men, sexual satisfaction represents the culmination of sexual rights – it is the insistence not only enacting the sexual, but insistence on enjoying the sexual. A critical sexuality science recognizes that this journey from sexual behavior to sexual satisfaction is not an easy one. We must not forget this journey when asking our participants: “Are you satisfied?”

Table 1. Selected sample and Wave III sample characteristics [Study 1].

|  | Selected Sample<br>(N=8,595)<br>(%) | Wave III Sample<br>(N=14,322)<br>(%) | Tests of group differences |
|--|-------------------------------------|--------------------------------------|----------------------------|
| Gender   |                                     |                                      |                            |
| Men  | 4087<br>(47.6)                      | 6759<br>(47.2)                       | $\chi^2=0.28, p=0.60$      |
| Women  | 4508<br>(52.4)                      | 7563<br>(52.8)                       |                            |
| Sexual Minority Status                         |                                     |                                      |                            |
| Heterosexual                                   | 8204<br>(96.0)                      | 13847<br>(96.7)                      | $\chi^2=6.18, p=0.01$      |
| Sexual Minorities                              | 337<br>(4.0)                        | 475<br>(3.3)                         |                            |
| Age at Interview                               |                                     |                                      |                            |
| Mean   | 22.2                                | 21.9                                 | $t(8594)=15.68, p<.001$    |
| SD   | (1.7)                               | (1.8)                                |                            |
| Range  | 18-28                               | 18-28                                |                            |
| Race   |                                     |                                      |                            |
| White  | 4908<br>(57.2)                      | 7777<br>(54.4)                       | $\chi^2=17.55, p<.001$     |
| Black or African American                      | 1706<br>(19.9)                      | 3069<br>(21.5)                       |                            |
| Hispanic or Latino                             | 1288<br>(15.0)                      | 2262<br>(15.8)                       |                            |
| Asian or Pacific Islander                      | 590<br>(6.9)                        | 1040<br>(7.3)                        |                            |
| American Indian or Native American             | 93<br>(1.1)                         | 159<br>(1.1)                         |                            |
| Born in the US                                 |                                     |                                      |                            |
| Yes  | 7912<br>(92.1)                      | 13146<br>(91.8)                      | $\chi^2=0.45, p=0.50$      |
| No   | 682<br>(7.9)                        | 1172<br>(8.2)                        |                            |
| SES  |                                     |                                      |                            |
| Reported 0 economic hardships in last 12 mos.  | 5785<br>(67.4)                      | 9793<br>(68.5)                       | $\chi^2=3.112, p=0.08$     |
| Reported 1+ economic hardships in last 12 mos. | 2802<br>(32.6)                      | 4505<br>(31.5)                       |                            |

Notes. Frequencies are un-weighted.

Table 2. Selected sample characteristics by gender and sexual minority status [Study 1].

| Selected Sample                 |  |                |  |               |   |
|---------------------------------|--|----------------|--|---------------|---|
|                                 | Heterosexual<br>Participants<br>N=8204 |                | Sexual Minority<br>Participants<br>N=337 |               | <i>Tests of<br/>significance<br/>between groups</i> |
|                                 | Men                                    | Women          | Men                                      | Women         |   |
| Age at Interview                |  |                |  |               |   |
| Mean                            | 22.3                                   | 22.1           | 22.1                                     | 21.9          | $F(8537)=9.92,$<br>$p < .001$                       |
| SD                              | (1.7)                                  | (1.7)          | (1.7)                                    | (1.7)         |   |
| Range                           | 18-28                                  | 18-27          | 18-25                                    | 19-25         |   |
| Race                            |  |                |  |               |   |
| White                           | 2284<br>(58.0)                         | 2408<br>(56.6) | 71<br>(56.3)                             | 127<br>(60.5) | $\chi^2=35.21, p <$<br>$.001$                       |
| Black or<br>African American    | 710<br>(18.0)                          | 919<br>(21.6)  | 17<br>(13.5)                             | 41<br>(19.5)  |   |
| Hispanic or<br>Latino           | 622<br>(15.8)                          | 591<br>(13.9)  | 27<br>(21.4)                             | 36<br>(17.1)  |   |
| Asian<br>or Pac. Islander       | 285<br>(7.2)                           | 287<br>(6.7)   | 10<br>(7.9)                              | 4<br>(1.9)    |   |
| Am. Indian or<br>Native Am.     | 40<br>(1.0)                            | 49<br>(1.2)    | 1<br>(0.8)                               | 2<br>(1.0)    |   |
| SES                             |  |                |  |               |   |
| Reported 0 ECs<br>last 12 mos.  | 2611<br>(66.9)                         | 2853<br>(67.8) | 85<br>(69.1)                             | 134<br>(63.8) | $\chi^2=2.03, p=.57$                                |
| Reported 1+<br>ECs last 12 mos. | 1291<br>(33.1)                         | 1357<br>(32.2) | 38<br>(30.9)                             | 76<br>(36.2)  |   |
| Relationship<br>Type            | N=3218<br>(%)                          | N=3448<br>(%)  | N=102<br>(%)                             | N=144<br>(%)  |   |
| Married to<br>partner           | 589<br>(18.3)                          | 773<br>(22.4)  | 3<br>(2.9)                               | 21<br>(14.6)  | $\chi^2=149.09, p <$<br>$.001$                      |
| Dating partner<br>exclusively   | 1635<br>(50.8)                         | 1886<br>(54.7) | 54<br>(52.9)                             | 76<br>(52.8)  |   |
| Dating<br>frequently            | 376<br>(11.7)                          | 375<br>(10.9)  | 8<br>(7.8)                               | 17<br>(11.8)  |   |
| Dating once in a<br>while       | 178<br>(5.5)                           | 183<br>(5.3)   | 10<br>(9.8)                              | 8<br>(5.6)    |   |
| Only having sex                 | 440<br>(13.7)                          | 231<br>(6.7)   | 27<br>(26.5)                             | 22<br>(15.3)  |   |

Table 2 (continued). Selected sample characteristics by gender and sexual minority status [Study 1].

| Selected Sample                               |  |                 |  |                |   |
|---|--|-----------------|--|----------------|---|
|   | Heterosexual<br>Participants<br>N=8204 |                 | Sexual Minority<br>Participants<br>N=337 |                | <i>Tests of<br/>significance<br/>between groups</i> |
|   | Men                                    | Women           | Men                                      | Women          |   |
| # mos. since<br>sexual activity w/<br>partner | Mean<br>(SD)                           | Mean<br>(SD)    | Mean<br>(SD)                             | Mean<br>(SD)   |   |
| Vaginal<br>intercourse                        | 5.98<br>(12.35)                        | 4.68<br>(11.77) | X  | X              | $F(6762)=19.59,$<br>$p < .001$                      |
| Receiving oral<br>sex                         | 5.83<br>(11.90)                        | 4.60<br>(10.33) | 6.56<br>(11.81)                          | 4.22<br>(8.73) | $F(5397)=6.17,$<br>$p < .001$                       |

Notes. Boxes with an "X" indicate that the group was not systematically asked the items due to survey administration. Frequencies are un-weighted.  
EC=economic hardship.

Table 3. Sexual identity labels and frequencies of same- and different-sex partners for men and women [Study 1].

| Sexual Identity                        | Men<br>N=4073<br>N<br>(%)         |                 | Women<br>N=4466<br>N<br>(%) |              |
|--|-----------------------------------|-----------------|-----------------------------|--------------|
|  | Most recent sexual partner was... |                 |                             |              |
|  | Male                              | Female          | Male                        | Female       |
| 100% or Mostly heterosexual (straight) | 15<br>(.37)                       | 3947<br>(96.91) | 4257<br>(95.30)             | 16<br>(.36)  |
| Bisexual                               | 9<br>(.22)                        | 14<br>(.34)     | 111<br>(2.48)               | 23<br>(.51)  |
| 100% or Mostly homosexual (gay)        | 82<br>(2.01)                      | 6<br>(.15)      | 9<br>(.20)                  | 51<br>(1.14) |

Notes. Frequencies are un-weighted.

Table 4. Means and SDs of the number of sexual activities with most recent sexual partner by gender and sexual minority status [Study 1].

|   | Total Sample Mean (SD)  | Heterosexual Participants Mean (SD) |                         | Sexual Minority Participants Mean (SD) |                        |
|---|-------------------------|-------------------------------------|-------------------------|--|------------------------|
|   |                         | Men                                 | Women                   | Men                                    | Women                  |
| Number of total sexual activities reported <sup>a</sup> | 2.51<br>(.92)<br>N=6835 | 2.48<br>(.92)<br>N=3122             | 2.53<br>(.92)<br>N=3464 | 2.77<br>(1.1)<br>N=99                  | 2.43<br>(.92)<br>N=150 |
| Number of oral sex activities reported <sup>b</sup>     | 1.82<br>(.38)<br>N=6168 | 1.81<br>(.39)<br>N=2814             | 1.83<br>(.38)<br>N=3116 | 1.77<br>(.42)<br>N=95                  | 1.87<br>(.34)<br>N=143 |

Notes. Frequencies are un-weighted.

- (a) Participants were asked a different number and combination of items based on their gender and/or sexual minority status: heterosexual men were asked four items; heterosexual women were asked four items; sexual minority men were asked four items; sexual minority women were asked three items.
- (b) All participants were asked to report whether they had engaged in performing and receiving oral sex.

Table 5. Means and SDs of sexual satisfaction score by gender and sexual minority status [Study 1].

| Total<br>Sample<br>Mean<br>(SD) | Heterosexual<br>Participants<br>Mean<br>(SD) |                         | Sexual Minority<br>Participants<br>Mean<br>(SD) |                        |
|---------------------------------|--|-------------------------|---|------------------------|
|                                 | Men  | Women                   | Men   | Women                  |
| 4.45<br>(.69)<br>N=6835         | 4.60<br>(.59)<br>N=3122                      | 4.31<br>(.75)<br>N=3464 | 4.42<br>(.74)<br>N=99                           | 4.51<br>(.66)<br>N=150 |

Notes. Scores are on a 1-5 scale, with higher numbers representing higher sexual satisfaction. Frequencies are un-weighted.

Table 6. Means, SDs, and correlations of sexual satisfaction items and orgasm frequency for entire sample [Study 1].

|                         | Mean<br>(SD)             | Correlations    |                 |                 |                |               |   |
|-------------------------|--------------------------|-----------------|-----------------|-----------------|----------------|---------------|---|
|                         |                          | 1               | 2               | 3               | 4              | 5             | 6 |
| Liking Sexual Behaviors |                          |                 |                 |                 |                |               |   |
| 1. Vaginal intercourse  | 4.77<br>(.59)<br>N=4612  | -               |                 |                 |                |               |   |
| 2. Performing oral sex  | 4.19<br>(.97)<br>N=5400  | .33**<br>N=3519 | -               |                 |                |               |   |
| 3. Receiving oral sex   | 4.66<br>(.69)<br>N=5854  | .39**<br>N=3759 | .36**<br>N=5066 | -               |                |               |   |
| 4. Performing anal sex  | 4.18<br>(1.02)<br>N=645  | .16**<br>N=435  | .21**<br>N=596  | .16**<br>N=623  | -              |               |   |
| 5. Receiving anal sex   | 3.05<br>(1.43)<br>N=724  | .22**<br>N=526  | .40**<br>N=699  | .24**<br>N=684  | .18<br>N=34    | -             |   |
| Orgasm                  |                          |                 |                 |                 |                |               |   |
| 6. Orgasm frequency     | 4.27<br>(1.16)<br>N=2513 | .29**<br>N=1740 | .21**<br>N=2068 | .22**<br>N=2149 | -0.04<br>N=249 | .12*<br>N=268 | - |

\* $p < 0.05$  (2-tailed)

\*\* $p < 0.01$  (2-tailed)

Note: Items 1 (vaginal intercourse) and 6 (orgasm frequency) were asked only of heterosexual participants. Item 4 (performing anal sex) was asked only of male participants.

Table 7. Means and SDs of sexual satisfaction and orgasm frequency items for heterosexual and sexual minority men and women [Study 1].

|                          | Heterosexual Participants<br>Mean<br>(SD) |                          | Sexual Minority Participants<br>Mean<br>(SD) |                        |
|--------------------------|---|--------------------------|--|------------------------|
|                          | Men                                       | Women                    | Men  | Women                  |
| Like vaginal intercourse | 4.81<br>(.54)<br>N=2062                   | 4.75<br>(.63)<br>N=2450  |  |                        |
| Like performing oral sex | 4.41<br>(.86)<br>N=2436                   | 3.99<br>(1.02)<br>N=2741 | 4.33<br>(1.10)<br>N=82                       | 4.36<br>(.90)<br>N=131 |
| Like receiving oral sex  | 4.75<br>(.57)<br>N=2669                   | 4.56<br>(.57)<br>N=2948  | 4.63<br>(.78)<br>N=86                        | 4.78<br>(.50)<br>N=136 |
| Like performing anal sex | 4.13<br>(1.04)<br>N=591                   |                          | 4.72<br>(.61)<br>N=50                        |                        |
| Like receiving anal sex  |   | 2.96<br>(1.41)<br>N=641  | 3.88<br>(1.27)<br>N=49                       | 3.39<br>(1.43)<br>N=31 |
| Orgasm frequency         | 4.72<br>(.77)<br>N=1130                   | 3.93<br>(1.27)<br>N=1383 |  |                        |

Notes. All variables are scored on a 5 point scale with higher values representing more liking or frequency. Boxes with an "X" indicate that the sub-group was not systematically asked the items due to survey design. Frequencies are un-weighted.

Table 8. Means and SDs of self esteem by gender and sexual minority status [Study 1].

| Total<br>Sample<br>Mean<br>(SD)<br>N=8541 | Heterosexual<br>Participants<br>Mean<br>(SD)<br>N=3947 |               | Sexual Minority Participants<br>Mean<br>(SD)<br>N=211 |               |
|---|--|---------------|---|---------------|
|   | Men  | Women         | Men   | Women         |
| 4.22<br>(.57)                             | 4.26<br>(.57)  | 4.19<br>(.57) | 4.09<br>(.65)   | 3.40<br>(.63) |

Notes. Scales ranges from 1-5, with higher numbers representing more self esteem.

Table 9. Frequencies and percentages of participants' perceived relational reciprocity with their most recent partner [Study 1].

|                | Total Sample<br>N<br>(%) | Heterosexual<br>Participants<br>N<br>(%) |                 | Sexual Minority<br>Participants<br>N<br>(%) |                |
|----------------|--------------------------|--|-----------------|---|----------------|
|                | Total<br>N=7426          | Men<br>N=3355                            | Women<br>N=3757 | Men<br>N=101                                | Women<br>N=168 |
| Reciprocal     | 6154<br>(82.9)           | 2697<br>(80.4)                           | 3203<br>(85.3)  | 75<br>(74.3)                                | 142<br>(84.5)  |
| Non-reciprocal | 1272<br>(17.1)           | 658<br>(19.6)                            | 554<br>(14.7)   | 26<br>(25.7)                                | 26<br>(15.5)   |

Notes.  $\chi^2=4.96$ ,  $p=0.17$

Table 10. Regression of sexual satisfaction on gender and self esteem [Study 1].

| Gender x Self Esteem | $\Delta R^2$ | $F$       | $B$  | $\beta$ |
|----------------------|--------------|-----------|------|---------|
| Step 1:              |              |           |      |         |
| (Intercept)          |              |           | 4.59 |         |
| Gender               |              |           | -.26 | -.19*** |
| Self Esteem          |              |           | .13  | .11***  |
| Step 1               | .05***       | 177.51*** |      |         |
| Step 2:              |              |           |      |         |
| (Intercept)          |              |           | 4.59 |         |
| Gender               |              |           | -.26 | -.19*** |
| Self Esteem          |              |           | .08  | .07***  |
| Gender*Self Esteem   |              |           | .08  | .05**   |
| Step 2               | .001**       | 121.23*** |      |         |
| $R^2$ Final Equation | .05***       |           |      |         |

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

Notes. The table presents  $B$ s,  $\beta$ s, and significance levels from the hierarchical regression analysis with the two predictors entered individually on Step 1 and as a multiplicative interaction on Step 2 (N=6865). Men=0 and women=1.

Table 11. Regression of sexual satisfaction on sexual minority status and self esteem [Study 1].

| SMS x Self Esteem    | $\Delta R^2$ | $F$      | $B$  | $\beta$ |
|----------------------|--------------|----------|------|---------|
| Step 1:              |              |          |      |         |
| (Intercept)          |              |          | 4.45 |         |
| SMS                  |              |          | .05  | .01     |
| Self Esteem          |              |          | .15  | .12***  |
| Step 1               | .01***       | 49.99*** |      |         |
| Step 2:              |              |          |      |         |
| (Intercept)          |              |          | 4.45 |         |
| SMS                  |              |          | .05  | .01     |
| Self Esteem          |              |          | .15  | .12***  |
| SMS*Self Esteem      |              |          | -.03 | .00     |
| Step 2               | .00          | 33.32*** |      |         |
| $R^2$ Final Equation |              |          | .01  |         |

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

Notes. The table presents  $B$ s,  $\beta$ s, and significance levels from the hierarchical regression analysis with the two predictors entered individually on Step 1 and as a multiplicative interaction on Step 2 (N=6865). SMS=Sexual Minority Status. Men=0 and women=1.

Table 12. Regression of sexual satisfaction on gender and relational reciprocity [Study 1].

| Gender x Relational Reciprocity | $\Delta R^2$ | $F$       | $B$  | $\beta$ |
|---------------------------------|--------------|-----------|------|---------|
| Step 1:<br>(Intercept)          |              |           | 4.36 |         |
| Gender                          |              |           | -.29 | -.21*** |
| Relational Reciprocity          |              |           | .30  | .16***  |
| Step 1                          | .07***       | 234.38*** |      |         |
| Step 2:<br>(Intercept)          |              |           | 4.42 |         |
| Gender                          |              |           | -.42 | -.31*** |
| Relational Reciprocity          |              |           | .22  | .12***  |
| Gender* Relational Reciprocity  |              |           | .16  | .12***  |
| Step 2                          | .002***      | 161.06*** |      |         |
| $R^2$ Final Equation            | .07***       |           |      |         |

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

Notes. The table presents  $B$ s,  $\beta$ s, and significance levels from the hierarchical regression analysis with the two predictors entered individually on Step 1 and as a multiplicative interaction on Step 2 (N=6865). Men=0 and women=1.

Table 13. Regression of sexual satisfaction on sexual minority status and relational reciprocity [Study 1].

| SMS x Relational Reciprocity | $\Delta R^2$ | $F$      | $B$  | $\beta$ |
|------------------------------|--------------|----------|------|---------|
| Step 1:<br>(Intercept)       |              |          | 4.22 |         |
| SMS                          |              |          | .05  | .01     |
| Relational Reciprocity       |              |          | .27  | .15***  |
| Step 1                       | .02***       | 74.24*** |      |         |
| Step 2:<br>(Intercept)       |              |          | 4.23 |         |
| SMS                          |              |          | -.10 | -.03    |
| Relational Reciprocity       |              |          | .26  | .14***  |
| SMS* Relational Reciprocity  |              |          | .18  | .05     |
| Step 2                       | .00          | 50.41*** |      |         |
| $R^2$ Final Equation         | .02          |          |      |         |

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

Notes. The table presents  $B$ s, standard errors,  $\beta$ s, and significance levels from four separate hierarchical regression analyses with the two predictors entered individually on Step 1 and as a multiplicative interaction on Step 2 (N=6865). SMS=Sexual Minority Status. Men=0 and women=1.

Table 14. Demographic characteristics [Study 2].

|                              |                            | N=34<br>(%)  |
|------------------------------|----------------------------|--------------|
| Gender                       |                            |              |
|                              | Men                        | 16<br>(47.1) |
|                              | Women                      | 17<br>(50.0) |
|                              | Trans (FTM)                | 1<br>(2.9)   |
| Sexual Orientation           |                            |              |
|                              | Heterosexual/Straight      | 18<br>(52.9) |
|                              | Gay/Lesbian/Bisexual/Queer | 13<br>(38.2) |
|                              | Undecided/All              | 3<br>(8.8)   |
| Age                          |                            |              |
|                              | Mean                       | 21.1         |
|                              | SD                         | (3.1)        |
|                              | Range                      | 18-28        |
| In Relationship with Partner |                            |              |
|                              | Partnered                  | 24<br>(70.6) |
|                              | Not partnered              | 10<br>(29.4) |
| Race                         |                            |              |
|                              | White                      | 16<br>(47.1) |
|                              | Black/African American     | 3<br>(8.8)   |
|                              | Latino                     | 6<br>(17.6)  |
|                              | Asian/API                  | 5<br>(14.7)  |
|                              | Mixed Race/Ethnicity       | 4<br>(11.8)  |
| Born in the US               |                            |              |
|                              | No                         | 10<br>(29.4) |
|                              | Yes                        | 24<br>(70.6) |

Table 14 (continued). Demographic characteristics [Study 2].

| SES: Mother's Education |              |
|-------------------------|--------------|
| Less than high school   | 2<br>(5.9)   |
| High school/GED         | 6<br>(17.6)  |
| Some college            | 12<br>(35.3) |
| College degree or more  | 14<br>(41.2) |

Table 15. Means and standard deviations of sexual satisfaction items by gender and sexual minority status [Study 2].

|  | Total Sample<br>Mean<br>(SD) | Heterosexual<br>Participants<br>Mean<br>(SD) |                       | LGBT<br>Participants<br>Mean<br>(SD) |                       |
|--|------------------------------|--|-----------------------|--------------------------------------|-----------------------|
|  | Total                        | Men  | Women                 | Men                                  | Women                 |
| Orgasm<br>frequency <sup>a</sup>               | 3.65<br>(1.64)<br>N=23       | 4.75<br>(.50)<br>N=4                         | 3.75<br>(1.75)<br>N=8 | 2.75<br>(2.06)<br>N=4                | 3.43<br>(1.62)<br>N=7 |
| Like sex with<br>partner <sup>b</sup>          | 4.57<br>(1.04)<br>N=23       | 5.0<br>(.00)<br>N=4                          | 4.62<br>(1.07)<br>N=8 | 4.0<br>(1.41)<br>N=4                 | 4.57<br>(1.13)<br>N=7 |
| Overall<br>sexual<br>satisfaction <sup>c</sup> | 7.24<br>(1.67)<br>N=33       | 7.42<br>(1.28)<br>N=9                        | 7.63<br>(2.13)<br>N=8 | 7.14<br>(1.35)<br>N=7                | 6.78<br>(1.92)<br>N=9 |

Notes. In order to avoid presenting data on a single participant, the trans person's data for this analysis only, was combined with the LGBT men as the person was FTM. In addition, those participants that described themselves as "undecided" in terms of sexual orientation were coded as LGBT for this analysis only.

(a) "When you and your partner have sexual relations, how often do you have an orgasm – that is, climax or come?" Responses ranged from 1 (*never/hardly ever*) to 5 (*most of the time/every time*). N=23 (partnered participants only; missing data for 1 participant).

(b) "How much do/did you like having sex (of any type) with your partner?" Responses ranged from 1 (*dislike very much*) to 5 (*like very much*). N=23 (partnered participants only; missing data for 1 participant).

(c) Participants were asked to evaluate their overall sexual satisfaction using a self-anchored 10-point scale. N=33 (missing data for 1 participant).

Table 16. Eight profiles of responses to three survey items [Study 2].

| Name of group                      | Pattern         | N  | Description of profile  |
|------------------------------------|-----------------|----|---|
|                                    | Org/Like/Satis. |    |   |
| <i>Aligned:</i><br>Unsatisfied     | LLL             | 2  | low orgasm, liking, and satisfaction  |
| <i>Aligned:</i><br>Satisfied       | HHH             | 12 | high orgasm, liking, and satisfaction   |
| <i>Unpartnered:</i><br>Unsatisfied | NNH             | 7  | not currently partnered, low overall satisfaction                               |
| <i>Unpartnered:</i><br>Satisfied   | NNL             | 4  | not currently partnered, high overall satisfaction                              |
| <i>Contrast:</i><br>Unsatisfied    | HHL             | 3  | high orgasm frequency and liking sex with partner, but low overall satisfaction |
| <i>Contrast:</i><br>Satisfied      | LLH             | 1  | low orgasm and low liking sex with partner, but high overall satisfaction       |
| <i>Liking:</i><br>Like sex         | LHL             | 3  | low orgasm frequency, high liking sex, but low satisfaction                     |
| <i>Orgasmless:</i><br>Low orgasm   | LHH             | 2  | low orgasm frequency, but high liking and high satisfaction                     |

L=low, H=high.

N=not partnered. These participants were answered one question pertaining to overall sexual satisfaction only.

Table 17. Five strategies used by study participants to organize un-marked ladder item concerning overall sexual satisfaction [Study 2].

| Organizing framework | Description of frameworks  | Examples  |
|----------------------|--|---|
| Degree               | The degree to which one is satisfied, usually ranging from “not at all” to “very.”   | “I’m not at all satisfied”  |
| Time                 | The amount of time one is satisfied. This can be relative to the number of sexual interactions the person engages in or relative to time more generally. | “I’m satisfied 50% of the time” or “if I have sex regularly I am satisfied”                               |
| Sexual outcome       | Sexual outcomes associated with feeling satisfied, most commonly orgasm.   | “I’m satisfied if my partner has an orgasm”   |
| Emotional outcome    | Specific emotional outcomes (one’s own or one’s partners) were associated with feeling more or less satisfied.   | “I’m not satisfied if I feel distant from my partner” and “I’m very satisfied when she says she loves me” |
| Partner type         | Different types of partners were associated with feeling more or less satisfied.   | “random person” described as less satisfying than sex with a “loved partner”                              |

Figure 1. Ecological model illustrating social and psychological antecedents of sexual satisfaction appraisals.

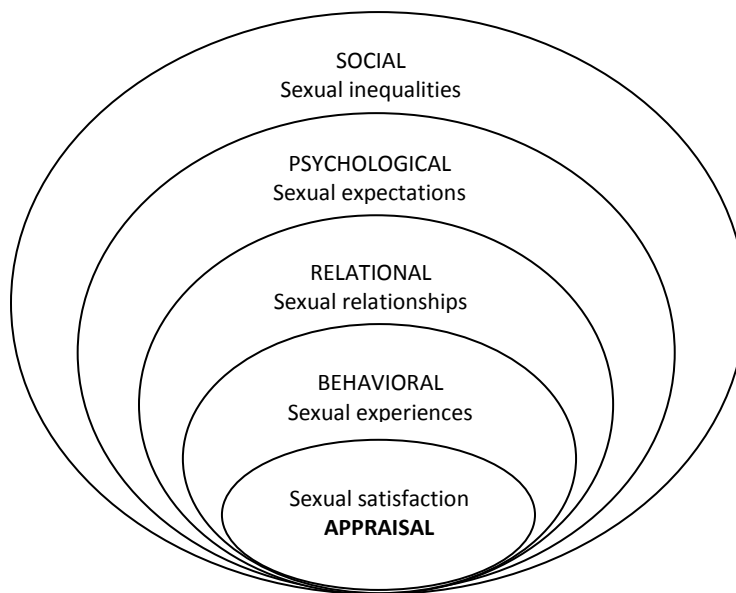
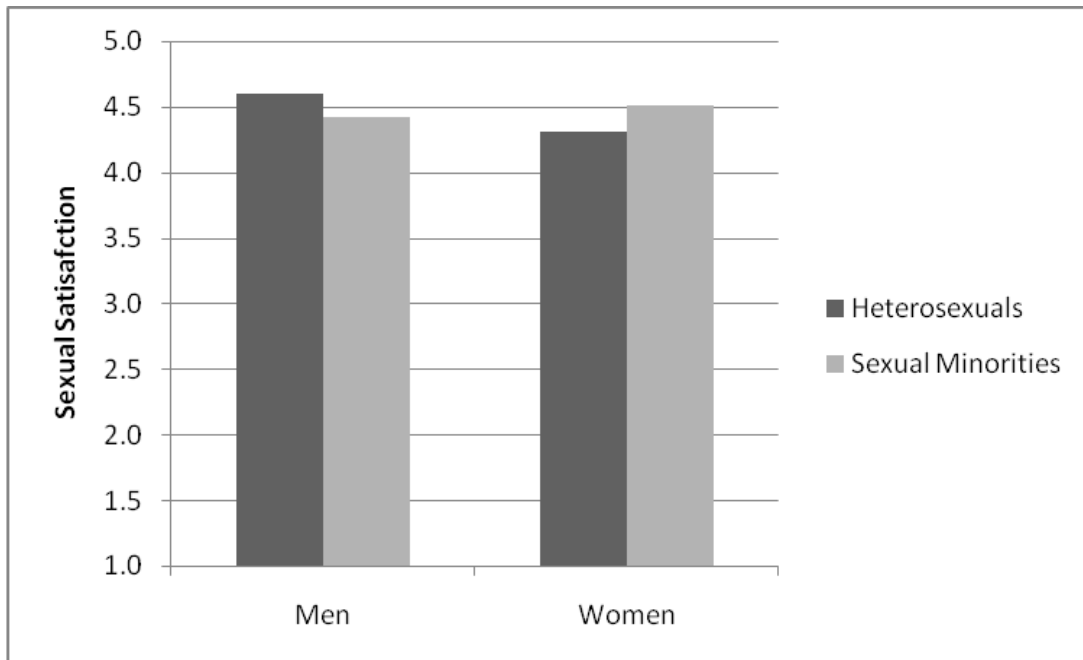
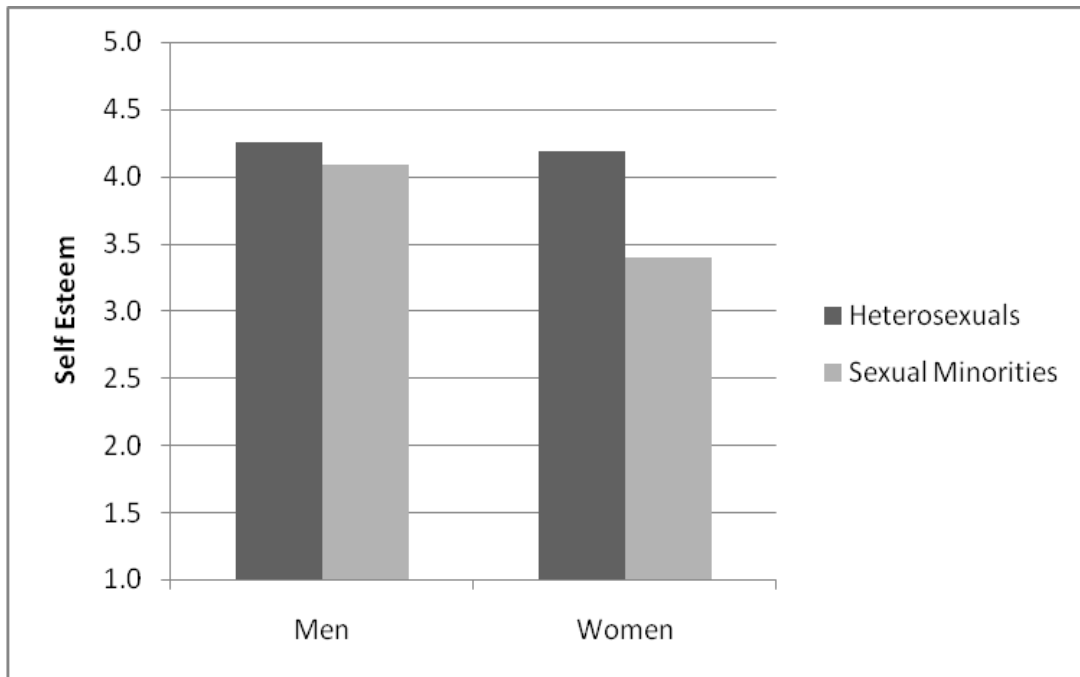


Figure 2. Sexual satisfaction means for heterosexual and sexual minority men and women [Study 1].



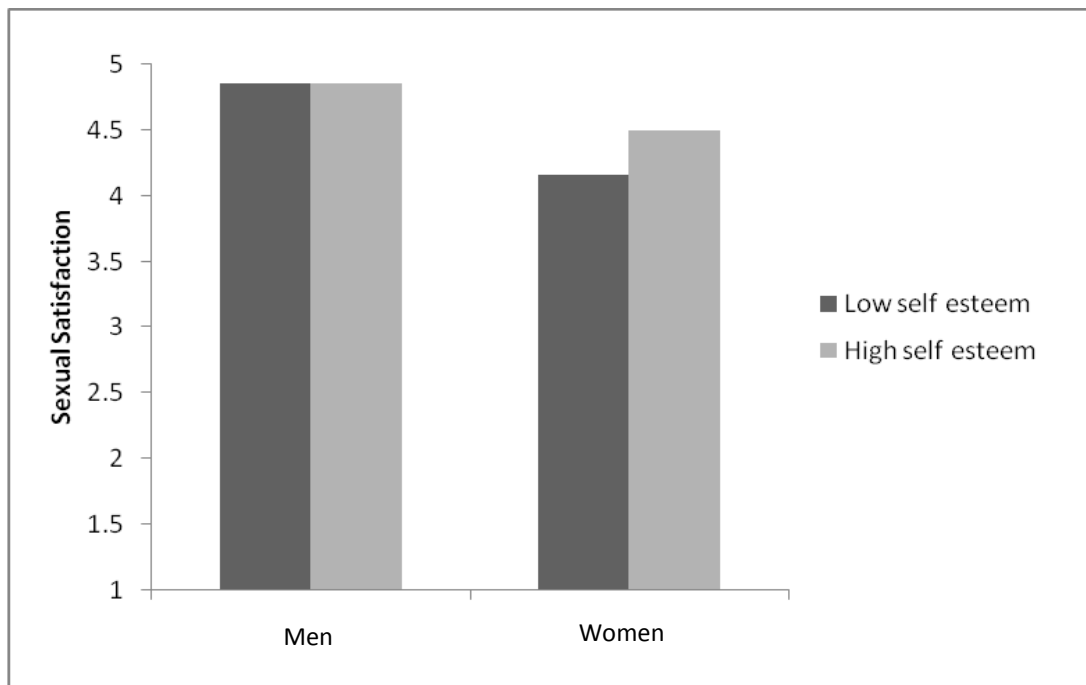
Notes. Sexual satisfaction score ranges from 1-5 with higher values representing more satisfaction.

Figure 3. Self esteem means for heterosexual and sexual minority men and women [Study 1].



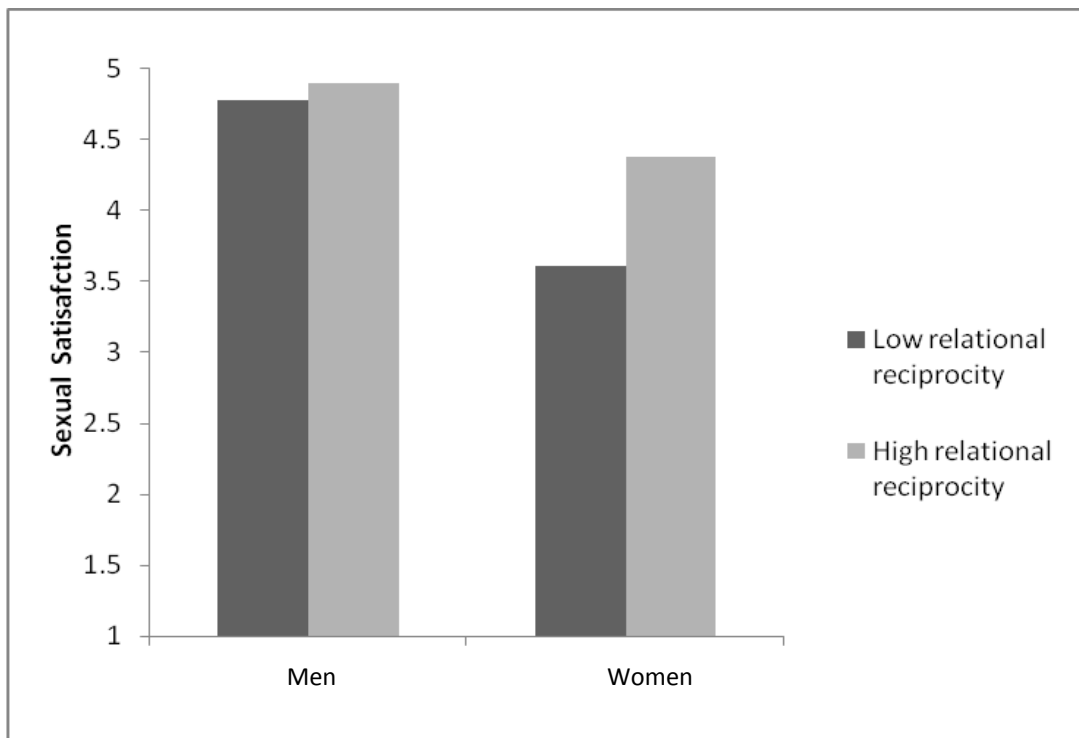
Notes. Self esteem ranges from 1-5 with higher values representing more self esteem.

Figure 4. Sexual satisfaction scores of men and women with lower and higher self esteem scores [Study 1].



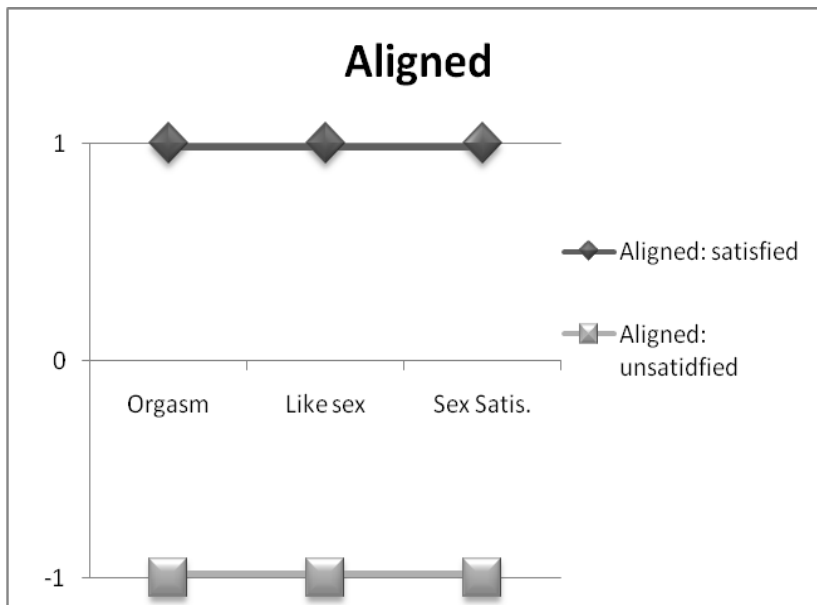
Notes. Sexual satisfaction score ranges from 1-5 with higher values representing more satisfaction.

Figure 5. Sexual satisfaction scores of men and women with reciprocal and non-reciprocal emotional relationships with their most recent sexual partners [Study 1].



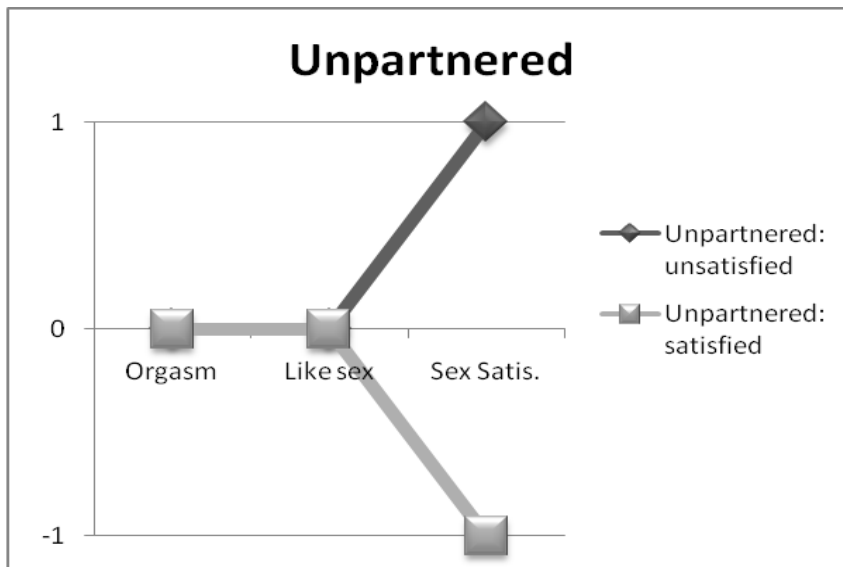
Notes. Sexual satisfaction score ranges from 1-5 with higher values representing more satisfaction.

Figure 6. The “Aligned” profile [Study 2].



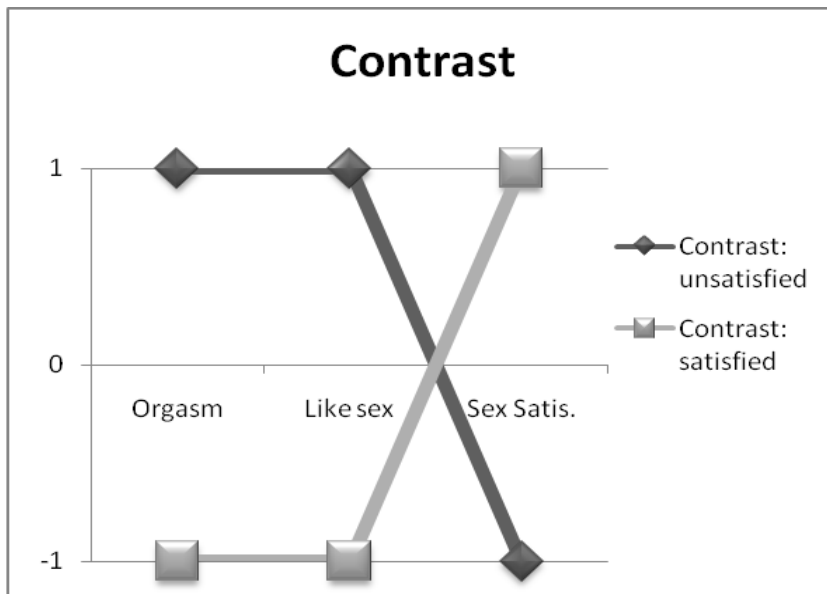
1=high, -1=low

Figure 7. The “Unpartnered” profile [Study 2].



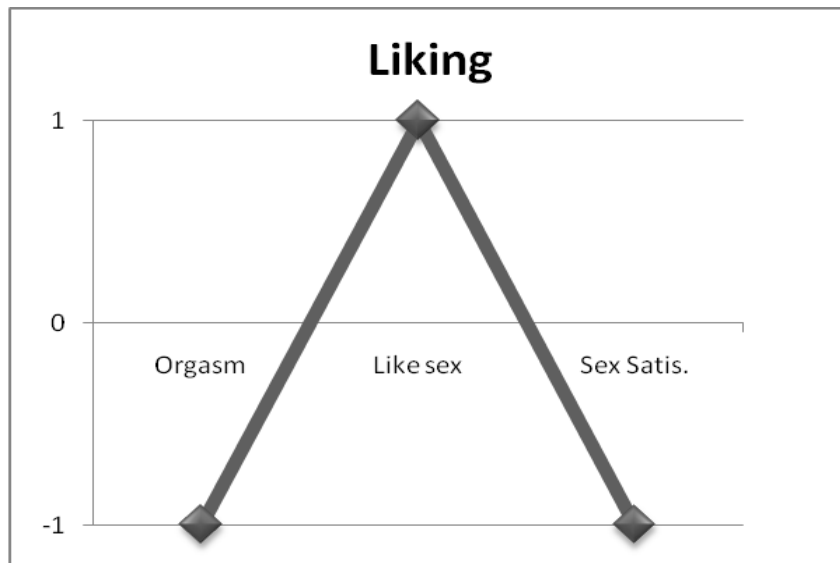
1=high, -1=low

Figure 8. The “Contrast” profile [Study 2].



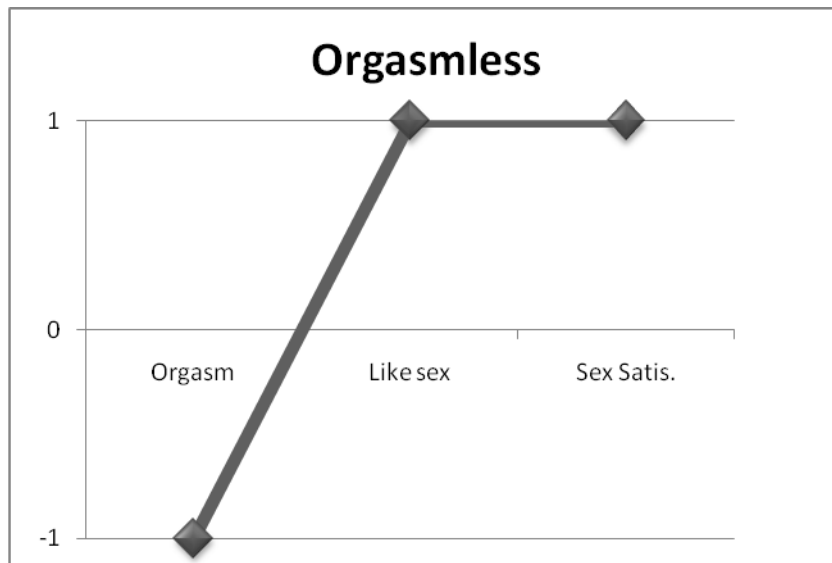
1=high, -1=low

Figure 9. The “Liking” profile [Study 2].



1=high, -1=low

Figure 10. The “Orgasmless” profile [Study 2].



1=high, -1=low

## APPENDICES

### APPENDIX A. Add Health items used in analyses [Study 1].

1. Gender
  - a. Respondent's gender [male/female]
2. Sexual Minority Status
  - a. Please choose the description that best fits how you think about yourself. [100% heterosexual/straight, mostly heterosexual/straight, bisexual—that is, attracted to men and women equally, mostly homosexual (gay), but somewhat attracted to people of the opposite sex, 100% homosexual (gay)]
  - b. Please indicate whether <partner> is male or female.
3. Race
  - a. Are you of Hispanic or Latino origin? [yes/no]
  - b. What is your race? [white; black/African American; American Indian or Native American; Asian or Pacific Islander]
  - c. Which one category best describes your racial background? [white; black/African American; American Indian or Native American; Asian or Pacific Islander]
4. Sexual Satisfaction
  - a. How much do/did you like having vaginal intercourse with <partner>?
  - b. How much do/did you like for <partner> to perform oral sex on you?
  - c. How much do/did you like to perform oral sex on <partner>?
  - d. How much do/did you like for <partner> to perform anal sex on you?
  - e. How much do/did you like to perform anal sex on <partner>?
5. Orgasm
  - a. When you and <partner> have sexual relations, how often do you have an orgasm—that is, climax or come?
6. Self Esteem
  - a. Do you agree or disagree that you have many good qualities?
  - b. Do you agree or disagree that you have a lot to be proud of?
  - c. Do you agree or disagree that you like yourself just the way you are?
  - d. Do you agree or disagree that you feel you are doing things just about right?
7. Relational Reciprocity
  - a. How much do you love <partner>?
  - b. How much do you think <partner> loves you?

## APPENDIX B. Participant Recruitment On-Line Flyer [Study 2].

Psychology students who were signed onto the on-line Hunter College Psychology 100 Research Participation System were able to read the following description of the study:

**Study Name:** Dating & Relationships Study

**Abstract:** Study about dating and relationships (straight & LGBT). You can participate even if you are not currently in a relationship or dating.

**Description:** The study will take about 1 hour and involves sorting cards based on your own opinions, answering short interview questions, and written survey questions.

---

All genders

Straight / LGBT

In a relationship / Single / Dating / Casual relationships

All ages (but at least 18)

---

In order to find out if you are eligible to participate in the study, please fill out an initial on-line survey (takes less than 1 minute): [Eligibility Questionnaire: http://app.formassembly.com/forms/view/13013](http://app.formassembly.com/forms/view/13013). All responses will be confidential.

After you complete the survey, you will be emailed within 48 hours by the Principal Investigator to let you know if you are eligible to participate in the 1 hour face-to-face study at Hunter College. Even if you are eligible, it is completely up to you whether you decide to participate in the face-to-face study.

**If you are eligible to participate, you will be emailed a password which will allow you to sign up for the study using this on-line system.**

If you have any questions, please email the Principal Investigator, Sara McClelland, at: [SMcClelland@gc.cuny.edu](mailto:SMcClelland@gc.cuny.edu).

## APPENDIX C. Participant On-Line Screener [Study 2].

**Dating & Relationships Study Eligibility Form**

Thank you for your interest in the Dating & Relationships study. In order to determine if you are eligible to participate in the study, please answer the questions below. There are no right or wrong answers.

After you complete the survey, you will be emailed within 48 hours by the Principal Investigator to let you know if you are eligible to participate in the 1 hour face-to-face study at Hunter College. Even if you are eligible, it is completely up to you whether you decide to participate in the face-to-face study.

If you are eligible to participate, you will be emailed a password which will allow you to sign up for the study using the Hunter College Psychology Research 100 Participation on-line system.

Please email Sara McClelland at [smcclelland@gc.cuny.edu](mailto:smcclelland@gc.cuny.edu) if you have any questions.

**Eligibility Questions**

1. What gender do you identify as? [Female, Male, Transgender, Other (please specify)]
2. How old are you?
3. How many years of post-high school education have you completed?
4. How would you describe your race/ethnicity? (Check all that apply)  
[White/Caucasian, Latino/a, Black/African-American, Asian/Asian Pacific Islander, Other (please specify)]
5. Are you fluent in both spoken and written English? [Yes, No]
6. Do you currently live with your family (for example, parent(s), grandparent(s), guardian, etc.)? [Yes, No]
7. How would you describe your sexual orientation? [Gay/Lesbian, Straight/Heterosexual, Bisexual, Asexual, Other (please specify)]
8. Are you currently in a relationship or feel a special commitment to someone? [Yes, No, Don't know]
9. [If yes, in relationship or Don't know] What is their gender? [Male, Female, Other (please describe)]
10. How long have you been in this relationship?

**EMAIL ADDRESS**\_\_\_\_\_. Your email address will only be used once to let you know if you are eligible to participate in the Dating & Relationships study. Your email will not be shared with anyone.

## APPENDIX D. Semi-Structured Interview Protocol [Study 2].

1. How was the card sorting task for you?
  - Prompt for discussion of decision points and areas the participant found especially difficult or easy to sort the cards.
2. Do you think about your own sexual satisfaction in your life?
  - Prompt for discussion of how often the person thinks of what is satisfying to them, under what circumstances, and if they do think about their own satisfaction, how long have they have thought about it.
3. What kinds of definitions do you have for what is satisfying?
  - Prompt for discussion of what the definitions are, whether these definitions have changed over time for them and if so, when, and were there were circumstances that prompted these changes.
4. How do you determine what is satisfying from unsatisfying?
  - Prompt for discussion of the criteria that the person uses, whether these criteria have changed over time, and were there were circumstances that prompted these changes.
  - [If this developmental timeline is difficult for the participant to imagine] If you were to sort the cards 2 years ago, would the sort be different?
  - [If this developmental timeline is difficult for the participant to imagine] If you were to sort the cards in 2-5 years, would the sort be different?
5. [If the person mentions any type of partner (i.e., casual or long-term)] How would your partner sort the cards?
  - Prompt for discussion of how the participant imagines their sexual partner(s) definitions of sexual satisfaction and their priorities within this area. Prompt for discussion of what the participant thinks about these definitions and priorities.
6. [If the participant had been sexually involved with (or imagined themselves involved with) more than one gender] How do you think [male/female] partners would sort these cards?
  - Do you imagine your own satisfaction to be different with male and female partners? If so, why?
7. What kinds of priorities do you imagine as important to men and women in determining their sexual satisfaction?
  - If there are differences, why do you think men and women think about sexual satisfaction in these ways?
8. How other people in your life think about or talk about sexual satisfaction?
  - Prompt for discussion of how friends define (or are imagined to define) terms and priorities concerning their own sexual satisfaction. Prompt for discussion of what the participant thinks about these definitions and priorities.

9. How have you learned about sex?
  - Has anyone ever talked to you about satisfaction in terms of sex?
  - Do you talk about it with friends?
  - Do you talk about it with your family?
10. How do you define feminine and masculine? What are your associations with these words?
  - Are there other words that you had associations with? If so, how do you define these words?
11. [If participants added or changed any cards] Tell me why these changes or additions were important to you.
  - What other things would you change or add to the sort?
  - Why would these be important to you?
  - How do you imagine other people responding to these words?
12. Do you feel like the sort represents you? What would you have done differently?
13. Do you have any questions that I can answer?

## APPENDIX E. Self-Anchored Ladder Item [Study 2].

The following is how the item appeared to research participants:

PLEASE NOTE: Throughout this study, the word “sex” will be used. By sex, we mean all of the following: masturbation, caressing, fondling, intercourse, genital contact, and/or oral/genital contact.

**DIRECTIONS:** In the following three questions, you will see scales without any words telling you what the points on the scale mean. These questions are asking you to complete two tasks: 1) answer the question by marking an “X” where you think it should go on the line; 2) in the spaces below each scale, explain what the low, middle, and high points of the scale meant to you when you made your “X” on the line. This is an unusual task – scales usually fill in the meanings for you. These three questions ask for you to describe what you think the worst, middle, and best are in terms of your own life.

How would you rate your overall level of sexual satisfaction? Please mark your response anywhere on the line below:



Briefly describe what the low, middle, and high ends of the scale above mean to you:

| LOW END OF SCALE | MIDDLE OF SCALE | HIGH END OF SCALE |
|------------------|-----------------|-------------------|
|                  |                 |                   |

## APPENDIX F. Measures Used to Create Q Statements [Study 2].

This table represents 15 measures that have been developed and used to measure dimensions of male and female sexual satisfaction. The 394 items from these measures were collected, sorted, organized by themes, and summarized in order to get the final set of 63 Q statements.

| Scale Name / Authors / Year   | Brief Description of Measure / Samples   |
|---|--|
| <b>The Extended Satisfaction With Life Scale: Sexual Satisfaction Sub-Scale</b><br>Alfonso, Allison, Rader, and Gorman, B.S. (1996) | (5 items) Sex sub-scale developed for both men and women. Bliss & Horne (2005) found alphas for gay men (.96) and for lesbians (.97) using this scale.   |
| <b>Index of Premature Ejaculation</b><br>Althof et al. (2006)   | (10 items) Scale developed to measure subjective aspects of premature ejaculation in men. Three factors emerged: sexual satisfaction, control, and distress.   |
| <b>Feelings associated with satisfying sexual experiences</b><br>Bridges, Lease & Ellison (2004)                                    | (56 words) Descriptions come from a study of women who provided positive and negative emotions that were associated with the most satisfying sexual experiences for the participants.  |
| <b>AMORE Scale (The Affective and Motivational Orientation Related to Erotic Arousal Questionnaire)</b><br>Hill & Preston (1996)    | (62 items) Scale developed to measure eight motives for desire across gender, as expressed in the 8 sub scales.  |
| <b>Female Sexual Subjectivity Scale</b><br>Horne & Zimmer-Gembeck (2006)  | (20 items) Scale developed for women.  |
| <b>Index of Sexual Satisfaction</b><br>Hudson et al. (1981)   | (24 items)   |
| <b>Sexual satisfaction measure</b><br>Impett & Tolman (2006)  | (4 items) Items used to assess sexual satisfaction in sample of late adolescent girls. Alpha: 0.75   |
| <b>Rewards/Costs Checklist</b><br>Lawrence & Byers (1998)   | (60 items) Scale developed and used with both men and women. Note: The original 46 items on the checklist are noted. In the sub-items, I have noted how I broke up the item when there was more than one concept included in the item. |
| <b>Sexual Satisfaction and Distress Scale for Women (SSS-W)</b><br>Meston & Trapnell (2005)   | (30 items) 4 sub-scales found: contentment, communication, compatibility, concern/distress   |
| <b>Why Humans Have Sex: YSEX? Questionnaire</b><br>Meston & Buss (2007)   | (54 responses) Selected relevant items from list of 142 responses.   |

|   |   |
|---|---|
| <p><b>The “Good Enough” Model for Sexual Satisfaction</b><br/>Metz &amp; McCarthy (2007)</p>              | <p>(12 statements) Model developed for therapeutic and clinical interventions for couples.</p>  |
| <p><b>International Index of Erectile Function Questionnaire (US version)</b><br/>Rosen et al. (1997)</p> | <p>(15 items) Scale developed for use with men, specifically designed for detecting treatment-related changes in patients with erectile dysfunction.</p>  |
| <p><b>Sexuality Scale</b><br/>Snell &amp; Panini (1989)</p>   | <p>(10 items) Scale used with both men and women. I used only the items from the “Sexual Depression” subscale; the “Sexual Self Esteem” was not used because all the items were written with reference to a partner.</p>  |
| <p><b>Sexual Satisfaction Scale</b><br/>Whitley &amp; Poulsen (1975)</p>                                  | <p>(22 items) Scale developed to study sexual satisfaction in sample of working women. The items ask about activities “commonly engaged in before, during and directly after the time of sexual activity.” Participants were asked to rate their satisfaction with each activity.</p>                             |
| <p><b>Sexual Life Quality Questionnaire</b><br/>Woodward et al. (2002)</p>                                | <p>(10 items) Scale used to evaluate satisfaction with treatments for erectile dysfunction among patients and their partners—used and developed for men and their female partners. The alpha for the overall scale was .97. When gender was assessed separately, the alpha for men was .97 and for women .98.</p> |

## APPENDIX G. List Of Cards Used in Card Sorting Task [Study 2].

|    | Themes Represented  | Q Statements   |
|----|---------------------|--|
| 1  | Behavior            | In order for me to feel sexually satisfied, there must be a lot of variety and spontaneity in the sex.                             |
| 2  | Behavior            | I find sex without condoms/birth control to be less sexually satisfying.   |
| 3  | Behavior            | Specific sex acts are necessary for me to feel sexually satisfied.   |
| 4  | Behavior            | In order to feel sexually satisfied, I need to have sex everyday.  |
| 5  | Behavior            | I find masturbation is more sexually satisfying than sex with another person.  |
| 6  | Behavior            | I usually rely on myself for my own sexual satisfaction.   |
| 7  | Behavior<br>Partner | In order for me to feel sexually satisfied, I have to be having sex with another person.   |
| 8  | Behavior<br>Partner | Having sex with a partner is more sexually satisfying than sex with myself (masturbating).   |
| 9  | Behavior<br>Partner | Having sex with a partner who is the same sex as me is most satisfying.  |
| 10 | Behavior<br>Partner | When I have sex with a very attractive partner, I feel more sexually satisfied.  |
| 11 | Behavior<br>Partner | I usually rely on a partner for my own sexual satisfaction.  |
| 12 | Behavior<br>Partner | I find fulfilling a partner's wishes most sexually satisfying.   |
| 13 | Behavior<br>Partner | I feel sexually satisfied when I know that I am fulfilling my duty as a partner.   |
| 14 | Behavior<br>Partner | I think sex with strangers is more satisfying than sex with a romantic partner.  |
| 15 | Behavior<br>Partner | In order to feel sexually satisfied, I have to be having sex within a monogamous relationship (you only have sex with each other). |
| 16 | Body                | After sexually activity is over, I know I am sexually satisfied when my genitals feel relaxed.                                     |
| 17 | Body                | After sexually activity is over, I know I am sexually satisfied when my body feels relaxed.  |
| 18 | Body<br>Partner     | I feel more sexually satisfied when a partner ignores what my body looks like.   |
| 19 | Body<br>Partner     | It's essential that a partner compliment my body in order for me to feel sexually satisfied.                                       |
| 20 | Power               | There has to be some degree of pain in order for the sex to be satisfying.   |
| 21 | Power               | I only feel sexually satisfied if I feel powerful during sex.  |
| 22 | Power               | It's important that a partner be aggressive or forceful with me during sex in order for me to feel sexually satisfied.             |
| 23 | Power               | Feeling dominant during sex is important for me to feel sexually satisfied.  |
| 24 | Power               | Feeling dominated by a partner during sex is important for me to feel sexually satisfied.  |
| 25 | Power               | I have to feel safe during sex in order to feel sexually satisfied.  |
| 26 | Power               | I like to feel somewhat unsafe during sex.   |
| 27 | Power               | I usually feel less satisfied if my partner coerced me into having sex.  |
| 28 | Self/Emotion        | Sex is satisfying when I feel more masculine.  |

|    |                         |  |
|----|-------------------------|--|
| 29 | Self/Emotion            | Sex is satisfying when I feel more feminine.   |
| 30 | Self/Emotion            | If I feel inhibited during sex, I don't feel sexually satisfied.                                   |
| 31 | Self/Emotion            | I feel most sexually satisfied when I'm able to forget my worries.                                 |
| 32 | Self/Emotion            | Sex where I can "check out" is the most satisfying.  |
| 33 | Self/Emotion            | I know sex is satisfying when I feel happy.  |
| 34 | Emotion<br>Partner      | I know sex is sexually satisfying when I let my guard down with another person.                    |
| 35 | Emotion<br>Partner      | The emotional closeness I feel to a partner is what makes sex satisfying for me.                   |
| 36 | Emotion<br>Partner      | If I had to choose feeling loved or having an orgasm during sex, I would pick the orgasm.          |
| 37 | Emotion<br>Partner      | In order to feel sexually satisfied, I have to trust a partner during sex.                         |
| 38 | Emotion<br>Partner      | Sex is a way of showing someone I care about them, but I don't usually get much out of it.         |
| 39 | Emotion<br>Partner      | Feeling physically satisfied is more important than feeling emotionally close with another person. |
| 40 | Emotion<br>Partner      | Sex is satisfying when I feel "merged" with someone.   |
| 41 | Expectations            | Feeling sexually satisfied is possible, but is very difficult for me.                              |
| 42 | Expectations            | I believe that feeling sexually satisfied is out of my reach.                                      |
| 43 | Expectations            | I expect to feel sexually satisfied every time I have sex.   |
| 44 | Expectations            | I don't know how to judge whether I am sexually satisfied.   |
| 45 | Expectations            | Feeling sexually satisfied is an important part of my life.  |
| 46 | Expectations            | I have a good idea of what I mean when I think of being sexually satisfied.                        |
| 47 | Expectations            | Even when I feel sexually unfulfilled, I can still feel sexually satisfied.                        |
| 48 | Expectations            | I rarely feel sexually satisfied.  |
| 49 | Expectations<br>Partner | I have high expectations for satisfaction during sexual encounters.                                |
| 50 | Expectations<br>Partner | In order for me to feel sexually satisfied, my partner has to feel satisfied.                      |
| 51 | Expectations<br>Partner | I find it difficult to ask partners for things that would sexually satisfy me.                     |
| 52 | Orgasm                  | I need to feel in control of my orgasm in order to feel sexually satisfied.                        |
| 53 | Orgasm                  | In order to feel sexually satisfied, I have to have an orgasm.                                     |
| 54 | Orgasm                  | I don't feel sexually satisfied if I orgasm right away.  |
| 55 | Orgasm                  | In order to feel sexually satisfied, I need to orgasm more than once.                              |
| 56 | Orgasm                  | I usually find it difficult to have an orgasm.   |
| 57 | Orgasm                  | I feel more sexually satisfied if it takes me a long time to have an orgasm.                       |
| 58 | Orgasm                  | Having an orgasm is not at all important for me to feel sexually satisfied.                        |
| 59 | Orgasm<br>Partner       | In order for me to feel sexually satisfied, my partner has to have an orgasm.                      |
| 60 | Orgasm<br>Partner       | Even if my partner doesn't have an orgasm, I can feel sexually satisfied.                          |
| 61 | Orgasm<br>Partner       | My orgasm is <i>less</i> important than the orgasm of the person I am having sex with.             |

|    |                   |  |
|----|-------------------|--|
| 62 | Orgasm<br>Partner | My orgasm is <i>more</i> important than the orgasm of the person I am having sex with. |
| 63 | Orgasm<br>Partner | I usually don't have an orgasm when I have sex with another person.                    |

NOTE: Shaded boxes do not assume partnered sex.



## References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, London, Sage.
- Alcock, J. (1980). Beyond the sociobiology of sexuality: Predictive hypotheses. *Behavioral and Brain Sciences*, 3, 181–182.
- Alfonso, V.C., Allison, D.B., Rader, D.E., and Gorman, B.S. (1996). The extended satisfaction with life scale: Development and psychometric properties. *Social Indicators Research*, 38(33), 275-301.
- Allport, G. (1968). The open system in personality theory. In W. Buckley (Ed.), *Modern systems research for the behavioral sciences* (pp. 343-350). Chicago: Aldine.
- Althof, S., Rosen, R., Symonds, T., Mundayat, R., May, K., & Abraham, L. (2006). Development and validation of a new questionnaire to assess sexual satisfaction, control, and distress associated with premature ejaculation. *The Journal of Sexual Medicine*, 3(3), 465-475.
- Andrews, F.M. & Withey, S.B. (1976). *Social Indicators of well-being: Americans' perceptions of life quality*. New York: Plenum Press.
- Apt, C., Hurlbert, D. F., Sarmiento, G. R., & Hurlbert, M. K. (1996). The role of fellatio in marital sexuality: An examination of sexual compatibility and sexual desire. *Sexual & Marital Therapy*, 11(4), 383-392.
- Aries, E. (1976). Interaction patterns and themes of male, female, and mixed groups. *Small Group Behavior*, 7(1), 7-18.
- Babin, B. J., & Griffin, M. (1998). The nature of satisfaction: An updated examination and analysis. *Journal of Business Research*, 41(2), 127-136.
- Bartky, S., (1990). *Femininity and domination*. New York: Routledge.
- Basson, R. (2000). The female sexual response: A different model. *Journal of Sex & Marital Therapy*, 26(1), 51-65.
- Basson, R. (2001). Human sex-response cycles. *Journal of Sex & Marital Therapy*, 27(1), 33-43.

- Basson, R. (2002). Women's Sexual Desire – Disordered or Misunderstood? *Journal of Sex & Marital Therapy*, 28(1), 17-28.
- Basson, R. (2002). Are our definitions of women's desire, arousal and sexual pain disorders too broad and our definition of orgasmic disorder too narrow? *Journal of Sex & Marital Therapy*, 28(4), 289-300.
- Basson, R. (2007). Sexual desire/arousal disorders in women. In S. R. Leiblum, & S. R. Leiblum (Eds.), *Principles and practice of sex therapy (4th ed.)*. (pp. 25-53). New York, NY: Guilford Press.
- Bay-Cheng, L. (2003). *Safer sex in context: Condom and contraceptive use among adolescent women*. Doctoral dissertation, University of Michigan.
- Bearman, P.S., Jones, J., and Udry, J.R. (1997). The National Longitudinal Study of Adolescent Health: Research Design. Accessed April 23, 2009: <http://www.cpc.unc.edu/projects/addhealth/design>. University of North Carolina at Chapel Hill, NC.
- Beckman, N., Waern, M., Gustafson, D., & Skoog, I. (2008). Secular trends in self reported sexual activity and satisfaction in Swedish 70 year olds: Cross sectional survey of four populations, 1971-2001. *BMJ (Clinical Research Ed.)*, 337, 279-279.
- Belson, W.R. (1981). *The design and understanding of survey questions*. Aldershot, England: Gower Press.
- Bergner, D. (2009). What do women want? *New York Times Magazine*, p. 26.
- Berridge, K., & Kringelbach, M. (2008). Affective neuroscience of pleasure: Reward in humans and animals. *Psychopharmacology*, 199(3), 457-480.
- Biswas-Diener, R. & Diener, E. (2001). Making the best of a bad situation: Satisfaction in the slums of Calcutta. *Social Indicators Research*, 55(3), 329.
- Blackman, J. (1989). *Intimate violence: A study of injustice*. New York: Columbia University Press.
- Bliss, S. H. (1915). The origin of laughter. *American Journal of Psychology*, 26(2), 236-246.

- Bliss, W. J., & Horne, S. G. (2005). Sexual satisfaction as more than a gendered concept: The roles of psychological well-being and sexual orientation. *Journal of Constructivist Psychology, 18*(1), 25-38.
- Blumstein, P., & Schwartz, P. (1983). *American couples: Money, work, & sex*. New York: William Morrow.
- Bockting, W.O. & Coleman, E. (2003). *Masturbation as a means of achieving sexual health*. New York: Haworth Press.
- Braun, V., Gavey, N., & McPhillips, K. (2003). The 'fair deal'? Unpacking accounts of reciprocity in heterosex. *Sexualities, 6*(2), 237.
- Bridges, S. K., & Horne, S. G. (2007). Sexual satisfaction and desire discrepancy in same sex women's relationships. *Journal of Sex & Marital Therapy, 33*(1), 41-53.
- Bridges, S. K., Lease, S. H., & Ellison, C. R. (2004). Predicting sexual satisfaction in women: Implications for counselor education and training. *Journal of Counseling & Development, 82*(2), 158-166.
- Brody, S., & Krüger, T. (2006). The post-orgasmic prolactin increase following intercourse is greater than following masturbation and suggests greater satiety. *Biological Psychology, 71*(3), 312-315.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Burt, H E; Clark, J C. Facial expression in advertisements. *Journal of Applied Psychology, 7*(2), 114-126
- Buss, D. M. (1994). *The evolution of desire*. New York: Basic Books.
- Buss, D. M. (1998). Sexual strategies theory: Historical origins and current status. *Journal of Sex Research, 35*(1), 19-31.
- Buss, D. M. and Schmitt D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review, 100*, 204-232.

- Byers, E. S. (2005). Relationship satisfaction and sexual satisfaction: A longitudinal study of individuals in long-term relationships. *Journal of Sex Research, 42*(2), 113-118.
- Byers, E. S., & MacNeil, S. (2006). Further validation of the interpersonal exchange model of sexual satisfaction. *Journal of Sex & Marital Therapy, 32*(1), 53-69.
- Byers, E. S., & Wang, A. (2004). Understanding sexuality in close relationships from the social exchange perspective. In J. H. Harvey, A. Wenzel, S. Sprecher, J. H. Harvey, A. Wenzel & S. Sprecher (Eds.), *The handbook of sexuality in close relationships*. (pp. 203-234). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Byers, E. S., Demmons, S., & Lawrance, K. (1998). Sexual satisfaction within dating relationships: A test of the interpersonal exchange model of sexual satisfaction. *Journal of Social & Personal Relationships, 15*(2), 257.
- Byers, E.S. & Demmons, S. (1999). Sexual satisfaction and sexual self-disclosure: Within dating relationships. *The Journal of Sex Research, 36*(2), 180-189.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Cantril, H., Fried, E. (1944). The meaning of questions. In Cantril H. (Ed.), *Gauging public opinion*. Princeton, NJ: Princeton University Press.
- Cantril, H. (1965). *The patterns of human concerns*. New Brunswick, NJ: Rutgers University Press.
- Carrillo, J., Corning, A. F., Dennehy, T. & Crosby, F. J., (forthcoming). Relative deprivation: Looking back and looking ahead. In D. Chardee (Ed.), *Selected theories in social psychology*. Jamaica: University of West Indies Press.
- Chantala, K. (Oct. 1, 2006). National Longitudinal Study of Adolescent Health. Guidelines for Analyzing Add Health Data. Accessed April 23, 2009: <http://www.cpc.unc.edu/projects/addhealth/data/using/guides/wt-guidelines.pdf>. University of North Carolina at Chapel Hill, NC.
- Chen, Q., Rodgers, S., & He, Y. (2008). A critical review of the E-satisfaction literature. *American Behavioral Scientist, 52*(1), 38-59.

- Cheung, M. W., Wong, P. W., Liu, K. Y., Yip, P. S., Fan, S. Y., & Lam, T. (2008). A study of sexual satisfaction and frequency of sex among Hong Kong Chinese couples. *Journal of Sex Research, 45*(2), 129-139.
- Christopher, F. S., & Sprecher, S. (2000). Sexuality in marriage, dating, and other relationships: A decade review. *Journal of Marriage & Family, 62*(4), 999-1017.
- Clark, R. D., & Hatfield, E. (1989). Gender differences in receptivity to sexual offers. *Journal of Psychology and Human Sexuality, 2*, 39-55.
- Clark, V. L. P., Creswell, J. W., Green, D. O., and Shope, R. J. (2008). Mixing quantitative and qualitative approaches. In, S.N. Hesse-Biber and P. Leavy (Eds.) *Handbook of Emergent Methods*, pp. 363-387. New York: Guilford Press.
- Cohen, J. (1968). Multiple regression as a general data-analytic system. *Psychological Bulletin, 70*, 426-443.
- Cohen, J., Cohen, P., West, S. G., Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.)*. New York: Erlbaum.
- Cohen, K., & Savin-Williams, R. (1996). Developmental perspectives on coming out to self and others. *The lives of lesbians, gays, and bisexuals: Children to adults* (pp. 113-151). Orlando, FL: Harcourt Brace College Publishers.
- Cohen, L. L., & Shotland, R. L. (1996). Timing of first sexual intercourse in a relationship: Expectations, experiences, and perceptions of others. *Journal of Sex Research, 33*(4), 291-299.
- Cole, E. R. (2008). Coalitions as a model for intersectionality: From practice to theory. *Sex Roles, 59*(5), 443-453.
- Coleman, E. M., Hoon, P. W., & Hoon, E. F. (1983). Arousability and sexual satisfaction in lesbian and heterosexual women. *Journal of Sex Research, 19*(1), 58-73.
- Colson, M. H., Lemaire, A., Pinton, P., Hamidi, K., & Klein, P. (2006). Sexual behaviors and mental perception, satisfaction and expectations of sex life in men and women in France. *The Journal of Sexual Medicine, 3*(1), 121-131.

- Conley, T. (forthcoming). Understanding Gender Differences in the Clark and Hatfield (1989) Casual Sex Paradigm.
- Conrad, F. G. and Schober, M. F. (2008). New frontiers in standardized survey interviewing. In, S.N. Hesse-Biber and P. Leavy (Eds.) *Handbook of Emergent Methods*, pp. 363-387. New York: Guilford Press.
- Consolacion, T. B., Russell, S. T., & Sue, S. (2004). Sex, race/ethnicity, and romantic attractions: Multiple minority status adolescents and mental health. *Cultural Diversity & Ethnic Minority Psychology*, 10(3), 200-214.
- Cook, Thomas D., and Donald T. Campbell. (1979). *Quasi-experimentation: Design & analysis issues for field settings*. Boston: Houghton Mifflin Company.
- Cooper, M. L., Shapiro, C. M., & Powers, A. M. (1998). Motivations for sex and risky sexual behavior among adolescents and young adults: A functional perspective. *Journal of Personality and Social Psychology*, 75(6), 1528-1558.
- Corning, A. F. (2000). Assessing perceived social inequity: A relative deprivation framework. *Journal of Personality and Social Psychology*, 78(3), 463-477.
- Cosgrove, L., & McHugh, M. (2008). A post-Newtonian, postmodern approach to science: New methods in social action research. *Handbook of emergent methods* (pp. 73-85). New York, NY US: Guilford Press.
- Crenshaw, K. W. (1995). Mapping the margins: Intersectionality, identity politics, and violence against women of color. In K. W. Crenshaw, N. Gotanda, G. Peller, & K. Thomas (Eds.) *Critical race theory: The key writings that formed the movement* (pp. 357–384). New York: New Press.
- Cronbach, L. (1971). Test validation. In R. Thorndike, (Ed.), *Educational measurement, 2nd ed.* (pp. 443-507). Washington, D.C.: American Council on Education.
- Cronbach, L. J. & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281-302.
- Cronbach, L. J., Gleser, G. C., Nanda, H., & Rajaratnam, N. (1972). *The dependability of behavioral measurements: Theory of generalizability for scores and profiles*. New York: John Wiley.

- Crosby, F. (1976). A model of egoistical relative deprivation. *Psychological Review*, 83(2), 85-113.
- Crosby, F. (1982). *Relative deprivation and working women*. New York: Oxford University Press.
- Crosby, F. (1984). The denial of personal discrimination. *American Behavioral Scientist*, 27(3), 371.
- Cuffee, J. J., Hallfors, D. D., & Waller, M. W. (2007). Racial and gender differences in adolescent sexual attitudes and longitudinal associations with coital debut. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 41(1), 19-26.
- Cunningham, W. A.; Preacher, K. J.; Banaji, M. R. (2001). Implicit attitude measures: Consistency, stability, and convergent validity. *Psychological Science*, 12, 2.
- Cyranowski, J. M., Bromberger, J., Youk, A., Matthews, K., Kravitz, H. M., & Powell, L. H. (2004). Lifetime depression history and sexual function in women at midlife. *Archives of Sexual Behavior*, 33(6), 539-548.
- Daker-White, G., & Donovan, J. (2002). Sexual satisfaction, quality of life and the transaction of intimacy in hospital patients' accounts of their (hetero)sexual relationships. *Sociology of Health & Illness*, 24(1), 89.
- Daniels, E., & Leaper, C. (2006). A longitudinal investigation of sport participation, peer acceptance, and self-esteem among adolescent girls and boys. *Sex Roles*, 55(11-12), 875-880.
- Das, A. (2007). Masturbation in the United States. *Journal of Sex & Marital Therapy*, 33(4), 301-317.
- Davis, J. A. (1959). A formal interpretation of the theory of relative deprivation. *Sociometry*, 22, 280-296.
- Davison, S. L., Bell, R. J., LaChina, M., Holden, S. L., & Davis, S. R. (2008). Sexual function in well women: Stratification by sexual satisfaction, hormone use, and menopause status. *Journal of Sexual Medicine*, 5(5), 1214-1222.

- Dawson, L. H., Shih, M., de Moor, C., & Shrier, L. (2008). Reasons why adolescents and young adults have sex: Associations with psychological characteristics and sexual behavior. *Journal of Sex Research, 45*(3), 225-232.
- Deaux, K. (1979). Self-evaluations of male and female managers. *Sex Roles, 5*(5), 571-580.
- Deenen, A. A., Gijs, L., & van Naerssen, A. X. (1994). Intimacy and sexuality in gay male couples. *Archives of Sexual Behavior, 23*(4), 421-431.
- DeLamater, J. (1987). Gender differences in sexual scenarios. In K. Kelley, & K. Kelley (Eds.), *Females, males, and sexuality: Theories and research*. (pp. 127-139). Albany, NY: State University of New York Press.
- DeLamater, J. (1991). Emotions and sexuality. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships*, (pp. 49-70). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- DeLamater, J., & Hyde, J. (2004). Conceptual and theoretical issues in studying sexuality in close relationships. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships*, (pp. 7-30). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- DeLamater, J., Hyde, J. S., & Fong, M. (2008). Sexual satisfaction in the seventh decade of life. *Journal of Sex & Marital Therapy, 34*(5), 439-454.
- Dennerstein, L., Koochaki, P., & Barton, I. (2006). Hypoactive sexual desire disorder in menopausal women: A survey of western European women. *Journal of Sexual Medicine, 3*(2), 212-222.
- Dennison, R. P., & Russell, S. T. (2005). Positive perspectives on adolescent sexuality: Contributions of the national longitudinal study of adolescent health. *Sexuality Research & Social Policy: A Journal of the NSRC, 2*(4), 54-59.
- Desmarais, S., & Curtis, J. (1997). Gender differences in pay histories and views on pay entitlement among university students. *Sex Roles, 37*(9), 623-642.
- Desmarais, S., Lerner, M. J. (1994). Entitlements in close relationships: A justice-motive analysis. In M. J. Lerner & G. Mikula (Eds.), *Entitlement and the affectional bond: Justice in close relationships*, (pp. 43-63). New York: Plenum.

- Deutsch, M. (1982). Interdependence and psychological orientation. In V. Derlega & J.L. Grzelek (Eds.), *Cooperation and helping behavior: Theories and research*, (pp. 15-42). New York: Academic Press.
- Deutsch, M., & Krauss, R. M. (1965). *Theories in social psychology*. Oxford England: Basic Books.
- Diagnostic and statistical manual of mental disorders (DSM-IV)*. (1994). Washington, D.C.: American Psychiatric Association.
- Diamond, L. M. (2003a). New paradigms for research on heterosexual and sexual-minority development. *Journal of Clinical Child and Adolescent Psychology*, 32(4), 490-498.
- Diamond, L. M. (2003b). Was it a phase? Young women's relinquishment of lesbian/bisexual identities over a 5-year period. *Journal of Personality & Social Psychology*, 84(2), 352-364.
- Diamond, L. M. (2006). Introduction: In search of good sexual-developmental pathways for adolescent girls. *New Directions for Child & Adolescent Development*, 2006(112), 1-7.
- Diamond, L. M. (2008a). Female bisexuality from adolescence to adulthood: Results from a 10-year longitudinal study. *Developmental Psychology*, 44(1), 5-15.
- Diamond, L. M. (2008b). *Sexual fluidity*. Cambridge: Harvard University Press.
- Diamond, L. M., & Lucas, S. (2004). Sexual-minority and heterosexual youths' peer relationships: Experiences, expectations, and implications for well-being. *Journal of Research on Adolescence*, 14(3), 313-340.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Diener, E., Lucas, R. E., & Scollon, C. N. (2006). Beyond the hedonic treadmill: Revising the adaptation theory of well-being. *American Psychologist*, 61(4), 305-314.

- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology, 54*(1), 403.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*(2), 276-302.
- Dion, K. K., & Dion, K. L. (2001). Gender and relationships. In R. K. Unger (Ed.), *Handbook of the psychology of women and gender*, (pp. 256-271). New York: John Wiley & Sons.
- Driver, S. (2007). Beyond 'straight' interpretations: Researching queer youth digital video. In A. L. Best (Ed.), *Representing youth: Methodological issues in critical youth studies*. New York: NYU Press.
- Dunn, K., Croft, P., & Hackett, G. (2000). Satisfaction in the sex life of a general population sample. *Journal of Sex & Marital Therapy, 26*(2), 141-151.
- Ebeling, J., King, M., & Rogers, M. (1977). Hierarchical position in the work organization and job satisfaction: Findings in national survey data. *Human Relations, 32*, 387-394.
- Edwards, J., & Booth, A. (1994). Sexuality, marriage, and well-being: The middle years. In A. S. Rossi (Ed.), *Sexuality across the life course* (pp. 233-259). Chicago, IL: University of Chicago Press.
- Ellis, H. (1913). *Analysis of the sexual impulse, love and pain, the sexual impulse in women* (2nd ed.). Philadelphia, PA: F A Davis.
- Fahs, B. (forthcoming). *Performing sex*. New York: SUNY Press.
- Faulkner, A. H.; Cranston, K. (1998). Correlates of same-sex sexual behavior in a random sample of Massachusetts high school students. *American Journal of Public Health, 88*(2), 262-266.
- Ferenidou, F., Kapoteli, V., Moisisidis, K., Koutsogiannis, I., Giakoumelos, A., & Hatzichristou, D. (2008). Presence of a sexual problem may not affect women's satisfaction from their sexual function. *Journal of Sexual Medicine, 5*(3), 631-639.

- Fergusson, D. M., Horwood, L. J., & Beautrais, A. L. (1999). Is sexual orientation related to mental health problems and suicidality in young people? *Archives of General Psychiatry*, *56*(10), 876-80.
- Fields, J., González, I., Hentz, K., Rhee, M., & White, C. (2008). Learning from and with incarcerated women: Emerging lessons from a participatory action study of sexuality education. *Sexuality Research & Social Policy: A Journal of the NSRC*, *5*(2), 71-84.
- Fine, M. (1988). Sexuality, schooling, and adolescent females: The missing discourse of desire. *Harvard Educational Review*, *58*(1), 29-53.
- Fine, M. (1994). Working the hyphens: Reinventing self and other in qualitative research. In N. K. Denzin, Y. S. Lincoln, N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*. (pp. 70-82). Thousand Oaks, CA US: Sage Publications, Inc.
- Fine, M., & McClelland, S. I. (2007). The politics of teen women's sexuality: Public policy and the adolescent female body. *Emory Law Journal*, *56*(4), 993-1038.
- Fine, M., & McClelland, S. I. (2006). Sexuality education and desire: Still missing after all these years. *Harvard Educational Review*, *76*(3), 297-338.
- Fishman, J. R. (2004). Manufacturing desire: The commodification of female sexual dysfunction. *Social Studies of Science*, *34*(2), 187-218.
- Ford, K., & Lepkowski, J. M. (2004). Characteristics of sexual partners and STD infection among American adolescents. *International Journal of STD & AIDS*, *15*(4), 260-265.
- Freud, S. (1920). *A general introduction to psychoanalysis*. New York, NY: Horace Liveright.
- Freud, S., (1950). *Beyond the pleasure principle: A new translation by James Strachey*. London: The Hogarth Press and Institute of Psycho-Analysis.
- Frith, H., & Kitzinger, C. (2001). Reformulating sexual script theory: Developing a discursive psychology of sexual negotiation. *Theory & Psychology*, *11*(2), 209-232.

- Frohlich, P., & Meston, C. (2002). Sexual functioning and self-reported depressive symptoms among college women. *Journal of Sex Research, 39*(4), 321.
- Frost, D. M., & Bastone, L. M. (2008). The role of stigma concealment in the retrospective high school experiences of gay, lesbian, and bisexual individuals. *Journal of LGBT Youth, 5*(1), 27-36.
- Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals. *Journal of Counseling Psychology, 56*(1), 97-109.
- Gagnon, J. H., & Simon, W. (Ed.). (1970). *The sexual scene*. New York: Aldine Publishing Company.
- Gavey, N. (2005). *Just sex? The cultural scaffolding of rape*. London and New York: Routledge.
- George, L. K., & Bearon, L. B. (1980). *Quality of life in older persons: Meaning and measurement*. New York: Human Sciences Press.
- Gergen, K. (1985). The social constructionist movement in modern psychology. *American Psychologist, 40*, 266-275.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine Publishing Company.
- Gray, J. (1992). *Men Are from Mars, Women Are from Venus*. New York: HarperCollins.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59-82.
- Guo, Y. N., Ng, E. M. L., & Chan, K. (2004). Foreplay, orgasm and after-play among shanghai couples and its integrative relation with their marital satisfaction. *Sexual & Relationship Therapy, 19*(1), 65-78.
- Haavio-Mannila, E., & Kontula, O. (1997). Correlates of increased sexual satisfaction. *Archives of Sexual Behavior, 26*(4), 399.

- Halpern, C. T., Waller, M. W., Spriggs, A., & Hallfors, D. D. (2006). Adolescent predictors of emerging adult sexual patterns. *The Journal of Adolescent Health, 39*(6), 926.e1-10.
- Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspectives. *Feminist Studies, 14*(3), 575–599.
- Harding, S. (1986). *The science question in feminism*. Ithaca: Cornell University Press.
- Harris, K. M. (2008a). *The national longitudinal study of adolescent health (Add Health), Waves I & II, 1994–1996; Wave III, 2001–2002 [machine-readable data file and documentation]*. Chapel Hill, NC: Carolina Population Center, University of North Carolina at Chapel Hill.
- Harris, K. M. (July 24–25, 2008b). Overview of add health study and design. *2008 Add Health Users Conference*, Bethesda, MD.
- Hartsock, N. (1983). The feminist standpoint. In S. Harding and M. B. Hintikka (Eds.), *Discovering Reality* (pp.283-310). London: D. Riedel Publishing Company.
- Hatfield, E. (1965). The effect of self-esteem on romantic liking. *Journal of Experimental Social Psychology, 1*, 184-197.
- Hatfield, E. (1995). Self-esteem and passionate love relationships. In G. G. Brannigan, & M. R. Merrens (Eds.), *The social psychologists: Research adventures*, (pp. 129-143). New York: McGraw-Hill.
- Hatfield, E., Greenberger, D., Traupmann, J., & Lambert, P. (1982). Equity and sexual satisfaction in recently married couples. *Journal of Sex Research, 18*(1), 18.
- Hatfield, E., Rapson, R., & Aumer-Ryan, K. (2008). Social justice in love relationships: Recent developments. *Social Justice Research, 21*(4), 413-431.
- Hatfield, E., Sprecher, S., Pillemer, J. T., & Greenberger, D. (1988). Gender differences in what is desired in the sexual relationship. *Journal of Psychology & Human Sexuality, 1*(2), 39-52.
- Hatfield, E., Walster, G. W., & Berscheid, E. (1978). *Equity: Theory and research*. Boston, MA: Allyn and Bacon.

- Hegarty, P. (2007). Getting dirty: Psychology's history of power. *History of Psychology, 10*(2), 75-91.
- Hegarty, P., & Pratto, F. (2004). The differences that norms make: Empiricism, social constructionism, and the interpretation of group differences. *Sex Roles, 50*(7), 445-453.
- Henderson, A., Lehavot, K., & Simoni, J. (2009). Ecological models of sexual satisfaction among lesbian/bisexual and heterosexual women. *Archives of Sexual Behavior, 38*(1), 50-65.
- Henderson-King, D., & Veroff, J. (1994). Sexual satisfaction and marital well-being in the first years of marriage. *Journal of Social and Personal Relationships, 11*(4), 509-534.
- Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues, 63*(4), 905-925.
- Hill Collins, P. (2000). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. New York: Routledge.
- Hill, C. A., & Preston, L. K. (1996). Individual differences in the experience of sexual motivation: Theory and measurement of dispositional sexual motives. *Journal of Sex Research, 33*(1), 27-45.
- Hite, S. (1976). *The Hite Report*. New York: Macmillan.
- Holland, J., Ramasanoglu, C., Sharpe, S. (1998). *The male in the head: Young people, heterosexuality and power*. London: Tufnell Press.
- Holmberg, D., & Blair, K. L. (2009). Sexual desire, communication, satisfaction, and preferences of men and women in same-sex versus mixed-sex relationships. *Journal of Sex Research, 46*(1), 57-66.
- Hopper, E. & Weyman, A. (1975). Modes of conformity and forms of instrumental adjustment to feelings of relative deprivation. *The British Journal of Sociology, 26*(1), 66-77.
- Horne, S. G. & Bliss, W. J. (2009). Equality discrepancy between women in same-sex relationships: The mediating role of attachment in relationship satisfaction. *Sex Roles, 60*(9-10), 721-730.

- Horne, S. G. & Zimmer-Gembeck, M. J. (2006). The Female Sexual Subjectivity Inventory: Development and validation of a multidimensional inventory for late adolescents and emerging adults. *Psychology of Women Quarterly*, 30(2), 125-138.
- Horne, S. G., & Zimmer-Gembeck, M. (2005). Female sexual subjectivity and well-being: Comparing late adolescents with different sexual experiences. *Sexuality Research & Social Policy: A Journal of the NSRC*, 2(3), 25-40.
- Hudson, W. W., Harrison, D. F., & Croscup, P. C. (1981). A short-form scale to measure sexual discord in dyadic relationships. *The Journal of Sex Research*, 17(2), 157-174.
- Hughes, D., Seidman, E., & Williams, N. (1993). Cultural phenomena and the research enterprise: Toward a culturally anchored methodology. *American Journal of Community Psychology*, 21(6), 687-703.
- Hurlbert, D. F., & Apt, C. (1993). Female sexuality: A comparative study between women in homosexual and heterosexual relationships. *Journal of Sex & Marital Therapy*, 19(4), 315-327.
- Hurlbert, D. F., & Apt, C. (1994). What constitutes sexual satisfaction? Directions for future research. *Sexual & Marital Therapy*, 9(3), 285-289.
- Hurlbert, D. F., Apt, C., & Rabehl, S. M. (1993). Key variables to understanding female sexual satisfaction: An examination of women in nondistressed marriages. *Journal of Sex & Marital Therapy*, 19(2), 154-165.
- Hyde, J. S., & Jaffee, S. R. (2000). Becoming a heterosexual adult: The experiences of young women. *Journal of Social Issues*, 56(2), 283.
- Hyde, J. S., & Lindberg, S. M. (2007). Facts and assumptions about the nature of gender differences and the implications for gender equity. In S. S. Klein, et al. (Eds.), *Handbook for achieving gender equity through education (2nd ed.)*. (pp. 19-32). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- lasenza, S. (2008). Queering the new view. *Feminism & Psychology*, 18(4), 537-545.
- Impett, E. A., & Tolman, D. L. (2006). Late adolescent girls' sexual experiences and sexual satisfaction. *Journal of Adolescent Research*, 21(6), 628-646.

- Impett, E. A., Schooler, D., & Tolman, D. L. (2006). To be seen and not heard: Femininity ideology and adolescent girls' sexual health. *Archives of Sexual Behavior, 35*(2), 131-144.
- Josselson, R. (2004). The hermeneutics of faith and the hermeneutics of suspicion. *Narrative Inquiry, 14*(1), 1-28.
- Kaestle, C. E., & Halpern, C. T. (2007). What's love got to do with it? Sexual behaviors of opposite-sex couples through emerging adulthood. *Perspectives on Sexual & Reproductive Health, 39*(3), 134-140.
- Kahn, A. S. (2001). Entitlement and sexuality: An exploration of the relationship between entitlement level and female sexual attitudes, behaviors, and satisfaction. *Dissertation Abstracts International, B, the Sciences and Engineering, 62*(2), 1086.
- Kaplan, Helen (1974). *The new sex therapy: Active treatment of sexual dysfunctions*. New York: Brunner/Mazel.
- Karapetoff, W. (1903). On life-satisfaction. *American Journal of Sociology, 8*(5), 681-686.
- Kaschak, E., Tiefer, L., (Eds.). (2001). *A new view of women's sexual problems*. New York: The Haworth Press, Inc.
- Kedde, H., & van Berlo, W. (2006). Sexual satisfaction and sexual self images of people with physical disabilities in the Netherlands. *Sexuality & Disability, 24*(1), 53-68.
- Kertzner, R. (2007). Developmental issues in lesbian and gay adulthood. In I. H. Meyer & M. E. Northridge (Eds.), *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual, and transgender populations*, (pp. 48-64). New York, NY US: Springer Science + Business Media.
- Kimmel, M. S. (1987). *Changing men: New directions in research on men and masculinity*. Thousand Oaks, CA: Sage Publications, Inc.
- Kinsey, A. C., Pomeroy, W. B. & Martin, C. E. (1948). *Sexual behavior in the human male*. Bloomington: Indiana U. Press.

- Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). *Sexual behavior in the human female*. Bloomington: Indiana U. Press.
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology (2nd ed.)*. Thousand Oaks, CA: Sage.
- Kitson, H. D. (1923). Understanding the consumer's mind. *Annals of the American Academy of Political & Social Science*, 110, 131-138
- Kitson, H. D. (1927). *The mind of the buyer: The psychology of selling*. New York: MacMillan Co.
- Kitzinger, C. (1986). Introducing and developing Q as a feminist methodology: A study of accounts of lesbianism. In S. Wilkinson (Ed.), *Feminist social psychology: Developing theory and practice* (pp. 151-172). Stony Stratford, UK: Keynes.
- Kitzinger, C. (2001). Sexualities. In R. K. Unger (Ed.), *Handbook of the psychology of women and gender*. (pp. 272-285). Hoboken, NJ: John Wiley & Sons Inc.
- Kling, K. C., Hyde, J. S., Showers, C. J., & Buswell, B. N. (1999). Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*, 125(4), 470-500.
- Knight, G., & Hill, N. (1998). Measurement equivalence in research involving minority adolescents. In V. C. McLoyd & L. D. Steinberg (Eds.), *Studying minority adolescents: Conceptual, methodological, and theoretical issues* (pp. 183-210). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Kurdek, L. (1991). Sexuality in homosexual and heterosexual couples. In K. McKinney & S. Sprecher (Eds.), *Sexuality in close relationships* (pp. 177-191). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Lacey, H. P., Fagerlin, A., Loewenstein, G., Smith, D. M., Riis, J., & Ubel, P. A. (2008). Are they really that happy? Exploring scale recalibration in estimates of well-being. *Health Psychology*, 27(6), 669-675.
- Lather, P. (2007). *Getting lost: Feminist efforts toward a double(d) science*. New York: State University of New York Press.

- Laumann, E. O., Gagnon, J. H., Michael, R. T., Michaels, S. (1994). *The social organization of sexuality sexual practices in the United States*. Chicago: University of Chicago Press.
- Lawrance, K., & Byers, E. S. (1992). Development of the interpersonal exchange model of sexual satisfaction in long term relationships. *Canadian Journal of Human Sexuality*, 1(3), 123-128.
- Lawrance, K., & Byers, E. S. (1995). Sexual satisfaction in long-term heterosexual relationships: The interpersonal exchange model of sexual satisfaction. *Personal Relationships*, 2(4), 267-285.
- Lawrance, K., Byers, E.S. (1998). Interpersonal exchange model of sexual satisfaction questionnaire. In Davis, C.M., Yarber, W.L., Bauserman, R., Schreer, G., Davis, S.L. (Eds.), *Handbook of sexuality related measures*, (pp. 514-519). Thousand Oaks, CA: Sage.
- Lazarus, R. S. (1968). Emotions and adaptation: Conceptual and empirical relations. In W. J. Arnold (Ed.), *Nebraska Symposium on Motivation* (Vol. 16, pp. 175-270). Lincoln: University of Nebraska Press.
- Lerner, M. J. and Lerner, S. C. (1981). *The justice motive in social behavior: Adapting to times of scarcity and change*. New York: Plenum.
- Lever, J. (1994, August 23). Sexual revelations: The 1994 Advocate survey of sexuality and relationships: The men. *The Advocate*, 661/662, 16-24.
- Levin, R. J., & Wylie, K. (2008). Vaginal vasomotion—Its appearance, measurement, and usefulness in assessing the mechanisms of vasodilatation. *Journal of Sexual Medicine*, 5(2), 377-386.
- Lewin, K. (1935) *A dynamic theory of personality*. New York: McGraw-Hill.
- Lewin, K. (1936) *Principles of topological psychology*. New York: McGraw-Hill.
- Lewin, K. (1951) *Field theory in social science: Selected theoretical papers*. New York: Harper & Row.
- Lewin, K., Dembo, T., Festinger, L. & Sears, P.A. (1944). Level of aspiration. In J. McHunt (Ed.), *Personality and the behavior disorders*, (pp. 333–378). New York: Ronald Press.

- Lewis, M. D. (2005). Bridging emotion theory and neurobiology through dynamic systems modeling. *Behavioral and Brain Sciences*, 28(2), 169-245.
- Lindley, L. L., Barnett, C. L., Brandt, H. M., Hardin, J. W., & Burcin, M. (2008). STDs among sexually active female college students: Does sexual orientation make a difference? *Perspectives on Sexual & Reproductive Health*, 40(4), 212-217.
- Liu, C. (2003). Does quality of marital sex decline with duration? *Archives of Sexual Behavior*, 32(1), 55.
- Lloyd, E. A. (2005). *The case of the female orgasm: Bias in the science of evolution*. Cambridge: Harvard University Press.
- Lyubomirsky, S., & Dickerhoof, R. (2006). Subjective well-being. In J. Worell, C. D. Goodheart, J. Worell & C. D. Goodheart (Eds.), *Handbook of girls' and women's psychological health: Gender and well-being across the lifespan*, (pp. 166-174). New York, NY: Oxford University Press.
- Machado, A., & Silva, F. J. (2007). Toward a richer view of the scientific method: The role of conceptual analysis. *American Psychologist*, 62(7), 671-681.
- MacNeil, S., & Byers, E. (1997, December). The relationships between sexual problems, communication, and sexual satisfaction. *Canadian Journal of Human Sexuality*, 6(4), 277-283.
- Major, B. (1994). From social inequality to personal entitlement: The role of social comparisons, legitimacy appraisals, and group membership. In M. P. Zanna, (Ed.), *Advances in experimental social psychology*, vol. 26. (pp. 293-355). San Diego, CA: Academic Press.
- Major, B., McFarlin, D.B., & Gagnon, D. (1984). Overworked and underpaid: On the nature of gender differences in personal entitlement. *Journal of Personality & Social Psychology*, 47, 1399-1412.
- Masters, W. H. & Johnson, V. E. (1966). *Human sexual response*. New York: Bantam Books.
- Masters, W. H. & Johnson, V. E. (1970). *Human sexual inadequacy*. New York: Bantam Books.

- Matthews, A., Hughes, T., & Tartaro, J. (2006). Sexual behavior and sexual dysfunction in a community sample of lesbian and heterosexual women. In A. M. Omoto & H. S. Kurtzman (Eds.), *Sexual orientation and mental health: Examining identity and development in lesbian, gay, and bisexual people*, (pp. 185-205). Washington, DC: American Psychological Association.
- Mays, V., & Cochran, S. (2001). Mental health correlates of perceived discrimination among lesbian, gay, and bisexual adults in the United States. *American Journal of Public Health, 91*(11), 1869-1876.
- McCartney, K., & Rosenthal, R. (2000). Effect size, practical importance, and social policy for children. *Child Development, 71*(1), 173-180.
- McClelland, S.I. and Fine, M. (2008). Writing *on* cellophane: Studying teen women's sexual desires; Inventing methodological release points. In K. Gallagher (Ed.), *The Methodological Dilemma: Critical and Creative Approaches to Qualitative Research*. London: Routledge.
- McNulty, J. K., & Fisher, T. D. (2008). Gender differences in response to sexual expectancies and changes in sexual frequency: A short-term longitudinal study of sexual satisfaction in newly married couples. *Archives of Sexual Behavior, 37*(2), 229-240.
- Medvec, V. H., & Savitsky, K. (1997). When doing better means feeling worse: The effects of categorical cutoff points on counterfactual thinking and satisfaction. *Journal of Personality & Social Psychology, 72*(6), 1284-1296.
- Messick, S. (1980). Test validity and the ethics of assessment. *American Psychologist, 35*(11), 1012-1027.
- Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist, 50*(9), 741-749.
- Meston, C. & Trapnell, P. (2005). Development and validation of a five-factor sexual satisfaction and distress scale for women: The sexual satisfaction scale for women (SSS-W). *Journal of Sexual Medicine, 2*, pp. 66-81.
- Meston, C. M., & Buss, D. M. (2007). Why humans have sex. *Archives of Sexual Behavior, 36*(4), 477-507.

- Meston, C. M., & Heiman, J. R. (2000). Sexual abuse and sexual function: An examination of sexually relevant cognitive processes. *Journal of Consulting and Clinical Psychology, 68*(3), 399-406.
- Meston, C. M., Levin, R. J., Sipski, M. L., Hull, E. M., & Heiman, J. R. (2004). Women's orgasm. *Annual Review of Sex Research, 15*, 173-257.
- Meston, C. M., & Trapnell, P. (2005). Development and validation of a five-factor sexual satisfaction and distress scale for women: The sexual satisfaction scale for women (SSS-W). *Journal of Sexual Medicine, 2*(1), 66-81.
- Metz, M. E., & McCarthy, B. W. (2007). The "good-enough sex" model for couple sexual satisfaction. *Sexual & Relationship Therapy, 22*(3), 351-362.
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health & Social Behavior, 36*(1), 38-56.
- Meyer, I. H. (2003a). Prejudice as stress: Conceptual and measurement problems. *American Journal of Public Health, 93*(2), 262-265.
- Meyer, I. H. (2003b). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin, 129*(5), 674-697.
- Michalos, A. C. (1985). Multiple discrepancies theory (MDT). *Social Indicators Research, 16*, 347-414.
- Mongeau, P. A., & Johnson, K. L. (1995). Predicting cross-sex first-date sexual expectations and involvement: Contextual and individual difference factors. *Personal Relationships, 2*(4), 301-312.
- Morawski, J. (2005). Moving gender, positivism and feminist possibilities. *Feminism & Psychology, 15*(4), 408-414.
- Morrison, D. E. (1971). Some notes toward theory on relative deprivation, social movements and social change. *American Behavioral Scientist, 14*(5), 675-690.
- Morrow, S. L., Fassinger, R. E., Hawxhurst, D. & Tozer, E. (forthcoming). Beyond lesbian bed death: Sex in long-term relationships between women. In R.E. Fassinger & S.L. Morrow (Eds.), *Sex in the Margins: Erotic Experiences and*

*Behaviors of Sexual Minorities*. Washington, DC: American Psychological Association Books.

- Morse, J. (1994). Emerging from the data: The cognitive processes of analysis in qualitative inquiry. In J. Morse (Ed.), *Critical issues in qualitative research methods* (pp. 23-43). Thousand Oaks CA: Sage.
- Mulhall, J. P., King, R., Kirby, M., Hvidsten, K., Symonds, T., Bushmakin, A. G., et al. (2008a). Evaluating the sexual experience in men: Validation of the sexual experience questionnaire. *The Journal of Sexual Medicine*, 5(2), 365-376.
- Mulhall, J., King, R., Glina, S., & Hvidsten, K. (2008b). Importance of and satisfaction with sex among men and women worldwide: Results of the global better sex survey. *The Journal of Sexual Medicine*, 5(4), 788-795.
- NIH consensus conference. (1993). Impotence. NIH consensus development panel on impotence. *JAMA: The Journal of the American Medical Association*, 270(1), 83-90.
- Norsworthy, N. & Whitley, M. T. (1918). Tendencies accompanied by affective states. In N. Norsworthy & M. T. Whitley (Eds.), *The psychology of childhood*, (pp. 82-96). New York, NY, US: MacMillan Co.
- Oggins, J., Leber, D., & Veroff, J. (1993). Race and gender differences in black and white newlyweds' perceptions of sexual and marital relations. *Journal of Sex Research*, 30(2), 152-161.
- Oishi, S., Schimmack, U., & Diener, E. (2001). Pleasures and subjective well-being. *European Journal of Personality*, 15(2), 153-167.
- Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114(1), 29.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- Opatow, S. (1990). Moral exclusion and injustice: An introduction. *Journal of Social Issues*, 46(1), 1-20.

- 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*, (9-24). Hillsdale, NJ: Erlbaum.
- O'Sullivan, L. F. (2005). The social and relationship contexts and cognitions associated with romantic and sexual experiences of early-adolescent girls. *Sexuality Research & Social Policy: A Journal of the NSRC*, 2(3), 13-24.
- Otis, M. D., Riggle, E. D. B., & Rostosky, S. S. (2006). Impact of mental health on perceptions of relationship satisfaction and quality among female same-sex couples. *Journal of Lesbian Studies*, 10(1), 267-283.
- Ott, M. A., Millstein, S. G., Ofner, S., & Halpern-Felsher, B. (2006). Greater expectations: Adolescents' positive motivations for sex. *Perspectives on Sexual & Reproductive Health*, 38(2), 84-89.
- Ozer, D. J. (1985). Correlation and the coefficient of determination. *Psychological Bulletin*, 97(2), 307-315.
- Peplau, L. A., & Fingerhut, A. W. (2007). The close relationships of lesbians and gay men. *Annual Review of Psychology*, 58(1), 405-424.
- Peplau, L. A., Fingerhut, A., & Beals, K. P. (2004). Sexuality in the relationships of lesbians and gay men. In J. H. Harvey, A. Wenzel, S. Sprecher, J. H. Harvey, A. Wenzel & S. Sprecher (Eds.), *The handbook of sexuality in close relationships*, (pp. 349-369). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Peplau, L., Cochran, S., & Mays, V. (1997). A national survey of the intimate relationships of African American lesbians and gay men: A look at commitment, satisfaction, sexual behavior, and HIV disease. In B. Greene (Ed.), *Ethnic and cultural diversity among lesbians and gay men*, (pp. 11-38). Thousand Oaks, CA US: Sage Publications, Inc.
- Peterson, Z. D., & Muehlenhard, C. L. (2007). Conceptualizing the "wantedness" of women's consensual and nonconsensual sexual experiences: Implications for how women label their experiences with rape. *Journal of Sex Research*, 44(1), 72-88.
- Pfaus, J. G. (2007). Models of sexual motivation. In E. Janssen, & E. Janssen (Eds.), *The psychophysiology of sex*. (pp. 340-362). Bloomington, IN: Indiana University Press.

- Phillips, L. M. (2000). *Flirting with danger: Young women's reflections on sexuality and domination*. New York, NY US: New York University Press.
- Pinney, E. M., Gerrard, M., & Denney, N. W. (1987). The Pinney sexual satisfaction inventory. *Journal of Sex Research, 23*(2), 233.
- Pitt, A., & Britzman, D. P. (2003). Speculations on qualities of difficult knowledge in teaching and learning: an experiment in psychoanalytic research. *Qualitative Studies in Education, 16*(6), 755-776.
- Plante, R. (2005) *Sexualities in Context: A Social Perspective*. Boulder, CO: Westview Press.
- Plante, R. F. (2007). In search of sexual subjectivities: Exploring the sociological construction of sexual selves. In M. Kimmel (Ed.), *The sexual self: The construction of sexual scripts*, (pp. 31-49). Nashville, TN: Vanderbilt University Press.
- Pluhar, E. (2007). Childhood sexuality. In M. S. Tepper, A. F. Owens, M. S. Tepper & A. F. Owens (Eds.), *Sexual health Vol. 1: Psychological foundations*, (pp. 155-181). Westport, CT: Praeger Publishers/Greenwood Publishing Group.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.
- Poffenberger, A. T. (1925). An inventory of human desires. In: A. T. Poffenberger (Ed.), *Psychology in advertising*, (pp. 42-81). New York, NY: McGraw-Hill Book Company.
- Prior, L. (2008). Researching documents: Emergent methods. In S. Hesse-Biber & P. Leavy (Eds.), *Handbook of Emergent Methods*. New York: Guilford.
- Purdon, C., & Holdaway, L. (2006). Non-erotic thoughts: Content and relation to sexual functioning and sexual satisfaction. *Journal of Sex Research, 43*(2), 154-162.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*(3), 385-401.

- Raley, R. K., Crissey, S., & Muller, C. (2007). Of sex and romance: Late adolescent relationships and young adult union formation. *Journal of Marriage & Family*, 69(5), 1210-1226.
- Raphael, D., Rukholm, E., Brown, I., Hill-Bailey, P., & Donato, E. (1996). The quality of life profile—Adolescent version: Background, description, and initial validation. *Journal of Adolescent Health*, 19(5), 366-375.
- Renaud, C., Byers, E. S., & Pan, S. (1997). Sexual and relationship satisfaction in mainland china. *Journal of Sex Research*, 34(4), 399-410.
- Revenson, T. (1990). All other things are not equal: An ecological approach to personality and disease. In H. S. Friedman (Ed.), *Personality and disease* (pp. 65-94). Oxford England: John Wiley & Sons.
- Ricoeur, P. (1970). *Freud and philosophy: An essay on interpretation*. New Haven: Yale University Press.
- Rogler, L. H. (1999). Methodological sources of cultural insensitivity in mental health research. *American Psychologist*, 54(6), 424.
- Rosen, R. C., & Bachmann, G. A. (2008). Sexual well-being, happiness, and satisfaction, in women: The case for a new conceptual paradigm. *Journal of Sex & Marital Therapy*, 34(4), 291-297.
- Rosen, R., Brown, C., Heiman, J., Leiblum, S., Meston, C., Shabsigh, R., et al. (2000). The female sexual function index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. *Journal of Sex & Marital Therapy*, 26(2), 191-208.
- Rosen, R. C., Cappelleri, J. C., & Gendrano III, N. (2002). The international index of erectile function (IIEF). *International Journal of Impotence Research*, 14(4), 226.
- Rosen, R., Riley, A., Wagner, G., Osterloh, I. H., Kirkpatrick, J., & Mishra, A. (1997). The International Index of Erectile Function (IIEF): A multidimensional scale for assessment of erectile dysfunction. *Urology*, 49: 822–830.
- Rosenberg, M. (1989). *Society and the adolescent self-image*. Middletown, CT: Wesleyan University Press.

- Rostosky, S. S., Dekhtyar, O., Cupp, P. K., & Anderman, E. M. (2008). Sexual self-concept and sexual self-efficacy in adolescents: A possible clue to promoting sexual health? *Journal of Sex Research, 45*(3), 277-286.
- Rostosky, S. S., Riggle, E. D. B., Miller, A. D., & Horne, S. G. (2009). Marriage amendments and psychological distress in lesbian, gay, and bisexual (LGB) adults. *Journal of Counseling Psychology, 56*(1), 56-66.
- Rothblum, E. D. (1994). Transforming lesbian sexuality. *Psychology of Women Quarterly, 18*(4), 627.
- Rothblum, E. D. (2000). Sexual orientation and sex in women's lives: Conceptual and methodological issues. *Journal of Social Issues, 56*(2), 193-204.
- Rothblum, E. D. (2007). From science fiction to computer-generated technology: Sampling lesbian, gay, and bisexual individuals. In I. H. Meyer, M. E. Northridge, I. H. Meyer & M. E. Northridge (Eds.), *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual, and transgender populations*. (pp. 442-454). New York, NY US: Springer Science + Business Media.
- Rubin, G. (1984). Thinking sex: Notes for a radical theory of the politics of sexuality. In C. S. Vance (Ed.), *Pleasure and danger*. Boston: Routledge & Kegan Paul.
- Runciman, W. C. (1966). *Relative deprivation and social justice*. London: Routledge and Kegan Paul.
- Rusbult, C. E., & Van Lange, Paul A. M. (2003). Interdependence, interaction and relationships. *Annual Review of Psychology, 54*, 351-375.
- Russell, S. T. (2003). Sexual minority youth and suicide risk. *American Behavioral Scientist, 46*(9), 1241.
- Russell, S. T. (2005a). Conceptualizing positive adolescent sexuality development. *Sexuality Research Social Policy, 2*(3), 4.
- Russell, S. T. (2005b). Introduction to positive perspectives on adolescent sexuality: Part 1. *Sexuality Research & Social Policy: A Journal of the NSRC, 2*(3), 1-3.

- Russell, S. T., & Consolacion, T. B. (2003). Adolescent romance and emotional health in the united states: Beyond binaries. *Journal of Clinical Child and Adolescent Psychology, 32*(4), 499-508.
- Russell, S. T., Franz, B. T., & Driscoll, A. K. (2001). Same-sex romantic attraction and experiences of violence in adolescence. *American Journal of Public Health, 91*(6), 903-906.
- Ryan, S., Franzetta, K., Manlove, J., & Schelar, E. (2008). Older sexual partners during adolescence: Links to reproductive health outcomes in young adulthood. *Perspectives on Sexual & Reproductive Health, 40*(1), 17-26.
- Ryff, C. D., Keyes, C. L. M., & Hughes, D. L. (2003). Status inequalities, perceived discrimination, and eudaimonic well-being: Do the challenges of minority life hone purpose and growth? *Journal of Health & Social Behavior, 44*(3), 275-291.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*(6), 1069-1081.
- Ryff, C. D., & Singer, B. H. (2006). Best news yet on the six-factor model of well-being. *Social Science Research, 35*(4), p1103-1119.
- Sabatelli, R. M., & Pearce, J. (1986). Exploring marital expectations. *Journal of Social and Personal Relationships, 3*(3), 307-321.
- Sanchez, D. T., Crocker, J., & Boike, K. R. (2005). Doing gender in the bedroom: Investing in gender norms and the sexual experience. *Personality and Social Psychology Bulletin, 31*(10), 1445-1455.
- Sanchez, D. T., Kiefer, A. K., & Ybarra, O. (2006). Sexual submissiveness in women: Costs for sexual autonomy and arousal. *Personality and Social Psychology Bulletin, 32*(4), 512-524.
- Sanders, S. A., & Reinisch, J. M. (1999). Would you say you "had sex" if...? *JAMA: Journal of the American Medical Association, 281*(3), 275-277.
- Sandvik, E., Diener, E., & Seidlitz, L. (1993). Subjective well-being: The convergence and stability of self-report and non-self-report measures. *Journal of Personality, 61*(3), 317-342.

- Santelli, J. S., Lindberg, L. D., Abma, J., McNeely, C. S., & Resnick, M. (2000). Adolescent sexual behavior: Estimates and trends from four nationally representative surveys. *Family Planning Perspectives, 32*(4), 156-194.
- Savin-Williams, R. C., & Diamond, L. M. (2004). Sex. In R. M. Lerner, L. Steinberg, R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology (2nd ed.)*, (pp. 189-231). Hoboken, NJ: John Wiley & Sons Inc.
- Savin-Williams, R. C., & Cohen, K. (2007). Development of same-sex attracted youth. In I. H. Meyer & M. E. Northridge (Eds.), *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual, and transgender populations*, (pp. 27-47). New York, NY: Springer Science + Business Media.
- Savin-Williams, R. C., & Ream, G. L. (2007). Prevalence and stability of sexual orientation components during adolescence and young adulthood. *Archives of Sexual Behavior, 36*(3), 385-394.
- Savin-Williams, R. C. (2005). *The new gay teenager*. Cambridge, MA, US: Harvard University Press.
- Schwartz, C. E. & Sprangers, M. A. G. (2000). Methodological approaches for assessing response shift in longitudinal health-related quality-of-life research. In C. E. Schwartz & M. A. G. Sprangers (Eds.), *Adaptation to changing health: Response shift in quality-of-life research*, pp. 81-107. Washington, DC, US: American Psychological Association.
- Seligson, H. (Feb. 9, 2009). The orgasm gap. *The Daily Beast*. Accessed April 23, 2009: <http://www.thedailybeast.com/blogs-and-stories/2009-02-09/the-orgasm-gap/>.
- Shaw, M. A. (1907). Some facts of the practical life and their satisfaction. *International Journal of Ethics, 17*, 425-436.
- Sherif, M., & Cantril, H. (1945). The psychology of 'attitudes': Part I. *Psychological Review, 52*(6), 295-319.
- Shontz, F. (1965). *Research methods in personality*. New York: Appleton Crofts.
- Singer, J., & Singer, I. (1972). Types of female orgasm. *Journal of Sex Research, 8*(4), 255-267.

- Snell, W. E., & Papini, D. R. (1989). The Sexuality Scale: An instrument to measure sexual-esteem, sexual-depression, and sexual-preoccupation. *The Journal of Sex Research*, 26, 256-263.
- Snitow, A., Stansell, C., & Thompson, S. (Eds.). (1983). *Powers of desire: The politics of sexuality*. New York: Monthly Review Press.
- Snow, A. J. (1925). *Psychology in business relations*. Washington, D.C: American Psychological Association.
- Sprecher, S. (2002). Sexual satisfaction in premarital relationships: Associations with satisfaction, love, commitment, and stability. *Journal of Sex Research*, 39(3), 190.
- Sprecher, S., & Cate, R. M. (2004). Sexual satisfaction and sexual expression as predictors of relationship satisfaction and stability. In J. H. Harvey, A. Wenzel, S. Sprecher, J. H. Harvey, A. Wenzel & S. Sprecher (Eds.), *The handbook of sexuality in close relationships*. (pp. 235-256). Mahwah, NJ US: Lawrence Erlbaum Associates Publishers.
- Sprecher, S., & McKinney, K. (1993). *Sexuality*. Thousand Oaks, CA US: Sage Publications, Inc.
- Stainton Rogers, R. (1995) Q methodology. In Smith, J.A., Harre, R. & Van Longenhove, I. (Eds.), *Rethinking methods in psychology*, (pp. 178–193). London: Sage.
- Steil, J. M. (1994). Equality and entitlement in marriage: Benefits and barriers. In M. J. Lerner, G. Mikula, M. J. Lerner & G. Mikula (Eds.), *Entitlement and the affectional bond: Justice in close relationships*. (pp. 229-258). New York, NY US: Plenum Press.
- Steil, J. M. (1997). *Marital equality: Its relationship to the well-being of husbands and wives*. Thousand Oaks, CA: Sage Publications.
- Steil, J. M. (2001). Family forms and member well-being: A research agenda for the decade of behavior. *Psychology of Women Quarterly*, 25(4), 344.
- Steil, J. M., & Hoffman, L. (2006). Gender conflict and the family. In M. Deutsch, P. T. Coleman & E. C. Marcus (Eds.), *The handbook of conflict resolution: Theory and practice* (2nd ed., pp. 223-240). New York: John Wiley & Sons Inc.

- Stewart, A. J., & McDermott, C. (2004). Gender in psychology. *Annual Review of Psychology, 55*, 519-544.
- Stouffer, S. A., Suchman, E. A., DeVinney, L. C., Star, S. A., & Williams, R. M., Jr. (1949). *The American soldier: Adjustment during army life, volume I*. Princeton, NJ: Princeton University Press.
- Tabachnick, B. G., and Fidell, L. S. (2007). *Using multivariate statistics, 5th ed.* Boston: Allyn and Bacon.
- Sandfort, T. G. M., de Graaf, R., Bijl, R. V., & Schnabel, P. (2001). Same-sex sexual behavior and psychiatric disorders: Findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Archives of General Psychiatry, 58*(1), 85-91.
- Thibaut, J. W., and Kelley, H. H. (1959). *The social psychology of groups*. New York: John Wiley & Sons.
- Thorndike, E. L. (1919). Original satisfiers and annoyers. In E. L. Thorndike (Ed.), *Educational psychology: Briefer course*, (pp. 50-58). New York: Columbia University Press.
- Tiefer, L. (1996). The medicalization of sexuality: Conceptual, normative, and professional issues. *Annual Review of Sex Research, 7*, 252.
- Tiefer, L. (2001). Arriving at a 'New View' of women's sexual problems: Background, theory, and activism. *Women & Therapy, 24*(1), 63.
- Tiefer L. (2004). *Sex is not A natural act & other essays* (2nd ed.). USA: Westview Press.
- Tolman, D. L. (1994). Doing desire: Adolescent girls' struggles for/with sexuality. *Gender & Society, 8*(3), 324-342.
- Tolman, D. L. (2001a). Echoes of sexual objectification: Listening for one girl's erotic voice. In D. L. Tolman & M. Brydon-Miller (Eds.), *From subjects to subjectivities: A handbook of interpretive and participatory methods*. (pp. 130-144). New York, NY: New York University Press.

- Tolman, D. L. (2001b). Female adolescent sexuality: An argument for a developmental perspective on the new view of women's sexual problems. *Women & Therapy, 24*(1), 195.
- Tolman, D. L. (2005). Found(ing) discourses of desire: Unfettering female adolescent sexuality. *Feminism & Psychology, 15*(1), 5-9.
- Tolman, D. L., & Szalacha, L. A. (1999). Dimensions of desire. *Psychology of Women Quarterly, 23*(1), 7-39.
- Tolman, D. L., Striepe, M. I., & Harmon, T. (2003). Gender matters: Constructing a model of adolescent sexual health. *Journal of Sex Research, 40*(1), 4.
- Traubmann, J., Hatfield, E., & Wexler, P. (1983). Equity and sexual satisfaction in dating couples. *British Journal of Social Psychology, 22*(1), 33-40.
- Traubmann, J., Petersen, R., Utne, M., & Hatfield, E. (1981). Measuring equity in intimate relations. *Applied Psychological Measurement, 5*(4), 467-480.
- Trochim, W. K. (2006). *Idea of construct validity*. Access April 23, 2009: <http://www.socialresearchmethods.net/kb/considea.php>
- Tunuguntla, H. S. (2006). Female sexual dysfunction following vaginal surgery: A review. *The Journal of Urology, 175* (2), 439.
- Twenge, J. M., & Crocker, J. (2002). Race and self-esteem: Meta-analyses comparing whites, blacks, Hispanics, Asians, and American Indians and comment on Gray-Little and Hafdahl (2000). *Psychological Bulletin, 128*(3), 371.
- Udry, J. R. (2001). *References, instruments, and questionnaires consulted in the development of the add health in-home adolescent interview*. Retrieved March 16, 2009: <http://www.cpc.unc.edu/projects/addhealth/data/using/guides/refer.pdf>
- Ussher, J. M. (2005). The meaning of sexual desire: Experiences of heterosexual and lesbian girls. *Feminism & Psychology, 15*(1), 27-32.
- Utne, M. K., Hatfield, E., Traubmann, J., & Greenberger, D. (1984). Equity, marital satisfaction, and stability. *Journal of Social and Personal Relationships, 1*(3), 323-332.

- Vance, C. S. (Ed.). (1984). *Pleasure and danger: Exploring female sexuality*. Boston: Routledge and Kegan Paul.
- Vangelisti, A. L., & Daly, J. A. (1997). Gender differences in standards for romantic relationships. *Personal Relationships*, 4(3), 203-219.
- Vaquera, E., & Kao, G. (2008). Do you like me as much as I like you? Friendship reciprocity and its effects on school outcomes among adolescents. *Social Science Research*, 37(1), 55-72.
- Veenhoven, R. (2005). Apparent quality-of-life in nations: How long and happy people live. *Social Indicators Research*, 71(1-3), 61-86.
- Waite, L. J., & Joyner, K. (2001). Emotional satisfaction and physical pleasure in sexual unions: Time horizon, sexual behavior, and sexual exclusivity. *Journal of Marriage & Family*, 63(1), 247.
- Walker, I. & Heather J. Smith, H. J. (2001). *Relative deprivation: Specification, development, and integration*. Cambridge: Cambridge University Press.
- Warkentin, K. M., Gray, R. E., & Wassersug, R. J. (2006). Restoration of satisfying sex for a castrated cancer patient with complete impotence: A case study. *Journal of Sex & Marital Therapy*, 32(5), 389-399.
- Warr, D. J. (2001). The importance of love and understanding: Speculation on romance in safe sex health promotion. *Women's Studies International Forum*, 24(2), 241.
- Weaver, D. & Brickman, P. (1974). Expectancy, feedback, and disconfirmation as independent factors in outcome satisfaction. *Journal of Personality and Social Psychology*, 30, 420-428.
- Webster, P. (1984). The forbidden: Eroticism and taboo. In C.S. Vance (Ed.), *Pleasure and danger: Exploring female sexuality*. Boston: Routledge and Kegan Paul.
- Weinberger, D., & Schwartz, G. (1990). Distress and restraint as superordinate dimensions of self-reported adjustment: A typological perspective. *Journal of Personality*, 58(2), 381-417.
- Weis, D. L. (1998a). The use of theory in sexuality research. *Journal of Sex Research*, 35(1), 1-9.

- Weis, D. L. (1998b). Conclusion: The state of sexual theory. *Journal of Sex Research*, 35(1), 100-114.
- Whitaker, D. J., Saltzman, L. S., Haileyesus, T., & Swahn, M. (2007). Differences in frequency of violence and reported injury between relationships with reciprocal and nonreciprocal intimate partner violence. *American Journal of Public Health*, 97(5), 941-947.
- Whitley, M. P., & Poulsen, S. B. (1975). Assertiveness and sexual satisfaction in employed professional women. *Journal of Marriage & Family*, 37(3), 573-581.
- Wight, D., Parkes, A., Strange, V., Allen, E., Bonell, C., & Henderson, M. (2008). The quality of young People's heterosexual relationships: A longitudinal analysis of characteristics shaping subjective experience. *Perspectives on Sexual & Reproductive Health*, 40(4), 226-237.
- Wild, L., Flisher, A., Bhana, A., & Lombard, C. (2004). Associations among adolescent risk behaviours and self-esteem in six domains. *Journal of Child Psychology & Psychiatry*, 45(8), 1454-1467.
- Wood, J. M., Koch, P. B., & Mansfield, P. K. (2006). Women's sexual desire: A feminist critique. *Journal of Sex Research*, 43(3), 236-244.
- Wood, J. T. (2001). The normalization of violence in heterosexual romantic relationships: Women's narratives of love and violence. *Journal of Social and Personal Relationships*, 18(2), 239-261.
- Woodward, J. M. B., Hass, S. L., & Woodward, P. J. (2002). Reliability and validity of the sexual life quality questionnaire (SLQQ). *Quality of Life Research*, 11(4), 365-377.
- Wouda, J. C., Hartman, P. M., Bakker, R. M., Bakker, J. O., van, d. W., & Schultz, W. C. M. W. (1998). Vaginal plethysmography in women with dyspareunia. *Journal of Sex Research*, 35(2), 141-147.
- Young, M., Denny, G., Luquis, R., & Young, T. (1998). Correlates of sexual satisfaction in marriage. *Canadian Journal of Human Sexuality*, 7(2), 115-127.
- Young, M., Denny, G., Young, T., & Luquis, R. (2000). Sexual satisfaction among married women. *American Journal of Health Studies*, 16(2), 73.

Zajonc, R. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, 35(2), 151-175.

Zilbergeld, B., Ellison, C. R. (1980). Desire discrepancies and arousal problems in sex therapy. In S. R. Leiblum L. A. Pervin (Eds.), *Principles and practice of sex therapy*, (pp. 65–104). New York : Guilford.

Zurbriggen, E. L. (2002). Sexual objectification by research participants: Recent experiences and strategies for coping. *Feminism & Psychology*, 12(2), 261.