

SEXUAL ESTEEM, PERCEPTIONS OF PREGNANCY, AND MATERNAL  
CONFIDENCE IN WOMEN WITH AND WITHOUT  
PHYSICAL DISABILITIES

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY  
IN THE GRADUATE SCHOOL OF THE  
TEXAS WOMAN'S UNIVERSITY

DEPARTMENT OF PSYCHOLOGY AND PHILOSOPHY  
TEXAS WOMAN'S UNIVERSITY

BY

ERIN A. SCHRADER B.A., M.A.

DENTON, TEXAS

AUGUST 2014

## DEDICATION

I would like to dedicate this dissertation to my family and friends and to all women living with disability or chronic illness.

## ACKNOWLEDGEMENTS

I would like to express my gratitude to all of the individuals who contributed to this dissertation through direct involvement in this project or by offering much-needed support as I navigated through graduate school. I would first like to acknowledge Drs. Sally Stabb, Shannon Scott, Ellen Greenwald, and Debra Mollen for their willingness to participate on my dissertation committee. I would like to thank Dr. Stabb for being such a wonderful and dependable training director and for being such a strong source of support during the internship match process. Dr. Scott, I am so appreciative of your patience as you helped me tackle the statistics portion of my dissertation. Dr. Ellen Greenwald, you have had a tremendous amount of influence on my development as a therapist, and I am so happy you were involved in this part of my graduate school journey as well. Thank you so much for countless hours of supervision and for being a listening ear when I needed support during internship. I would like to especially acknowledge my dissertation chair, Dr. Debra Mollen. You have been my mentor since the beginning of graduate school and have played a hugely significant role in my professional development. Words cannot express how much I appreciate the advice and encouragement you have provided over the years. Though I may have been so focused on the task at hand that I did not always stop to say thank you at the time, please know that each and every supportive email, congratulatory box of chocolates, and glitter-filled card has not gone unappreciated. I am immensely grateful to have had you with me on this journey.

I am also grateful to the women who participated in this study. Your participation made this dissertation possible and I am so appreciative of the participants who took the time to contact me to express enthusiasm about the study or engage in discussion about their experiences of having a physical disability.

I would also like to acknowledge the many friends who have been a consistent source of support during graduate school. I am very appreciative of all of my friends at TWU who made graduate school more manageable with lively study parties and countless discussions in the T.A. office. Tiffany Dyer, Limor Hakim, Sue Mullenax, and Diana Winkelman – you are women who have demonstrated tremendous strength and have inspired me in countless ways during the years I have known you and I am so grateful to have you in my life. I also want to acknowledge Luke Belsky. It is hard to imagine what this journey would have been like if we had not met on the first day of graduate school. I am deeply appreciative of your friendship and look forward to many more game nights with you and Aleana.

To my mother and father, I want to share my profound gratitude for having you both as loving parents and amazing role models. With your support, I have been able to pursue the career of my dreams, and I am so appreciative of you for providing me that opportunity. To my sister Cara, you are my oldest and best friend and I have been so lucky to have you by my side on Christmas mornings and trips to Gulf Shores.

And finally, I want to thank my incredible husband Kyle. Your never-ending enthusiasm, positive attitude, and zest for life continually re-energize me and help me to

see the light at the end of the tunnel. Thank you for your incredible patience as I put my attention toward graduate school and your support as I pursued my dreams. I am incredibly happy with the family you, Stella, and I have created and look forward to the next phase of our life together.

## ABSTRACT

ERIN A. SCHRADER

### SEXUAL ESTEEM, PERCEPTIONS OF PREGNANCY, AND MATERNAL CONFIDENCE IN WOMEN WITH AND WITHOUT PHYSICAL DISABILITIES

AUGUST 2014

Disability remains a stigmatized identity in the United States. Individuals with both visible and invisible physical disabilities face negative attitudes and stereotypes. Women with physical disabilities may experience negative attitudes regarding their sexuality and reproduction as well as societal and environmental barriers during pregnancy and motherhood. The purpose of this study was to explore sexual esteem, perceptions of pregnancy, and maternal confidence in women with and without physical disabilities. Among women with disabilities, it was hypothesized that low sexual esteem would predict low levels of maternal confidence and that severity of disability would predict lower sexual esteem and lower maternal confidence. It was also hypothesized that able-bodied participants would endorse the highest levels of sexual esteem, maternal confidence, identification with pregnancy, and perceived societal support, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and participants with visible disabilities. One hundred and fifty-four women ages 18-39 years old with and without physical disabilities participated in the study. Participants completed online surveys consisting of a demographics questionnaire, the Sexual Esteem

subscale of the Sexuality Scale (Snell & Papini, 1989), an author-generated Perceptions of Pregnancy scale, and the Maternal Confidence subscales of the Childbearing Attitudes Questionnaire (CAQ; Ruble et al., 1990). Hypotheses were tested by utilizing hierarchical regression, linear regression, and one-way analysis of variance (ANOVA). Results supported the hypothesis that lower sexual esteem would predict lower maternal confidence. Significant differences were found between groups regarding maternal confidence; however, having a disability was correlated with higher maternal confidence. Participants with invisible disabilities reported the highest perceived societal support, followed by able-bodied participants, participants with sometimes visible disabilities, and participants with visible disabilities. Contrary to predictions, significant differences were not found between groups regarding reported sexual esteem or identification with pregnancy. Additionally, severity was not found to significantly impact sexual esteem or maternal confidence and these hypotheses were not supported. The study highlighted potential differences and similarities between women with and without physical disabilities regarding their expectations of pregnancy and motherhood and raised additional questions regarding potential protective factors that might impact women's sexual esteem and perceptions of pregnancy and motherhood.

## TABLE OF CONTENTS

	Page
DEDICATION .....	iii
ACKNOWLEDGMENTS .....	iv
ABSTRACT .....	vii
LIST OF TABLES .....	xii
Chapter	
I. INTRODUCTION .....	1
II. REVIEW OF THE LITERATURE.....	11
Prevalence and Definitions of Disability .....	11
Historical Treatment of Individuals with Disabilities .....	13
Societal Views of Disability .....	16
The Flawless Body .....	16
Stigmatized Identity .....	17
General Attitudes toward Disability .....	18
Stereotypes of Individuals with Disabilities .....	23
Visible and Invisible Disabilities .....	25
Experiences of Women with Disabilities.....	31
Attitudes toward Sexuality of Women with Disabilities .....	33
Experiences of Dating.....	38
Sexual Identity .....	40
Internalization of Stereotypes .....	44
Disability and Reproduction .....	46
Linking Sexuality and Reproduction .....	46
Pregnancy among Women with Disabilities.....	48
Women with Disabilities and Motherhood.....	53
The Ideal Mother.....	53
Attitudes toward Motherhood .....	55
Barriers to Parenting .....	58
Maternal Confidence.....	59
Adaptability and Strengths of Mothers with Disabilities.....	60



Social Model of Disability .....	62
Rationale for the Current Study .....	64
Research Hypotheses .....	65
 III. METHODOLOGY .....	 67
Participants.....	67
Instrumentation .....	70
Demographics .....	70
Sexual Esteem.....	71
Maternal Confidence.....	73
Perceptions of Pregnancy.....	75
Procedure .....	77
Statistical Analyses .....	80
 IV. RESULTS	
Preliminary Analyses .....	83
Analyses for Major Hypotheses.....	85
 V. DISCUSSION	
Summary of Major Findings.....	91
Integration of Findings with Theory and Prior Literature .....	92
Implications for Practice .....	103
Implications for Training .....	108
Implications for Research .....	110
Strengths of the Study.....	113
Limitations of the Study.....	114
Conclusion .....	119
 REFERENCES .....	 121
 APPENDICES	
A. Demographic Questionnaire .....	140
B. Sexual Esteem Subscale of Sexuality Scale .....	143
C. Measure of Maternal Confidence .....	145
D. Perceptions of Pregnancy Scale .....	148
E. Recruitment Letter.....	150
F. Recruitment Flyer .....	152
G. Informed Consent.....	154

H. Results and Gift Card Drawing Page ..... 157  
I. Referral List..... 159  
J. IRB Approval Letter..... 161

## LIST OF TABLES

Table	Page
1. Race/Ethnicity of Participants .....	67
2. Nature of Disability.....	69
3. Descriptive Statistics.....	85
4. Hierarchical Regression Table for Hypothesis 1 .....	86
5. Sexual Esteem Scores .....	87
6. Maternal Confidence Scores .....	88
7. Identification with Pregnancy Scores .....	89
8. Perceived Societal Support Scores.....	90

## CHAPTER I

### INTRODUCTION

Approximately 50 million Americans live with a physical, sensory, developmental, cognitive, emotional, or psychological disability (Centers for Disease Control [CDC], 2010b). Disability is defined as a physical or mental impairment that limits one or more major life activities of an individual (U.S. Department of Justice, 2008). The definition of disability has continued to evolve over time, and proponents of the Social Model of Disability encourage the creation of policies and attitudes that promote the inclusion of disabled individuals in society when considering a conceptualization of disability (Signore, Spong, Krotoski, Shinowara, & Blackwell, 2011). Considering that individuals with mental disabilities may have different experiences and face more negative attitudes than individuals with physical disabilities (Lippold & Burns, 2009; Ostapczuk, & Musch, 2011), it may be beneficial to explore these disability categories separately. As such, the current study focused only on physical disabilities, sensory disabilities, and developmental disabilities that result in physical impairment.

Historically, individuals with disabilities have faced stigmatization and suffered due to policies that minimized the value of disabled individuals (Waxman, 1994). Until the early 1900s, individuals with disabilities were commonly referred to as feebleminded or indigent (Switzer, 2003; Waxman, 1994). Individuals with disabilities have been

involuntarily institutionalized, exploited, and have faced forced sterilization (Switzer, 2003; Waxman, 1994). After the civil rights movement, attention was brought to the need for increased protection of U.S. citizens with disabilities. Although many legal protections for individuals with disabilities have been won through legislation such as the Americans with Disabilities Act (Switzer, 2003), individuals with disabilities continue to face discrimination through stigmatization, negative attitudes, and environmental barriers which prevent them from fully participating in society.

Disability identity continues to be considered a stigmatized identity. Stigma is a social construction that results in individuals being placed in distinct and devalued groups based on characteristics that society deems has rendered that person flawed (Link & Phelan, 2001; Phemister & Crew, 2004). Given society's emphasis on physical perfection, health, attractiveness, and the ideal body shape (Harper & Tiggemann, 2008; Henderson-King & Henderson-King, 1997; Stone, 1995), the physical differences of individuals with disabilities may be considered undesirable, and consequently, stigmatized. This results in a dominant culture that treats individuals with disabilities as the *other*, which can result in discrimination and psychological distress (Green, 2007).

Visibility of one's identity can play a role in stigmatization. Visible disabilities are easily observed by others by clues such as a noticeable limp or use of an assistive device such as a wheelchair (Dalgin & Bellini, 2008). Individuals with invisible disabilities may not show immediate visual clues or may have symptoms which are more pronounced on some days than others (Stone, 2005). Visibility may impact the way

people perceive individuals with physical disabilities. Though it may be detrimental to their mental health and sense of identity, individuals with invisible disabilities may make efforts to conceal their disabilities and pass as able-bodied (Clair, Beatty, & MacLean, 2005; McDonald, Keys, & Balcazar, 2007; Smart & Wegner, 2000). However, passing can be seen as adaptive, given that when one's disability is visible, it allows others to more easily categorize people with disabilities in a stigmatized group (Clair et al., 2005).

Given the stigma related to disability status, it is unsurprising that individuals may endorse negative attitudes or misinformed stereotypes about people with disabilities. Research has indicated able-bodied individuals may feel uncomfortable or awkward in the presence of disabled individuals and may report they are unenthused about social encounters with individuals with disabilities (Bruder & Mogro-Wilson, 2010; Fichten, Robillard, Judd, & Amsel, 1989). They may also perceive people with disabilities as less attractive than able-bodied persons (Weinberg, 1976). Potential employers may be hesitant to hire physically disabled individuals for jobs that require high interpersonal contact (Louvet, 2007). Research has shown people with disabilities may be stereotyped as damaged, anti-social and incompetent (Anderson & Kitchin, 2000; Louvet, 2007). Women with disabilities in particular may be stereotyped as vulnerable, poor, dependent, unfeminine, and physically unattractive (Nario-Redmond, 2010). Nario-Redmond indicated women with disabilities may also not be perceived as nurturing and may be stereotyped as unfit parents.

The stereotypes of women with disabilities as unfeminine and unfit for parenthood relate to larger societal attitudes regarding the sexuality of disabled women as well as their roles as mothers. Individuals with disabilities are consistently stereotyped as asexual (Nario-Redmond, 2010). It is often mistakenly assumed that women with disabilities are not interested in sex, that they are unable to take part in sexual activities, and that they should be grateful to able-bodied individuals who would have sexual relationships with them (Anderson & Kitchin, 2000; Basson, 1998). Parents may refrain from openly discussing sexual health with their children with disabilities or may imply that their children will likely only be partnered with another disabled individual in the future (DiGuilio, 2003; Esmail, Darry, Walter, & Knupp, 2010).

These messages and stereotypes may influence the dating experiences and sexual identity of women with disabilities. Women with disabilities tend to have their first kiss and serious relationship later in life than able-bodied women and may have difficulty attracting romantic partners, particularly if their disability is severe. (Howland & Rintala, 2001; Taleporos & McCabe, 2003; Walter, Nosek, & Langdon, 2001). Given the negative stigmatization of a disability identity, disabled women may remain in abusive relationships, defer to their partners' demands, and remain in relationships in which they are unhappy, due to fears that they will not find a partner in the future willing to date them because of their disability status (Howland & Rintala, 2001).

One's sexual identity and sexual esteem can be impacted by one's disability identity as well as negative societal messages regarding disability. Sexual esteem, one

facet of sexual identity, is defined as positive regard for and confidence in one's ability to experience sexuality in a satisfying way (Snell & Papini, 1989). Taleporos and McCabe (2001) found that participants with physical disabilities indicated finding sexual partners was hard and reported negative thoughts about themselves as sexual partners and frustrations with the limitations of their sexual expression. The severity of one's disability can also impact sexual esteem. Mona, Gardos, and Brown (1994) found that increased functionality and ease of completing tasks of daily living were associated with higher levels of sexual esteem.

Women have historically been defined by their sexuality as well as their ability to reproduce (Kallianes & Rubenfeld, 1997). It has been argued that stereotypes regarding the sexuality of women with disabilities are linked to negative attitudes toward reproduction and beliefs that it may be biologically and morally dangerous for these women to procreate (Kallianes & Rubenfeld, 1997; Waxman, 1994). Women with disabilities may be told by family members or physicians that they should not plan to have or are not capable of having children (Prilleltensky, 2003). Women with disabilities may receive reactions such as nervousness, criticism, disapproval, or concern regarding their ability to care for a child when sharing the news of a pregnancy with others (McFarlane, 2004; Prilleltensky, 2003). They may be questioned regarding the assumed risk that they will give birth to a child with physical disabilities (Prilleltensky, 2003). For many women with disabilities, they may feel as though they are struggling for the right to experience and participate fully in motherhood (Waxman, 1994).



There are very little data documenting the incidences of pregnancy in women with disabilities (Signore et al., 2011). In addition to researchers' neglect of the sexual and reproductive experiences of women with disabilities, there are environmental barriers that serve as physical obstacles to women accessing needed health care services. Before becoming pregnant, women with disabilities may have difficulty obtaining information regarding what they might expect during a pregnancy given their specific disability (Prilleltensky, 2003). During their pregnancy, women with disabilities may have difficulties if examination tables do not lower sufficiently, doorways are too narrow, and staff is untrained to assist them onto the examination tables (Signore et al.; Smeltzer, 2007). They may encounter health care professionals who are not familiar with the treatment considerations for pregnant women with their disability (Nosek, Howland, Rintala, Young, & Chanpong, 2001).

After giving birth, women with disabilities may face additional societal pressures and negative attitudes. Given that Western culture dictates the ideal mother should be ever-present for her child's needs and should be a limitless caregiver, these unachievable expectations can result in additional scrutiny for mothers with disabilities (Malacrida, 2009; Prilleltensky, 2003). People may assume that, given their potential inability to be as hands-on as able-bodied mothers, mothers with disabilities are not able to competently fulfill the role of a mother (Prilleltensky, 2004). They may be stereotyped as too dependent on others to effectively parent (Nario-Redmond, 2010). Normal difficulties that many new mothers may experience, such as breastfeeding, may be attributed to the

mother's disability status (Prilleltensky, 2003). People may also mistakenly assume that the children of women with disabilities will primarily provide care for their mothers and will be robbed of a normal childhood (Malacrida, 2009; Prilleltensky, 2004).

Mothers with disabilities also face environmental barriers that make it difficult to meet the expectations of the ideal parent. They may have difficulty accessing playgrounds for play dates, schools for parent-teacher conferences, and medical offices to take their children to the doctor (Malacrida, 2009). They may be more likely to be unemployed than able-bodied mothers, particularly if their disability is visible to others (Martz, 2003). The difficulty these mothers may have finding employment may increase the difficulty they have obtaining adequate housing as well as the chance they will live in poverty, which reinforces society's belief that they are not appropriate as parents (Malacrida, 2009).

Regardless of societal misperceptions or attitudes, many women with disabilities are interested in having sexual relationships and starting families (Anderson & Kitchin, 2000; Taleporos & McCabe, 2001). Most women with disabilities are not gynecologically impaired and are capable of becoming pregnant (Signore et al., 2011). For these women, pregnancy may be an opportunity to view a body they historically have seen as impaired as something capable of producing life (Grue & Lærum, 2002). Mothers with disabilities may utilize a variety of assistive devices in order to parent independently, such as adapted dressing tables, slings for breastfeeding, seeing-eye dogs, and visual alarms for mothers with hearing impairments (Carty, 1998; Signore et al.,

2011). Even if they experience physical limitations, they may effectively parent through verbal instruction and a system of consistently encouraging verbal communication to solve problems and resolve disputes (Prilleltensky, 2004). So while they may face barriers and challenges, like able-bodied mothers, many women with physical disabilities feel their role as a mother is joyous and fulfilling (Prilleltensky, 2004).

Although women with disabilities may date, marry, consider pregnancy, and become mothers, it is important to consider that they may still internalize stereotypes regarding their stigmatized identity. In Nario-Redmond's (2010) study of cultural stereotypes of men and women with disabilities, even disabled participants reported negative stereotypes of men and women with disabilities. Internalization of negative messages and stereotypes can result in women having negative attitudes about themselves, believing they are sexually unattractive and sexually impaired, and lead them to devalue themselves as potential partners (Howland & Rintala, 2001; Milligan & Neufeldt, 2001; Sipski, Alexander, & Rosen, 2001; Taleporos & McCabe, 2001). It is possible the internalization of negative stereotypes, in addition to awareness of society's expectations regarding the ideal mother, can lead women with disabilities to feel less confident in their abilities to be future mothers. Maternal confidence is defined as a mother's perception that she is able to care for and understand her children (Badr, 2005). Given the limited social support women with disabilities may receive if they are pregnant or are considering pregnancy and the limited amount of information available regarding

the experiences of pregnancy and motherhood for women with specific disabilities, women with disabilities may have lower maternal confidence than able-bodied women.

Thus, given attitudes toward people with disabilities in general, as well as attitudes toward disability and sexuality and reproduction in particular, women with disabilities may have different experiences of sexual esteem, pregnancy, and motherhood than able-bodied women. They may internalize messages regarding asexuality and sexual attractiveness as well as messages regarding who is and is not the ideal mother. Societal messages may also influence the way women with disabilities perceive pregnancy. Given the negative attitudes toward physical impairment and cultural ideas linking disability with asexuality, women with disabilities may differ from able-bodied women in their ability to identify with pregnancy (Prilleltensky, 2003). Based on the aforementioned literature regarding limited societal support and environmental barriers for pregnant women, women with disabilities may also differ from able-bodied women in their expectations of the societal support they would receive if they were to become pregnant.

While there has been qualitative research exploring women with physical disabilities and their experiences of sexuality, pregnancy, and motherhood (Esmail et al., 2010; Grue and Lærum, 2002; Malacrida, 2009; Taleporos & McCabe, 2001), there remains a gap in the literature with respect to quantitative studies on these topics. There also has not been research that has explored the link between sexuality and mothering in women, specifically the potential connection between sexual esteem and confidence in one's mothering abilities. Following a review of the literature and the areas that require

further exploration, the following research questions were posed for the current investigation: Given the link between sexuality and reproduction, is there a relationship between sexual esteem and maternal confidence? What roles do the visibility and severity of one's disability play in sexual esteem and maternal confidence? How do women with physical disabilities perceive their future experiences of pregnancy as compared to able-bodied women? The purpose of this study was to contribute to the literature and explore these questions by quantitatively examining the relationship between sexual esteem, perceptions of pregnancy, and maternal confidence in able-bodied women as well as women with visible, invisible, and sometimes visible disabilities.

## CHAPTER II

### REVIEW OF THE LITERATURE

#### **Prevalence and Definitions of Disability**

Approximately 20% of the United States population, about 50 million U.S. citizens, lives with at least one disability (CDC, 2010b). The Americans with Disabilities Act (ADA) of 1990 defined disability as a physical or mental impairment that limits one or more major life activities of an individual (U.S. Department of Justice, 2008). The definition of disability has continued to evolve over time and is now more broadly conceptualized as a multidimensional concept. Disabilities include physical, sensory, developmental, cognitive, emotional, and psychological difficulties (Bernstein, 2008). Physical disabilities, such as spinal cord injuries, may impair movement and result in the use of assistive devices, such as a wheelchair. Examples of sensory disabilities include difficulties with hearing or vision, such as blindness and deafness (Bernstein, 2008). Developmental disabilities, such as autism, may be physical or mental, begin any time during childhood through young adulthood, create difficulties with major life activities such as learning or living independently, and generally last throughout that person's lifetime (CDC, 2011). Cognitive disabilities result in difficulties in important areas of intellectual functioning, such as memory or learning (Bernstein, 2008). Individuals with emotional disabilities experience psychological difficulties that may be severe and limit

their daily functioning, such as schizophrenia or chronic depression (Bernstein, 2008).

For the purposes of this study, the primary focus was on physical and sensory disabilities as well as developmental disabilities that result in physical limitations, rather than cognitive or emotional disabilities. Physical disability includes chronic illness, and in 2005, 133 million U.S. citizens had at least one chronic illness (CDC, 2010a). One-fourth of people with chronic illness have limitations to their daily activities (CDC, 2010a). Examples of daily activities include tasks such as caring of oneself, communicating, seeing, hearing, and working (U.S. Department of Justice, 2008). According to the CDC (2009), the three most common causes of disability are arthritis and rheumatism, affecting approximately 8.6 million people; back and spine problems, affecting approximately 7.6 million people; and heart problems, affecting 3 million people.

In contrast to the traditional medical model, the Social Model of Disability provides another perspective on understanding disabilities. This model focuses on disability as the degree to which attitudinal and societal barriers place constraints on the ability of a person with a disability to fully participate in society (Signore et al., 2011). This definition places less focus on the perceived impairments of persons with disabilities and increased focus on the idea that people may appear more or less disabled as a function of the efforts society makes to be more or less inclusive of people with a range of physical needs. Thus, defining disability is not solely a medical concern, but also

includes social policies and attitudes as a source for some of the difficulties faced by persons with disabilities (Waxman, 1994).

### **Historical Treatment of Individuals with Disabilities**

Though disability is a worldwide concern, definitions and perceptions of disability vary across countries and cultures (Meyer, 2010). Researchers have noted that differing values regarding individualism and collectivism may account for some of the different cultural responses to people who have disabilities (Meyer, 2010). Individualistic cultures tend to center around each person, while collectivistic cultures believe the needs of the group take priority over the needs of the individual (Meyer, 2010). In contemporary individualistic cultures, persons with disabilities tend to be more empowered and integrated into society than collectivistic cultures, which may segregate disabled individuals from the larger community, particularly if group members perceive that those individuals are not able to fulfill their contributory roles within the group (Hampton & Xiao, 2007; Meyer, 2010). Meyer suggested that individuals who are segregated from the group due to a disability status are also subjected to shunning and avoidance from members of the group, especially in collectivistic cultures for whom it is important to avoid bringing shame to one's family. Western nations tend to recognize significantly more disabilities and make more efforts to integrate children with disabilities into mainstream classrooms than Asian countries such as China or Japan (Meyer, 2010). Thus the individualistic values of the United States may result in increased encouragement for individuals with disabilities to be independent and valuable



members of society when compared to other nations. However, far from idealizing individualistic cultures, it is important to note the historical mistreatment of individuals with disabilities in the United States as well as the continued stigmatization of disability status.

Although it is clear there are a significant number of people in the United States who identify as having one or more disabilities, and current policies and practices are relatively more inclusive and humane, historically, people with disabilities have experienced pervasive stigma and faced negative societal attitudes and stereotypes (Waxman, 1994). At one time, people with disabilities were considered “feeble-minded” and were treated in a manner similar to criminals, facing institutionalization, forced sterilization, compulsory abortion, and loss of child custody (Waxman, p.156). According to Switzer (2003, p. 31), from the 1700s until the early 1900s, people with disabilities experienced abuse due to societal indifference and disabled individuals were labeled “indigent” and placed in state-funded institutions. During the early 1900s, individuals with cognitive disabilities were considered to be afflicted with “idiocy,” which psychologists feared would be hereditary and linked with immorality and crime (Switzer, 2003, p. 35). During this time, the eugenics movement deemed persons with disabilities as inferior and threatening to the survival of the human race (Switzer, 2003). In 1927, the United States Supreme Court ruled that forced sterilization of people with disabilities who were wards of the state was constitutional, which resulted in thousands of persons with disabilities being sterilized involuntarily through the late 1960s. Exploitation of

individuals with disabilities was also common during the first half of the 20th century, and some families with disabled children sold their children to sideshows which put them on display (Switzer, 2003).

During the mid-20th century, organizations began to develop increased public awareness of disability issues and schools were created to teach children with sensory disabilities, such as deafness and blindness (Switzer, 2003). During the 1960s, the civil rights movement highlighted the need for all people, including those who were not young, able-bodied, White men, to be able to fully participate in the United States (Ramey, 2007). Disability advocates began to insist on increased protection for individuals with disabilities, particularly for World War II veterans who had become disabled during the war and hoped to successfully reintegrate into society and find meaningful employment (Ramey). The Rehabilitation Act of 1973 granted vocational rehabilitation services to individuals with disabilities and mandated that individuals with disabilities would not be denied benefits from programs receiving federal assistance (Switzer, 2003). During the 1980s, disability advocates argued for increased protection from discrimination under federal law (Concannon, 2012).

In 1990, the Americans with Disabilities Act (ADA) was signed into law (Switzer, 2003). The ADA provided protection for people with disabilities from discrimination in a variety of contexts, including work and health care facilities (Grabois, 2001). The passing of the ADA was additionally significant due to the fact that the act included individuals with mental disabilities to be equally as protected as those with

physical disabilities (Concannon, 2012) The signing of the ADA marked a momentous occasion for individuals with disabilities, as the law indicated the United States officially viewed the exclusion or mistreatment of people with disabilities as discrimination, rather than an inevitable consequence of being disabled (Concannon, 2012).

### **Societal Views of Disability**

#### **The Flawless Body**

While society's understanding and treatment of people with disabilities have evolved, there remains a sense of separation between disabled and able-bodied persons. The "myth of bodily perfection" creates an environment in which fitness and health are valued while disability and impaired physical functioning are devalued (Stone, 1995, p. 413). Attractiveness is so valued that individuals who are considered fit or conventionally attractive typically reap rewards such as increased salaries and more successful careers (Harper, 2000; Hosoda, Stone-Romero, & Coats, 2003). While there are social rewards for attractiveness, negative social judgments may be ascribed to individuals who are perceived as unattractive (Henderson-King & Henderson-King, 1997). The emphasis that all persons should strive for physical perfection perpetuates a cultural obsession with the belief that bodies should be flawless (Stone, 1995). Women in Western nations in particular are encouraged to maintain an ideal body shape, and various media outlets send the message that women should be feminine and strive for and achieve the thin ideal (Harper & Tiggemann, 2008). Though this social standard is generally unachievable for

all individuals, for those individuals with physical disabilities in particular, the flawless body may be an especially unattainable goal (Phemister & Crew, 2004).

### **Stigmatized Identity**

Societal values that emphasize the importance of bodily perfection have created a dominant culture that justifies treating individuals with disabilities as the *other* (Stone, 1995). As these individuals are treated as the *other*, they may experience social stigma. Stigma is a social construction that results in the devaluation of individuals based on characteristics that are deemed to render that person flawed (Phemister & Crew, 2004). As stigmas can arise due to differences between humans, when individuals have obviously pronounced differences, such as visible disabilities, they may feel permanently stigmatized (Coleman, 1997). Link and Phelan (2001) conceptualized stigma as a convergence of multiple components. Link and Phelan noted that first, people label human differences. The second component is the linking of labeled persons to negative stereotypes through dominant cultural beliefs. Link and Phelan noted that the labeled individuals are then separated into a distinct group and consequently experience loss of status, discrimination, and unequal treatment. As individuals with physical disabilities do not and may never be able to achieve the standard ideals of beauty, their differences are considered undesirable, and therefore, stigmatized.

The negative evaluations from others as a result of stigma can result in disadvantages and discrimination in a variety of contexts as well as psychological distress for disabled individuals who are stigmatized (Green, 2007). Research has shown that

individuals with visible disabilities have concerns over how others will react to their visible stigmas, which consequently impacts their social interactions. For example, Kleck and Strenta (1980) asked 25 college students to interact with other students, whom they presumed to be other participants in the study, after being assigned to present themselves as having allergies, epilepsy, or a facial scar. Participants in the facial scar condition were told makeup would be applied to their face that would simulate facial disfigurement. After observing their scar in a mirror, participants were told a moisturizer was placed on their scar, though in reality the experimenter removed the makeup without their knowledge. Participants spent 6 minutes discussing strategies people use in making friends with the confederates and then responded to questionnaires rating the confederate's eye contact, degree of tenseness, amount of talking, degree to which the subject felt patronized, and the amount they liked the confederate. The participants also indicated how attractive they believed the confederate found them. Participants who believed they had a scar tended to perceive the confederate as not making eye contact with them, rated the confederate as feeling tenser, and believed the confederate rated them as less attractive than the participants with a more neutrally-valued condition such as allergies.

### **General Attitudes toward Disability**

Attitudes toward individuals with disabilities may vary (Thomas, 2001). According to DeLoach (1994), stigmatizing attitudes and behaviors may originate from the fact that persons with disabilities are viewed as being fundamentally different than

their peers, and this difference induces discomfort and anxiety in individuals without disabilities. Research has indicated that people who are able-bodied may feel uncomfortable around individuals with disabilities. Fichten et al. (1989) surveyed 253 college students, 17 with physical disabilities, 15 with sensory disabilities, and 221 with no physical disabilities. Participants responded to questionnaires that inquired about dating and social activity, and completed a measure of anxiety or distress in social situations, a measure of self-esteem, and questions regarding their comfort level with students with disabilities. Participants also assigned socially desirable and undesirable traits to a stimulus person (nondisabled student, visually impaired student, or student using a wheelchair). Able-bodied participants reported they were significantly less comfortable with visually impaired students than they were with nondisabled students and were least comfortable with individuals who used wheelchairs. Participants also assigned more undesirable traits to the wheelchair user and a visually impaired student than to a nondisabled student and indicated beliefs that students with disabilities were socially anxious and uneasy about dating.

Attitudes toward people with disabilities may also be related to the perceived attractiveness of physically disabled individuals. Weinberg (1976) explored the disability attitudes of 372 undergraduate students. The participants evaluated personality and attitude dimensions for descriptions of 10 people, including able-bodied men and women as well as physically disabled--as indicated by wheelchair use, blindness, or deafness--men and women. Weinberg found that participants rated individuals utilizing wheelchairs

as less physically attractive than the blind or deaf person. Although the authors did not speculate about reasons for the differing assessments of attractiveness, it is possible the participants' reactions are related to society's emphasis on physical perfection and ideal body shape. While an individual with hearing or vision loss experiences a physical impairment, an individual using a wheelchair has a visible physical impairment and may consequently receive more negative reactions regarding perceived attractiveness.

Potential employers may also evaluate applicants with disabilities as less desirable than able-bodied applicants in jobs involving public contact (Louvet, 2007). In a study of 132 undergraduate students majoring in management, Louvet assigned participants to read a packet with a job description, curriculum vitae, and an application letter of a potential job applicant. The participants were assigned applicants with or without a disability and evaluated the applicants for jobs with or without public contact. The participants in the disability condition were informed on the application letter that the applicant was in a wheelchair due to a car accident. Participants rated the applicants' personal characteristics related to job performance with descriptors such as conscientious and autonomous. Although no significant difference was found between disabled and able-bodied applicants for jobs requiring low levels of interpersonal contact, applicants with a disability received significantly more negative ratings than able-bodied applicants for jobs that required greater interpersonal contact. This finding indicated that one negative belief about persons with disabilities is that while they may be appropriate for

jobs requiring low interpersonal contact, given their stigmatized identity; it would be unwise to hire a disabled person as a face-to-face representative for one's company.

While some people endorse more favorable attitudes toward people with disabilities, such positive attitudes may not necessarily reflect positive interactions with persons with disabilities. For example, Bruder and Mogro-Wilson (2010) surveyed 881 undergraduate students and 2,056 faculty and graduate students. Participants completed multiple-choice questionnaires which focused on interactions with individuals with disabilities, opinions about disability-related issues, and opinions regarding the way the community and classroom treats individuals with disabilities. Bruder and Mogro-Wilson found that while most undergraduate and graduate students reported positive attitudes toward persons with disabilities (72% and 79%, respectively), the participants also reported their interactions with disabled individuals were limited, awkward, or embarrassing. Nearly half of the students reported they were never enthused about having social encounters with people with disabilities. Individuals may support the idea that society as a whole should help people with physical disabilities, but, reflecting stigma toward people with disabilities, may be hesitant to become personally involved and have fewer positive feelings when actually encountering people with disabilities (Granello & Wheaton, 2001).

Some research has indicated that individual attitudes may be negatively influenced by a person's perception that a disabled individual is personally responsible for his or her disability (Bordieri & Drehmer, 1988). Disability due to a congenital



condition or an external situation, such as a car accident, tends to be perceived as beyond a person's control (Beatty & Kirby, 2006). However, disabilities that people believe are a direct result of a person's behaviors tend to be seen as character flaws that reflect lack of self-restraint (Beatty & Kirby, 2006). For example, an individual may hold more negative attitudes toward a person diagnosed with AIDS or diabetes if they assume that person is responsible for his or her diagnosis, rather than an individual who is known to have been born with cerebral palsy. Bordieri and Drehmer (1988) studied attitudes toward people with disabilities among 125 senior undergraduate business students. Participants evaluated job applications from male applicants who were identified in the cover letter as having one of nine possible disabilities, such as cerebral palsy or an emotional disorder. In addition to evaluations of the applicant's qualifications for the position, the participants were asked to respond to questions regarding the extent to which the applicant was to blame for his disability. Bordieri and Drehmer found that participants tended to evaluate applicants who had disabilities that were perceived to be out of their control, such as cerebral palsy or hearing loss, more positively and evaluate applicants whom they perceived to be personally responsible for their disabilities, such as drug dependency or an emotional disorder, more negatively.

In some cases gender has been shown to influence attitudes toward individuals with disabilities. Vignes et al. (2009) administered a measure of attitudes toward children with disabilities to 1,135 students between the ages of 10 and 15 years old. The researchers found that gender was a factor associated with attitudes, as female students

tended to show more positive attitudes toward children with disabilities than male students. Weisel and Florian (1990) found that high school boys, rather than girls, tended to endorse less positive attitudes toward disabled women than men with disabilities. Folsom-Meek, Nearing, Groteluscheq, and Krampf (1999) surveyed college students and found that women indicated more positive attitudes toward teaching individuals with physical disabilities than men. Folsom-Meek et al. hypothesized that these findings might reflect the socialization of women to act as caregivers. Gorecnzy, Bender, Caruso, and Feinstein (2011) noted that differing attitudes toward disability between men and women may also be related to the fact that women tend to choose human services professions more frequently than men, and as a result may have increased contact with individuals with disabilities and more positive attitudes toward this group.

### **Stereotypes of Individuals with Disabilities**

As previously noted, according to Link and Phelan (2001), stereotyping is a critical component in the creation of a stigmatized group. Stereotypes are traits or attributes people use to define and distinguish between groups (Nario-Redmond, 2010). Stereotypes can help to simplify complex social information and create social categories and are not exclusively negative (Nario-Redmond, 2010). However, individuals with disabilities tend to be consistently negatively stereotyped (Nario-Redmond, 2010). In Western societies, disabled individuals are often characterized as damaged, child-like, anti-social, incompetent, and unproductive (Anderson & Kitchin, 2000; Louvet, 2007).

Individuals with physical and sensory disabilities have been stereotyped as more dependent and less intelligent than able-bodied persons (Weinberg, 1976).

In a more recent study, Nario-Redmond (2010) surveyed 97 men and women with and without disabilities in a free-response questionnaire that inquired about the first thoughts that came to mind about the stereotypical traits or descriptive features of disabled women, non-disabled women, disabled men, and non-disabled men. While the results indicated that men and women with disabilities were stereotyped as inspirational, disabled women were more likely to be stereotyped as vulnerable, poor, and dependent on others, while disabled men were stereotyped as angry and inferior. Non-disabled men were more likely to be stereotyped as physically strong and aggressive, while non-disabled women were often described as nurturing, attractive, and feminine. Both disabled and non-disabled women were described as weak and incompetent; however, disabled women were never labeled feminine. Women have historically been defined by their sexuality and their ability to have children (Kallianes & Rubenfeld, 1997). As disabled women in Nario-Redmond's study were not viewed as physically attractive or nurturing, and instead stereotyped as unfit parents, it appears that they were not believed to possess several of the common traits people often equate with being a woman, and were consequently perceived as unfeminine. Olney and Brockelman (2003) conducted focus groups with 25 men and women with a variety of disabilities. A theme that arose during the study was that participants consistently reported their belief that others stereotyped them as lazy, substandard, and dishonest.

## **Visible and Invisible Disabilities**

When discussing disability and stigma, it is important to note that people often make a distinction between visible and invisible disabilities. People tend to automatically categorize others as a way to organize information, which is a concept that applies to the categorization of disabled versus able-bodied individuals as well (Stone, 2005). People are taught that by attending to visual or auditory clues, it should be fairly clear which people belong in the disabled category. Visible disabilities are able to be observed by others through such clues (Dalgin & Bellini, 2008). For example, disabilities such as muscular dystrophy and some forms of spinal cord damage, which may require the use of a wheelchair or an assistive device, are considered visible disabilities. Additional examples of visible disabilities include having amputated limbs or severe burn scars (Esmail et al., 2010). Individuals with invisible disabilities, by contrast, may not consistently display visual or evidentiary cues that enable others to immediately recognize their disabilities (Stone, 2005). For example, while rheumatoid arthritis, diabetes, and Crohn's disease can be life-changing diagnoses, they may remain relatively invisible and are not necessarily readily observable.

The visibility or invisibility of one's disabilities has implications for his or her experiences as a person with a disability. Due to the fact that people with invisible disabilities are not readily recognized as having disabilities, the existence of invisible disabilities tends to be more easily dismissed or overlooked when discussing disability (Stone, 2005). Visibility also impacts social expectations. When a person has a visible

disability, others may view that person's inability to meet usual expectations as legitimate, as social norms dictate that one should hold different expectations for those who are disabled (Stone, 1995; 2005). One would not be surprised to see a woman utilizing a wheelchair taking the elevator rather than climbing a flight of stairs. However, the expectation of mobility may be different for those who do not have an obvious disability. For example, individuals with spina bifida have congenital neural tube defects, which may result in motor and sensory deficits such as leg weakness and orthopedic abnormalities (Demasio & Magriples, 1999). In less severe cases, this disability may not be immediately visible to others. Consequently, when an individual with spina bifida, who experiences pain and difficulty with balance when walking up stairs but appears able-bodied to others, chooses to take the elevator to the second floor, others might make a judgment due to the expectation that an able-bodied individual should be able to walk up a short distance. Thus, people may be inclined to label that individual as lazy, rather than considering the possibility that the individual is disabled in a way that is not immediately apparent.

When an individual chooses to reveal an invisible disability, it may be difficult for people to imagine or believe that a person who appears able-bodied identifies as having a disability. Invisible disabilities may not be considered legitimate, and the term *invisible disability* may be confusing to others (Olney & Brockelman, 2005; Stone, 1995).

Individuals with disabilities may receive messages from parents, teachers, friends, and

others that they are lazy or “faking” their invisible disability (Olney & Brockelman, 2003, p. 45).

The difficulty with proving the legitimacy of a disability is further complicated when a disability vacillates between being visible and invisible. Some individuals, such as those with multiple sclerosis, may have periods of time when their symptoms are ameliorated and they appear able-bodied, mixed with episodes of tremors or decreased mobility (Rosenzweig, Hartman, & MacKenzie, 2010). For individuals whose symptoms flare up sporadically or unexpectedly, it may be unclear which days will be good days and which days will be bad days (Stone, 2005). When a person’s disabilities are visible, others may be more likely to understand that there is a medical issue that should be taken into account when someone cannot meet expectations, such as repeatedly canceling plans. Without clear visual cues to prove the existence of a disability, individuals with invisible disabilities may feel guilty over every flare up of symptoms and worry that others will not believe them when they indicate they are feeling unwell (McMullin, 2003).

A recent example of public judgment of disabilities that fluctuate in visibility occurred in 2006, when Michael J. Fox, an actor and activist who has Parkinson’s disease, appeared in television advertisements supporting political candidates who favored stem cell research (Montgomery, 2006). Rush Limbaugh, a radio show host, commented on his show that Fox was exaggerating the effects of his disease and indicated his belief that Fox was acting, given that he had never seen Fox display such

visible tremors in the past (Montgomery, 2006). Though the statements were quickly categorized as insulting and factually inaccurate, the event demonstrated the resistance individuals might have to believing the legitimacy of one's disability, particularly if the presentation of symptoms varies on a day-to-day basis.

When the legitimacy of one's disability is questioned, it may leave individuals with disabilities feeling that they must prove their disabilities to others in order to be identified as being disabled. When interviewing women with invisible disabilities following a stroke, Stone (2005) found that the women reported they continually felt obligated to explain themselves when their apparently able bodies led others to have expectations of them that they were unable to meet. Individuals with invisible disabilities may express ambivalence as to whether they should claim disability identities (Olney & Brockelman, 2005). Women with invisible disabilities have reported feeling as if they are frauds for claiming disability identities, and expressed beliefs that their invisible disabilities will never be taken as seriously as those who have visible disabilities (Stone, 2005). In a focus group of 25 students with disabilities, Olney and Brockelman (2005) found that individuals with visible disabilities did not tend to distinguish themselves as different from individuals with invisible disabilities. However, individuals with invisible disabilities in the group tended to differentiate themselves from those with visible disabilities, with some participants minimizing their own disabilities when compared to others with more obvious mobility limitations (Olney & Brockelman, 2005).

Although individuals with invisible disabilities may face skepticism regarding the reality or severity of their disabilities, they typically retain some increased control over their ability to reveal their disability status to others (Olney & Brockelman, 2005). Additionally, in a study of men and women with visible and invisible physical and developmental disabilities, Olney and Brockelman (2005) found that several participants with invisible disabilities noted that they believed others viewed them as intelligent, which was not experienced by the participants with visible disabilities.

For individuals with invisible disabilities, their physical impairments may play a role in the way they interact with others from the beginning of the relationship (Olney & Brockelman, 2005). They may struggle with the timing of sharing these invisible disabilities with potential romantic partners (Basson, 1998). The strategy of timing the disclosure about the disability in order to minimize discomfort and make the disclosure as positive as possible can create feelings of anxiety due to the worry of being prematurely discovered (Olney & Brockelman, 2005). Concern regarding the timing of sharing one's disability may not necessarily be consistent across genders. In a focus group of men and women with disabilities, men with physical and developmental disabilities tended to downplay the negative effects of having a disability and were more concerned than women about being "found out" regarding their disability (Olney & Brockelman, 2005, p.84). The authors noted that while the male participants reported feeling more confident in their abilities and strengths than the women, they also reported being more concerned than women that others would discover their disabilities. Given that the women in the



study tended to discuss their disabilities with greater candor than the men, it is possible that women are less concerned about speaking more openly about invisible disabilities with others due to less gendered social pressures for women to present as physically capable and strong.

Given the stigma surrounding disability, some individuals with invisible disabilities may make efforts to pass as able-bodied individuals in order to conceal an aspect of themselves that may be considered socially undesirable (Clair et al., 2005; Smart & Wegner, 2000). Individuals may explicitly attempt to conceal their disability identities or may passively avoid sharing their identities with others (Berger, 1992). Individuals with disabilities have reported that some reasons for concealing their disabilities include the concern that others will not believe the disability is real, that they will be seen as less competent, that they will no longer be seen as consistent or trustworthy, and that they will become viewed as a person in need of help, rather than as someone who can contribute to a relationship (Olney & Brockelman, 2003). Passing can be adaptive, as it can allow a person to avoid stigma by adopting an identity as an individual without a devalued social identity (Clair et al., 2005).

However, there are also potential negative social and psychological consequences of attempting to conceal one's disability identity. When a person attempts to conceal his or her identity, this may use a great deal of mental energy (Smart & Wegner, 2000). Smart and Wegner noted that individuals attempting to conceal their stigmatized identities might find they are frequently thinking about the stigma, which may influence

their judgments and behaviors. The authors indicated these individuals may be so concerned with impression management and concealment of their disability identities that their ability to put energy into other cognitive tasks is consequently reduced. Individuals who conceal their disabilities may feel more shame about them, rather than integrating their disability identities into their self-concept (McDonald et al., 2007). Individuals who conceal their disabilities may also become disconnected from potential sources of support or from disability-related services (McDonald et al., 2007; Valeras 2010). Individuals who are attempting to pass as able-bodied or healthy may find that they are frequently focused on social cues and avoid situations in which their disabilities might be revealed to others, consequently isolating them from potential social support.

Thus, visibility is important to consider, as the relative visibility or invisibility of a disability may impact a disabled person and his or her relationships with others. The fact that most individuals have disabilities that can be concealed (Stone, 1995) and many individuals are hesitant to reveal their disabilities to others may also play a role in society's tendency to deny the prevalence of disabilities. This denial engenders negative stereotypes toward people with disabilities and contributes to the tendency to resist creating a physical environment which allows for people with disabilities to fully participate in society.

### **Experiences of Women with Disabilities**

While it is important to consider disability concerns for women as well as men, for the purposes of this study, the primary focus was on women with disabilities. Women

in the United States have reported a higher prevalence of disability compared to men (24.4% versus 19.1%, respectively) (CDC, 2009). Women with disabilities are more likely than women without disabilities to be unemployed, have lower educational attainment, earn lower wages when they are employed, live alone, and live in poverty (Steinmetz, 2004). Women with disabilities may not only experience negative stereotypes, but are at a higher risk of physical abuse compared to non-disabled women. In a study of intimate partner violence experienced by women with and without disabilities, Barrett, O'Day, Roche, and Carlson (2009) found that 33.2% of women in their study reported experiencing intimate partner violence compared to 21.2% of non-disabled women. Women with disabilities may be particularly vulnerable to sexual abuse, with disabled women two times more likely to have experienced unwanted sex with an intimate partner than non-disabled women. Women with disabilities have been found to be at greater risk of being physically abused before and during their pregnancies than women without disabilities (Mitra, Manning, & Lu, 2012). Mitra et al. found that women with disabilities were three to four times more likely to experience abuse than women without disabilities. An additional consideration for women with disabilities is the fact that they may experience more stigma and lower social status than men due to their double minority status (Weisel & Florian, 1990). The experience of stigma among women with disabilities may increase exponentially for non-White, non-heterosexual, non-Christian, and working class women (American Psychological Association, 2011).

## **Attitudes toward Sexuality of Women with Disabilities**

In 1979, Thornton noted that there was little information available related to the sexual attitudes and behaviors of women with spinal cord injuries, especially when compared to the more substantial amount of information related to sexual performance in men with spinal cord injuries. While there has been an increase in the last several decades in the amount of literature that can be found related to sexuality and disability issues for women, there is still a relative paucity of information and persistent stereotypes regarding disability and sexuality.

When exploring the research regarding sexuality and disability, one of the most consistent reports regarding attitudes toward sexuality and disability is that both men and women with disabilities may be frequently characterized as unattractive and asexual (Nario-Redmond, 2010). In a meta-analysis, Milligan and Neufeldt (2001) noted that research indicates that sex acts involving disabled individuals are viewed more negatively than when the same sex acts are considered in the context of non-disabled persons. In a study of 310 undergraduate students, Patterson and Witten (1987) found that 48% of participants agreed with the statement “people with disabilities have more important things to do than worry about their sexuality” (p. 43). Individuals with disabilities may commonly be represented as uninterested or unable to take part in sexual activities (Anderson & Kitchin, 2000). People often mistakenly believe that due to actual or assumed sexual dysfunction, a disabled person’s ability to experience sexual gratification is so restricted that he or she is essentially asexual (Milligan & Neufeldt, 2001).

Other myths and attitudes related to sexuality and disability include the misperceptions that only women with disabilities who can function independently are able to be involved in sexual relationships as well as the belief that women with disabilities should feel grateful to those who are willing to be sexually involved with them (Basson, 1998). Women with late-onset disabilities may experience a shift from being viewed as an object of sexual desire before their disability to someone in need of sympathy after they are disabled (Howland & Rintala, 2001). Thus, if a previously able-bodied woman becomes disabled later in life, she may face attitudes that imply that she has so profoundly changed that she has lost her sexuality. An additional myth identified in the literature is that not only are women with disabilities asexual, but if a woman with a disability wishes to express herself sexually, she may be seen as deviant. Pornography involving women with disabilities, such as women with amputated limbs or dwarfism, is often labeled as fetishism (Waxman-Fiduccia, 1999). This characterization sends an overt message that pornographic images or videos of women with physical disabilities are more appropriate for the “kinky underworld” than mainstream erotica (Waxman-Fiduccia, 1999, p. 280).

These attitudes, as well as the messages individuals with disabilities receive throughout their childhood and adulthood, influence their understanding of their own sexuality. Individuals with congenital physical disabilities have been socialized to have a disability identity from birth, and consequently may receive the message that they are asexual due to a lack of encouragement to develop a healthy understanding of their own

sexuality (Mona et al., 1994). Parents may shelter their teenagers with disabilities from experiences in which they might explore their sexuality (Di Giulio, 2003). For example, parents may not encourage expressions of sexuality such as kissing and may not openly discuss sexuality and sexual health with their disabled children (Di Giulio, 2003). The lack of experiences and education afforded to individuals with disabilities during childhood can leave them feeling confused or unsure about their sexual identity as they enter adulthood (Di Giulio, 2003). Though both physically disabled as well as able-bodied women reported that sex is rarely a topic of discussion at home (Walter et al., 2001), the distinct lack of media representation of sexually active persons with disabilities leaves developing disabled women with fewer examples of what sex might look like logistically for them (Milligan & Neufeldt, 2001).

The messages women with disabilities receive during childhood can affect their sexuality in their adulthood. Individuals with disabilities may receive messages growing up that their only option is to be partnered with another disabled individual, which sends the message that the sexuality and worth of a person with a disability as a romantic partner is unequal to that of an able-bodied individual and that it would be inappropriate to enter into a relationship with an able-bodied person (Esmail et al., 2010; Sakellariou, 2006). Despite reports from women with spinal cord injuries that in some cases it is possible to orgasm post-injury, women with spinal cord injuries may receive the message from researchers and physicians that it is not possible for them to experience sexual responses (Whipple, Gerdes, & Komisaruk, 1996). This news can be disheartening, and

potentially dismissive of the possibility that they may experience sexual responses in unconventional ways. Given these messages regarding sexual responsiveness and the ability to be a romantic partner, it is not surprising that more disabled women than able-bodied women indicate that they are unsure if they are physically capable of having sexual intercourse (Walter et al., 2001).

The lack of exposure to sexuality and disability and the resultant stereotypes influence the common misperception that individuals with disabilities do not experience sexual pleasure (Esmail et al., 2010). The strict view of sex as a heterosexual activity, generally equated with penile-vaginal intercourse, limits society's understanding of the range of possible sexual activities in which disabled individuals may participate (Esmail et al., 2010). Though women with disabilities may adapt their sexual response to their circumstances and derive pleasure from being caressed by their partner, sharing fantasies, and kissing, this limited view may lead physicians or other health care workers to label women with disabilities as sexually dysfunctional due to the fact that their sexual responses may not occur genitally, as expected by the traditional model of sexual response (Basson, 1998; Di Giulio, 2003).

The misperceptions regarding sexuality and disability may arise partly due to the fact that sexuality is unlikely to be discussed in the context of disability during sexual education classes and during social conversations (Esmail et al., 2010). Additionally, regardless of disability status, sexuality and sexual education are topics that many people avoid. In spite of the highly sexualized messages conveyed by the media in the United

States, educational settings often limit sexuality education for children and teenagers in general (Duguay, 2011). Walter et al. (2001) found that women with disabilities tended to receive information or advice about sexuality issues at a later age, which correlated with having sexual intercourse at a later age than able-bodied women. Both groups reported books and other printed materials as their most common source for information. Thus, adolescent women, with and without disabilities, may need to seek information regarding sex on their own, as discussions with disabled and able-bodied girls and women may be avoided. However, as individuals with disabilities are often seen as childlike and in need of protection, the topic of sexuality and disability may consequentially be considered particularly taboo (Sakellariou, 2006).

An individual's attitudes toward disability and sexuality are not necessarily rigid and may become flexible through education and exposure. Education regarding sexuality and disability has been found to be helpful in reshaping misperceptions. After watching a film about society's lack of education about sexuality and disability, Esmail et al. (2010) found that participants expressed increased understanding related to relationships with individuals with disabilities and offered positive comments related to the possibility that disabled individuals may more fully explore ways to find sexual pleasure. Unfortunately, the lack of education coupled with negative societal attitudes toward sexuality and disability continue to prevail, and it is important to note the potential negative consequences of these attitudes for women, such as distorted sexual esteem, reduction in their self-confidence, and decreased feelings of sexual attractiveness (Basson, 1998).



## **Experiences of Dating**

Although they may be erroneously characterized as asexual, women with disabilities are sexual beings, capable of feeling desire and love. Like able-bodied women, they may have strong interest in sexual expression, wish to have long-term sexual relationships, and want to start families of their own (Anderson & Kitchin, 2000; Taleporos & McCabe, 2001). In a study of 946 women with and without physical disabilities, Nosek et al. (2001) found that 87% of the participants with disabilities had been in at least one serious romantic relationship or marriage.

There has been some research regarding the experiences of dating for individuals with physical disabilities. Women with disabilities report they experience social and personal barriers to dating (Milligan & Neufeldt, 2001). Women with disabilities are often assumed not to engage in dating behaviors (Howland & Rintala, 2001). Women with disabilities typically have their first date, first kiss, and first serious relationship at a later age than able-bodied women (Howland & Rintala, 2001; Walter et al., 2001). For some women, this delay may relate to beliefs that they are meant to be alone and that no one would desire a sexual relationship with them (Howland & Rintala, 2001). The delay in dating may also be related to limits parents enforce due to fear that dating would be unsafe (Howland & Rintala, 2001). Howland and Rintala interviewed 31 women with various physical disabilities to discuss their experiences of dating. Women noted that practical barriers made dating difficult, such as the inaccessibility to their date's car or requiring the presence of a parent to assist with transferring in and out of vehicles.

Women have also reported difficulty related to attracting partners. Esmail et al. (2010) found that able-bodied individuals may be reluctant to become involved in romantic relationships with disabled individuals, particularly if the disability is obviously severe. Nosek et al. (2001) reported factors associated with difficulty attracting partners included low self-esteem, less education, communication impairment, and societal stigma. Severity of one's disability may also play a role in attracting partners. In a study of 1,196 participants with and without physical disabilities, Taleporos and McCabe (2003) found that participants with more severe disabilities who required assistance with daily activities were more likely to be single than those with less severe disabilities. The researchers also found that disabled women were more likely than disabled men to be in a romantic relationship. Single people with disabilities were found to be more depressed than disabled individuals with partners with whom they did not cohabit. The authors noted the research findings indicated that for individuals with disabilities, live-in relationships may add stress to relationships that are not evidenced in able-bodied couples.

One's disability identity can also increase a woman's risk of being sexually assaulted or feeling trapped in unhealthy relationships. Several participants in Howland and Rintala's (2001) study indicated they experienced sexual assaults and sexually exploitive situations while dating from which they were physically unable to escape due to their disabilities. It is also possible that a woman with a disability may endure controlling and abusive behaviors in relationships, lose her own voice in a relationship by

becoming overly agreeable to her partner's demands, or simply remain partnered with a person with whom she is not a good match, due to the fear that no one else will date her in the future (Howland & Rintala, 2001). Nosek et al. (2001) found that women with disabilities were significantly more likely to stay in bad marriages due to fear of losing custody of their children in a divorce than women without disabilities. The authors also found that women with disabilities tended to experience abuse for significantly longer periods of time than women without disabilities, reflecting the limited number of options these women may have to leave the relationship due to physical or economic dependence on others, environmental barriers, or social isolation.

### **Sexual Identity**

As with people without disabilities, it is important that individuals with disabilities have a strong sense of sexual identity, as sexual esteem and sexual satisfaction have been found to be strong predictors of self-esteem (Taleporos & McCabe, 2002). Moin, Duvdevany, and Mazor (2009) defined sexual identity as a multidimensional concept that includes dimensions such as sexual self-esteem (one's self-perception of being a good sexual partner), sexual preoccupation (the level of importance of sex in a person's life), and sexual satisfaction (the level of happiness or unhappiness with one's sexual life). Sexual self-esteem, which is also often labeled sexual esteem, is alternately defined as "positive regard for and confidence in the capacity to experience one's sexuality in a satisfying and enjoyable way" (Snell & Papini, 1989, p. 256).

**Psychological well-being.** Sexual identity and body image are important to psychological well-being (Moin et al., 2009). Moin et al. surveyed 134 women with and without disabilities and administered measures of sexual identity, body image, and quality of life. The researchers found that although the women with physical disabilities considered sex to be an important part of their lives, their body image, sexual self-esteem, sexual satisfaction, and life satisfaction were significantly lower compared to the women without disabilities. Nosek et al. (2001) also found that when comparing women with and without disabilities, both groups had similar levels of sexual desire, though women with disabilities reported significantly lower levels of sexual activity and satisfaction. These studies contradicted the stereotype that women with disabilities are asexual, as they have awareness of sex as being important in their lives. However, the stigma related to disability and sexuality can damage these women's perception of themselves as sexual partners, which negatively impacts their ability to fully develop their sexual identities (Moin et al., 2009).

If individuals with disabilities feel positively about their bodies and their sexuality, they may be less likely to feel depressed (Taleporos & McCabe, 2002). Taleporos and McCabe found that among participants with physical disabilities, high levels of sexual satisfaction and body esteem predicted low levels of depression in men and women. Peleg-Sagy and Shahr (2012) surveyed 243 first- to seventh-year medical students for symptoms of depression, self-criticism, role commitment, and sexual satisfaction. The authors found symptoms of depression were the sole predictor of

participants' low sexual satisfaction. Given the correlation between disability and depression, it is all the more salient to explore potential mediators for depression, such as sexual esteem.

**Sexual esteem.** Taleporos and McCabe (2001) conducted focus groups for 35 men and women with disabilities during which participants discussed the impact of physical disability on their sexuality in addition to completing questionnaires inquiring about their sexual esteem. Taleporos and McCabe found that participants with disabilities were interested in sex, as a statement related to disinterest in sex on a measure of sexual esteem for individuals with physical disabilities received the least agreement from participants. However, participants most strongly agreed with the statement that finding a sexual partner was harder when one has a disability. The authors noted themes that arose during the groups related to sexual esteem, negative thoughts about oneself as a sexual partner, and frustration due to limitations in sexual expression. This study also reinforced the idea that the societal perception of persons with disabilities as asexual may limit their sexual expression and consequently negatively impact their sexual esteem.

It is important to note that a disability identity did not appear to negatively affect sexual esteem or sexual expression for all participants in Taleporos and McCabe's (2001) study. Of the 35 participants, 21 agreed or strongly agreed with the statement that their sexual expression was limited by their disability, while 14 disagreed or strongly disagreed. In response to the statement that disability makes them a more creative lover, 20 participants agreed or strongly agreed with the statement. Based on reports from

participants related to their dating and sexual history, Taleporos and McCabe noted that for these individuals, the optimistic outlook that their disabilities motivated them to become more creative with their sexual expression was associated with success in establishing sexual relationships. In this study with a relatively small sample, Taleporos and McCabe reported a variety of responses from participants with physical disabilities related to sexual esteem and sexual expression. Although Taleporos and McCabe indicated all participants had some difficulty walking, the authors did not note whether the severity or visibility of participants' mobility limitations influenced their tendency to report positive or negative sexual experiences.

Research has indicated that daily functioning and the severity of one's physical disability can influence sexual esteem. Taleporos and McCabe (2003) conducted a quantitative study exploring sexual esteem, severity of disability, relationships, and adjustment in 1,196 adult men and women with and without physical disabilities. The authors found that individuals who reported more severe disabilities were less likely to have a partner than participants who reported less severe disabilities or individuals with no disability, with over half of the participants who reported having severe disabilities identifying as single, compared to less than a third of the able-bodied participants. The finding that the severity of one's physical disability can limit the opportunity to form romantic or intimate relationships may be related to the idea that the severity of one's disability may also impact sexual esteem. Mona et al. (1994) administered measures of daily functioning, sexual esteem, and self-esteem to 43 women with visible physical

disabilities and found that functional health status was positively correlated with sexual esteem. The results indicated that women who were more easily able to complete activities of daily living tended to have higher levels of sexual esteem.

### **Internalization of Stereotypes**

Given the prevalence of stigma and the attitudes that devalue disabled persons and their sexuality, it may be difficult for individuals with disabilities to avoid internalizing common social messages and values (Milligan & Neufeldt, 2001). In Nario-Redmond's (2010) study of cultural stereotypes of men and women with disabilities, regardless of one's own disability, participants reported endorsing negative stereotypes related to disabled men and women. This finding indicates that cultural stereotypes are so pervasive that these ideas may be deeply held by disabled as well as non-disabled individuals.

Internalization of negative messages can lead women with disabilities to have self-defeating attitudes about themselves (Howland & Rintala, 2001). Even without experiencing overt rejection, women with disabilities may believe they are sexually unattractive (Milligan & Neufeldt, 2001). This is not surprising, given the strong cultural messages that beauty is equivalent to physical perfection (Milligan & Neufeldt, 2001), particularly for women. Societal attitudes can distort the sexual self-image of women and reduce their self-confidence and feelings of sexual attractiveness (Basson, 1998). Although women with disabilities such as spinal cord injuries may be able to orgasm, misinformation regarding their assumed inability to orgasm can result in women failing to orgasm because they believe it is not a possibility due to their disability (Sipski et al.,

2001). Stone (2005) found that after women with invisible disabilities received messages denying that they were actually disabled, they began to deny to themselves that they had disabilities and felt guilt over claiming a disability identity in the presence of others who were more obviously disabled. Olney and Brockelman (2003) also found that students expressed ambivalence about their invisible disabilities and experienced moments of denying their own disabilities in response to the beliefs of others that their disabilities were not real. Thus, messages and stereotypes received from the community can so strongly influence women with disabilities that they may begin to believe that they are more physiologically impaired than they truly are, or may begin to doubt the veracity of their claim to a disability identity.

The internalization of negative messages can also lead women to hold self-defeating attitudes related to their ability to date given their disabled identities (Howland & Rintala, 2001). Women with disabilities may believe that no one will want them if they are disabled, as they cannot compete with able-bodied women (Taleporos & McCabe, 2001). According to Howland and Rintala, as disability is devalued and stigmatized in our society, a woman with a disability may devalue anyone who wishes to date her, because she has internalized the belief that any person who chooses to date a disabled woman must be damaged in some way, or they would have chosen an able-bodied woman. The research on stereotype threat may provide insight into the internalization of stereotypes for women with disabilities. According to the stereotype threat literature, when one is aware of negative social stereotypes they can directly interfere with



performance, even if one does not believe that stereotype applies to him or her directly (Steele, 1997). Thus, it is important to consider the ways in which societal messages regarding disability status and sexuality may impact the sexual esteem of individuals with physical disabilities. The stereotypes related to disability may also influence disabled women's experiences of pregnancy and motherhood.

## **Disability and Reproduction**

### **Linking Sexuality and Reproduction**

Women have historically been defined by their sexuality and ability to reproduce (Kallianes & Rubenfeld, 1997). Women with disabilities are often seen as asexual and undesirable sexual partners, and it has been argued that beneath this sexual stereotype is the belief that it may be biologically, morally, and economically dangerous for women with disabilities to procreate and parent (Kallianes & Rubenfeld, 1997; Waxman, 1994). Due to the myth that people with disabilities may not have the social judgment to act responsibly on their sexual desires, involuntary sterilization had been compulsory for individuals with cognitive disabilities (DeLoach, 1994). In the midst of the eugenics movement, proponents of whom advocated for attention to the heredity of the human race and propagation of superior over inferior genes, approximately 60,000 individuals in the U.S. who were labeled feeble-minded, 60% of whom were women, underwent sterilization between 1927 and 1957 (Stubblefield, 2007). In an analysis of studies related to attitudes toward disability, Aunos and Feldman (2002) reported that multiple

studies in the 1970s found support from service workers and parents of children with intellectual disabilities for sterilization of persons with intellectual disabilities.

More recently, Stansfield, Holland, and Clare (2007) reported that 73 individuals were referred for sterilizations in England and Wales between 1988 and 1999. Thirty-seven of those individuals were eventually sterilized, and 6 received sterilizations without court authorization. Individuals referred for sterilization had diagnoses ranging from mild to severe cognitive impairment, with some referees reporting they had been married or were in serious relationships. The majority (75%) of the referrals was made by the parents of the disabled individual, and in some cases the referrals were made by extended family members, the patients themselves, the Health Authority, or the County Council. The authors noted that although the court deemed the women lacked the capacity to consent to sterilization, slightly less than one-third of the women had partners, indicating a need to further explore the relationship between the capacity to consent to sterilization and the capacity to consent to sexual relationships, as well as the psychological processes driving referrals for sterilization, such as fear and attitudes toward contraception.

In addition to the aforementioned stereotypes related to disability and sexuality, Howland and Rintala (2001) noted that people have concerns that disabled women's dating may lead to pregnancy, which may result in a child for whom a woman is assumed to be unable to care or a child assumed to carry the genetic defects of the mother. Given the assumptions regarding the asexuality of women with disabilities and the consequential lack of inclusion of disabled women when discussing motherhood, the

voices of women with disabilities are relatively absent when exploring literature on reproduction and parenting (Thomas, 1997).

### **Pregnancy among Women with Disabilities**

According to Waxman (1994), the medical field has historically focused primarily on preventing pregnancy, rather than promoting sexuality or reproductive health for women with disabilities. One of the challenges in understanding the experiences of pregnancy and motherhood for women with disabilities is the relative lack of data documenting the incidence of pregnancy in this population (Signore et al., 2011). Most women with disabilities do not have impaired fertility and are capable of becoming pregnant (Signore et al., 2011). Women with disabilities may receive messages that they are unable to have children from family members or other sources and may be surprised to discover from a gynecologist that they are capable of becoming pregnant (Prilleltensky, 2003). However, there remains a dearth of research regarding the experiences and outcomes of pregnancy among women with disabilities (Signore et al., 2011).

**Societal barriers.** Women with disabilities who become pregnant may have difficulty obtaining prenatal care for a number of reasons. Barriers such as limited transportation can impede one's ability to attend prenatal appointments. While the ADA of 1990 specified that physicians who provide health care services should remove structural barriers in order for people with disabilities to access services (Grabois, 2001), some women may have difficulty physically accessing health care facilities. It was

recently the observation of the author that at a physician's office, which was frequented by older and physically disabled adults, there was a single heavy door used to enter the practice, which was not equipped to open automatically. This made it nearly impossible for patients utilizing wheelchairs or with mobility impairments that would otherwise affect their ability to open the door to physically enter the practice without assistance from others. As pregnancy may affect balance and make walking unassisted increasingly difficult for women with mobility issues (Signore et al., 2011), it is problematic when women with disabilities have difficulty literally getting in the front door. Few offices are equipped with the appropriate scale needed to weigh a woman using a wheelchair and consequently, the gestational weight gain for pregnant women in wheelchairs may not be closely monitored (Signore et al., 2011) The examination tables in offices may not lower sufficiently and the staff may not be skilled in assisting patients with disabilities onto tables. Other potential barriers when attempting to seek prenatal care include narrow doorways, lack of accessible parking, lack of lowered counters at the front desk, and inaccessible bathrooms (Smeltzer, 2007).

In addition to physical barriers, women with disabilities may also face difficulties when working with health care providers. Oshima, Kirschner, Heinemann, and Semik (1998) surveyed 44 resident physicians in internal medicine and obstetrics and gynecology at a large urban medical center and provided a vignette regarding a hypothetical pregnant patient with tetraplegia who experienced mobility limitations or paralysis in the upper and lower body due to a spinal cord injury. When asked how they

would facilitate a pelvic examination if mobility issues made it difficult for the patient to position herself on the table, fewer than 10% of participants indicated they would ask the patient directly what position would work best for her. Forty percent of respondents indicated they did not have the resources or were unsure how to assist the patient onto the examination table. Nosek et al. (2001) interviewed 31 women with disabilities to discuss their experiences when seeking medical and reproductive care. Thirty-nine percent of the participants reported that their physicians did not speak directly to them when a friend or family member also accompanied them to their appointment. Thirty-six percent of the participants had difficulty finding a physician who was willing to provide them medical care during their pregnancy.

Women may also have difficulty finding physicians who are knowledgeable about their particular disability and can provide clear information about what to expect during pregnancy and childbirth, given her disability (Nosek et al., 2001). Physicians may not have information about the interaction between a particular disability and pregnancy, may not know what special measures should be taken, and may not recognize the need to discuss referrals to other physicians or therapists who could help with mobility issues that may arise during the pregnancy, such as a physical therapist (Lipson & Rogers, 2000; Prilleltensky, 2003). In Oshima et al.'s (1998) study, 27% of the physicians indicated they could not articulate the risks of pregnancy, labor, and delivery for a patient with tetraplegia. Most participants also indicated they would not be very comfortable managing a pregnant patient with a spinal cord injury (Oshima et al., 1998). Lastly, given

the limited amount of research related to reproduction and disability, women with disabilities may have difficulty finding information about the birthing experiences of women with disabilities similar to their own (Prilleltensky, 2003). In a qualitative study of eight mothers with chronic illnesses, Blackford, Richardson, and Grieve (2000), found that seven out of the eight participants reported there was inadequate information provided regarding the best ways to care for symptoms related to their illness during their pregnancy. Participants also reported they received limited information regarding the specific ways pregnancy might worsen their illness. In a survey of 34 family planning clinics, Anderson and Kitchin (2000) found that only nine clinics could provide reading materials related to sexual education and family planning in a format accessible to patients with sensory or intellectual disabilities. Of the nine clinics that reported they could provide these materials, all of them indicated they did not have the materials on site for immediate access. Only one clinic indicated it provided family planning information that was specifically targeted toward individuals with disabilities. The lack of available information may leave women with disabilities feeling uninformed and uncertain about what to expect during pregnancy and childbirth.

**Societal attitudes toward pregnancy.** As previously noted, there are many negative attitudes and stereotypes regarding disabled individuals in general. Women may also face attitudinal barriers specifically related to pregnancy and mothering, as women with disabilities often experience negative reactions from family members, health care providers, and society when voicing a desire to become a mother (Smeltzer, 2007).

Women with disabilities may not be considered nurturing; rather, they may often be stereotyped as being unfit for motherhood (Nario-Redmond, 2010). The tendency for people to infantilize women with disabilities may also lead to the belief that they should be a recipient of care, rather than an active caregiver (McFarlane, 2004). While sharing the news of pregnancy may be a joyous occasion for many able-bodied women, pregnancy may result in reactions ranging from joy to nervousness to overtly critical responses such as disapproval and questioning regarding the ability to physically or competently provide care for women with disabilities (McFarlane, 2004; Prilleltensky, 2003). Family members may also voice concerns about the woman's health and safety, in some cases going so far as to attempt to have the child placed into their own custody due to the belief that it would not be possible for the woman to parent effectively (Barber, 2008; Thomas, 1997). These reactions may lead women with disabilities to doubt their own abilities or decision to become pregnant.

While able-bodied women are often asked to justify their reasons for choosing not to have children (Letherby, 2002), disabled women and couples are asked to justify their reasons for choosing to have children (McFarlane, 2004). Women with disabilities may feel that they must secure permission from physicians in order to determine if it would be appropriate for them to reproduce. They may also hear repeated messages from the medical community suggesting that they be sterilized rather than risk becoming pregnant (McFarlane, 2004). Pregnant women with disabilities may also believe that their physicians believe they have been irresponsible by becoming pregnant and they may be

questioned regarding their desire to have a child, given a risk that they might produce another “defective” individual (Prilleltensky, 2003, p. 27; Signore et al., 2011). The misperception that women with disabilities are not mothers is reflected in hospitals, where there is often a lack of information about pregnancy in a variety of formats or an environment that has not been adapted for disabled women, such as inaccessible examination tables. Due to concern over the reactions of others or the possibility that others might suggest termination of the pregnancy, some disabled women have reported hiding their pregnancy from others for as long as possible (McFarlane, 2004).

### **Women with Disabilities and Motherhood**

While for many able-bodied women, the term *reproductive rights* brings to mind the rights to obtain contraception or end an unwanted pregnancy, for women with disabilities this term tends to be broader, and also includes the right to bear and raise children (Kallianes & Rubenfeld, 1997). The struggle for reproductive freedom and access to information regarding pregnancy can also be seen as a struggle for motherhood (Waxman, 1994).

### **The Ideal Mother**

Although they may face stigma or receive messages that pregnancy may not be an appropriate choice for them, there are many women with disabilities who would like to become pregnant and have children. Ghidini, Healey, Andreani, and Simonson (2008) surveyed 114 reproductive-aged women with spinal cord injuries and found that 44% reported a desire to become pregnant after their injuries and 36% were able to



successfully conceive after their injuries. Of the 41 women who conceived, 17 women's pregnancies ended either through miscarriage or abortion. Women who chose not to pursue pregnancies after their injuries often indicated that fear of pregnancy, fear of rearing children, as well as a lack of support influenced their decisions not to attempt to have children after their injuries. Of the 24 women who had children after their injuries, 23 reported that being a parent increased their quality of life.

Grue and Lærum (2002) interviewed 30 women with physical disabilities to explore their experiences of becoming mothers. The authors indicated one theme that arose during the study was the idea that while a woman with a disability may historically view her body negatively and generally experience it as impaired and needing medical attention, the birth of a child can transform her perception of her body into something valuable and capable of producing life. Women with disabilities may so strongly desire children that they are willing to face increased pain or decreased mobility during their pregnancies in order to have a child (Thomas, 1997). For some women with disabilities, becoming a mother may be an important step in being perceived as an adult and achieving womanhood (Grue & Lærum, 2002). Women with disabilities who do become mothers, either through pregnancy or another route such as adoption, also face negative attitudes, incorrect assumptions from others, and a variety of barriers that may make it difficult to fully participate as a parent.

Mothers with disabilities may struggle with the idea that they are not ideal mothers. In Western culture, motherhood is a significant social role and an essential and

expected part of womanhood (Malacrida, 2009; McKeever, Angus, Lee-Miller, & Reid, 2003). Western culture also dictates that the ideal mother should immediately attend to her child's needs and be fully present for her child at all times (Malacrida, 2009). Malacrida noted that, "mothers in modern western societies are idealized as 'natural' and limitless caregivers for their children" (2009, p. 101). Mothers who are physically paralyzed may not be seen as truly fulfilling the ideal mothering role because although they may parent responsively in other ways, they may not be able to immediately provide for their child's physical needs (Malacrida, 2009). Mothers are also often considered the provider of moral guidance in the home (Malacrida, 2009). For mothers with and without disabilities, high expectations attached to motherhood result in a culture of mother-blaming, where mothers are typically the parent held responsible for their family's successes, as well as their failures (Malacrida, 2009). Malacrida argued that unnatural expectations are placed on mothers, setting an ideal standard that neither able-bodied nor disabled mothers can possibly achieve.

### **Attitudes toward Motherhood**

Women with disabilities are vulnerable to public scrutiny regarding their reproductive choices (Prilleltensky, 2003). They are also particularly vulnerable to mother-blaming (Malacrida, 2009). Women with disabilities are often stereotyped as dependent (Nario-Redmond, 2010), and this assumption can undermine their role as mothers (Prilleltensky, 2004). Malacrida found that agencies meant to protect the welfare of children may visit the home of a disabled parent with the expectation that the parent

will fail, and consequently search for evidence to support that belief rather than providing the parent with suggestions to help them or noting the ways in which the parent is successful. As parenting is often viewed as a largely hands-on and movement-oriented, mothers with disabilities who are not able to fulfill all of the physical tasks of parenting may face skepticism and negative attitudes regarding their ability to competently and effectively function as mothers (Prilleltensky, 2004).

When women with disabilities make adjustments in an effort to keep their young children controlled or safe, others may interpret the behaviors as indicative of their incompetence as parents, rather than seeing that the mother is attempting to solve practical problems creatively that may arise with physical disabilities (Grue & Lærum, 2002). For example, if a mother with a physical disability attaches a leash to her child's backpack while at a theme park where she cannot maneuver quickly, others may view this as a sign of her own weakness, rather than an effort to keep her child safe.

Additionally, when a mother with physical disabilities faces difficulties related to parenting, it may be mistakenly assumed the difficulty is related to her disability. For example, while many able-bodied women may initially struggle with breastfeeding, a visually impaired mother who struggles to breastfeed her child may be perceived as unable to adapt given her disability and face skepticism regarding her ability to parent (Prilleltensky, 2003).

Women with disabilities are also seen as falling short of their responsibilities when myths are perpetuated that they depend on their children for care (Malacrida,

2009). Prilleltensky (2004) indicated a body of journal articles have emerged that focus on the needs of children who provide care for parents with disabilities. The author indicated some articles on this topic emphasize the negative impact of being what has been coined a “young carer” and focus on the social and educational disadvantages children of parents with illnesses or disabilities face, without acknowledging the roles poverty, stigma, and inadequate services and funds play as barriers to parenting (p. 210). It can be problematic if widespread public opinion is that children of parents with disabilities are automatically going to be taking responsibility for their parent and assuming a parental role at a young age, thus “robbing them of their childhood” (Malacrida, 2009, p. 102; Prilleltensky, 2004).

Given the amount of stigma and negative attitudes faced by individuals with disabilities, it is not surprising that mothers with invisible disabilities may also try to hide their differences from the community (Malacrida, 2009). In a qualitative study of 43 women with a range of disabilities, including physical impairments, cognitive disabilities, developmental disabilities, sensory impairments, and disabling mental health conditions, Malacrida (2009) found that most mothers with disabilities who participated in the study were concerned about the perceptions of others regarding their parenting abilities. Participants reported they either attempted to minimize the opportunities for others to become aware of their disabilities or overcompensated by becoming involved in numerous activities. Malacrida found that several participants reported making conscious efforts to prove their ability to parent effectively by showing that their children were very

well taken care of, via trips to the zoo or by providing them nice clothing. Malacrida noted these attempts were made in an effort to reduce the stigma they experienced as parents with disabilities.

### **Barriers to Parenting**

Women with disabilities face daily barriers that may make it additionally challenging to meet the expectation of the ideal mother. As mothers are expected to be all things at all times for their children, they are often the parent expected to play with their children at the park, attend parent-teacher conferences at school, and take their children to their annual check-ups with the doctor. Difficulty with access to playgrounds, schools, and medical buildings that are not physically accessible may reduce the ability of women with some physical disabilities to fully participate in these day-to-day activities with their children and fulfill the expectation of what it means to be an ideal mother (Malacrida, 2009). Mothers with disabilities may also be unable to accompany their children into their friends' homes in order to meet the parents and view the environment in which they leave their children for play dates (McKeever et al., 2003).

Mothers with disabilities also face economic barriers. In 2010, the unemployment rate for individuals with disabilities was 14.8%, compared with 8.8% for persons with no disability (United States Department of Labor, 2010). The socially constructed assumption that physical disability also equates to lowered intelligence can reduce the ability of mothers with disabilities to access educational and occupational opportunities (Malacrida, 2009). Women whose disabilities are visible, such as those who require

prosthetic limbs, may have increased difficulty finding a job. In one study, people with invisible disabilities were 16 times more likely to be employed than individuals with visible disabilities (Martz, 2003). The barriers women with disabilities face in gaining employment increases their chances of living in poverty or inadequate housing, which serves to reinforce society's impression that mothers with physical disabilities are not as adequate parents (Malacrida, 2009).

### **Maternal Confidence**

Maternal confidence is defined as a mother's perception that she is able to care for and understand her children (Badr, 2005). Factors such as social support may impact maternal confidence. Cutrona and Troutman (1986) surveyed 55 women during and after their pregnancies and found that those who reported higher levels of social support during their pregnancies also reported higher levels of maternal confidence. Given the vast literature delineating the lack of social support women with disabilities may receive from medical professionals and family members (Prilleltensky, 2003), it is likely that they may consequently feel less confident in their abilities to care for their children. Due to the limited amount of data on pregnancy outcomes for women with disabilities, as well as the lack of information available for women regarding pregnancy or parenting with specific physical disabilities, it is presumed women with physical disabilities may also have lowered maternal confidence due to uncertainty about the methods they will use to negotiate parenting skills while managing their disability (Prilleltensky, 2003; Signore et al., 2011). Additionally, women may have lowered maternal confidence due to awareness

and internalization of society's expectations regarding the ideal mother and concerns that they will be perceived as failing at motherhood (Malacrida, 2009).

### **Adaptability and Strengths of Mothers with Disabilities**

Although it is important to highlight the many barriers and societal attitudes that may impact disabled women's perceptions of pregnancy and motherhood, it is imperative to also illustrate the positive experiences of mothers with physical disabilities. Many women with disabilities are eager to become mothers. Much of the research on parents with disabilities has been driven by assumptions that a parent's disability will have negative effects on his or her child (Kirshbaum & Olkin, 2002). However, there are many ways mothers learn to adapt their parenting styles in order to be effective parents. In order to be as physically involved as possible, women with disabilities may use assistive devices or adapt their baby's furniture in order to parent more independently (Signore et al., 2011). For example, women may use lowered dressing tables, purchase cribs with side openings, or utilize side cars attached to the mother's wheelchair (Signore et al., 2011). If a woman's upper extremities are affected, she may find her arms become more easily fatigued when attempting to breastfeed, and she may use slings or bottle attachments or seek a lactation consultant who can help her to explore ways to make the process comfortable for her and her baby (Carty, 1998; Signore et al., 2011). Mothers with visual impairments may use strollers specifically designed so a seeing-eye dog can assist in making turns (Carty, 1998). Mothers with hearing impairments may utilize sound-activated visual alarms that alert the mother to the baby's various sounds through a

pattern of flashes (Carty, 1998). Research has indicated that using these types of adaptations in order to increase the mother's involvement in her infant's care can improve mood, reduce pain, and have a positive effect on the parent-child interaction (Signore et al., 2011).

Contrary to research that highlights the disadvantages faced by children with a disabled parent, there is some research that explores the efforts women with disabilities make to parent effectively despite physical restrictions. In a qualitative study, Prilleltensky (2004) interviewed mothers with physical disabilities, many of whom utilized a wheelchair. One theme that arose during the interviews was the idea that although the children were taught to do things on their own and gain independence, it was important to the mothers in the study that their children remained children, rather than small adults. Part of the skepticism regarding the parenting ability of mothers with disabilities may concern the toddler years, which often require extra energy during a period of discipline and behavior management (Prilleltensky, 2004). Women indicated they were able to verbally provide their children choices and implement a consistent system of contracts and consequences. As physical strength can become less relevant when setting limits with older children and teenagers, it can be a strength that women with disabilities may adapt by setting consistent verbal limits with their young children (Prilleltensky, 2004).

An additional strength that can be found in the parenting of mothers with physical disabilities is the increased use of verbal communication during arguments, as one



participant in Prilleltensky's (2004) study indicated her children learned at a young age to openly discuss their problems verbally, rather than act them out physically. Parents with physical disabilities may move at a slower pace and spend more time sitting down with their children, which can be seen as valuable, as opposed to an example of impairment (Wates, 2002). Children of mothers with disabilities may also benefit from experiencing disability in the context of a positive relationship, rather than understanding disability as something to be feared (Wates, 2002).

Although mothers with physical disabilities may generate creative and effective ways to fulfill the physical aspects of parenting as independently as possible, it is important to note that parenting is about more than the ability to change diapers or tie a child's shoes. An important component of parenting is creating a nurturing, caring environment where a child can grow physically and emotionally (Prilleltensky, 2004). Parents need to ensure that their child's basic needs are met as well as modeling expression of feelings, communicating openly with their children, and ensuring that their child feels love and protected (Prilleltensky, 2004). While they may face barriers and challenges related to pregnancy and mothering, women with physical disabilities may experience joy from the close and fulfilling relationships they form and maintain with their children (Prilleltensky, 2004).

### **Social Model of Disability**

Research in the area of disability has shifted over the last several decades away from a medical model toward a Social Model of Disability (Esmail et al., 2010).

According to the Medical Model, disability is viewed as a health condition that should be addressed by each individual in terms of his or her own medical care and behavior changes (Emmett & Alant, 2006). This view contrasts the Social Model of Disability, which posits that although individuals who are physically impaired may face personal restrictions and limitations, the problems faced by individuals with disabilities come from attitudes, environments, and societal barriers that place limitations on the participation of disabled individuals in society (Oliver & Barnes, 2010). The Social Model of Disability emphasizes the importance of focusing on external societal barriers, rather than considering disability to be each individual's burden to overcome on their own (Esmail et al., 2010). Through the lens of a social model, disability is not limited to a particular medical condition. It is a social construct that should be addressed through action aimed at modifying the environment so disabled individuals can integrate and fully participate in the world around them, rather than requiring them to be wholly responsible for adapting to their environment (Emmett & Alant, 2006). While in some cases, medical concerns may be the primary reason a woman cannot become pregnant or is unable to parent, the current study was grounded in the understanding that for many women with physical disabilities, sexual expression and the choice to parent may be influenced by many variables other than a medical condition, such as coping with and internalizing others' negative attitudes, facing stigma, and overcoming environmental and societal barriers.

### **Rationale for the Current Study**

There are a significant number of women living in the U.S. with visible and invisible physical disabilities. Negative societal attitudes toward women with disabilities are prevalent, and myths regarding disability and sexuality have led to a widespread belief that women with disabilities are asexual (Milligan & Neufeldt, 2001). As an extension of the conceptualization of disabled women as asexual, women with disabilities are not often viewed as competent and capable parents, and may consequently encounter a variety of negative messages or social barriers when exploring the possibility of pregnancy or motherhood (Malacrada, 2009; Prilleltensky, 2003). Over time, the internalization of the messages received via societal dismissal of disability, environmental barriers, and negative attitudes related to disability can lead to self-defeating attitudes, lowered sexual esteem, and fear of being perceived as an incompetent mother (Basson, 1998; Howland & Rintala, 2001; Malacrada, 2009). Societal messages may influence disabled women's perceptions of pregnancy. They may differ from able-bodied women in their ability to identify with pregnancy, given the negative views of impairment and cultural ideas linking disability with asexuality (Prilleltensky, 2003). In consideration of the literature reviewed regarding limited societal support and environmental barriers for pregnant disabled women, women with disabilities may also view pregnancy differently than able-bodied women, due to their expectations regarding the societal support they may receive should they choose to become pregnant.

The majority of existing studies related to sexuality and motherhood for women with disabilities have utilized qualitative methodology. The current study contributed to the body of literature regarding mothering and disability identity by quantitatively exploring variables associated with sexual esteem, such as the visibility or invisibility of one's physical disability, as well as self-reported severity of one's disability. The study also explored the relationship between sexual esteem and maternal confidence for women. While expectations and concerns related to pregnancy for women with disabilities have been explored qualitatively, this study contributed to the literature by quantitatively comparing perceptions of pregnancy, including identification with pregnancy and perceived societal support of pregnancy, for women with and without physical disabilities.

### **Research Hypotheses**

Hypothesis 1. It was hypothesized that lower levels of sexual esteem and identifying as physically disabled would predict lower levels of maternal confidence.

Hypothesis 2. It was hypothesized that able-bodied participants would endorse the highest levels of sexual esteem, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities.

Hypothesis 3. It was hypothesized that able-bodied participants would endorse the highest levels of maternal confidence, followed by participants with invisible disabilities,

participants with sometimes visible disabilities and then participants with visible disabilities.

Hypothesis 4. It was hypothesized that greater severity in self-reported disability would predict lower sexual esteem among participants with disabilities.

Hypothesis 5. It was hypothesized that greater severity in self-reported disability would predict lower maternal confidence among participants with disabilities.

Hypothesis 6. It was hypothesized that able-bodied participants would endorse the highest identification with pregnancy, followed by participants with invisible disabilities, participants with sometimes visible disabilities and then participants with visible disabilities.

Hypothesis 7. It was hypothesized that able-bodied participants would endorse the highest perceived societal support, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities.

CHAPTER III  
METHODOLOGY

**Participants**

Four hundred and seventy-eight women who self-identified as currently without children but interested in having them in the future completed the study. Seventy-seven participants identified as having a physical disability and 401 participants identified as able-bodied. A matched sample was created so that the final sample consisted of 77 able-bodied participants and 77 participants with physical disabilities, for a total of 154 participants. Details regarding the matching procedure are described in the analysis section of this document. Participants ranged in age from 18 to 38 years old for participants with a physical disability ( $M = 25.42$ ,  $SD = 6.01$ ) and 18 to 39 years old for able-bodied participants ( $M = 25.45$ ,  $SD = 6.14$ ). All participants identified their gender identities as women. See Table 1 for information about the racial/ethnic makeup of the final sample of participants.

Table 1

*Race/Ethnicity of Participants*

Race/Ethnicity	<i>n</i>	Percentage
White/European American	115	74.68
Black/African American	13	8.44
Hispanic/Latina	9	5.84

Asian/Asian American	6	3.9
Native American/Alaskan Native	1	.65
Other <sup>a</sup>	10	6.49

<sup>a</sup>Includes participants who identified multiple races/ethnicities

Of the participants with physical disabilities, 33 (21.4%) identified as having visible disabilities, 22 (14.3%) identified as having invisible disabilities, and 22 (14.3%) identified as having disabilities that were sometimes visible to others. The age when the participants' physical disabilities first became apparent ranged from birth to 27 years, with an average age of onset of 9.27 years old ( $SD = 8.00$ ). On a scale from 1 (mild) to 6 (severe), the average self-identified rating of the severity of the primary physical disability was 3.44 ( $SD = 1.41$ ). Approximately 7% of participants reported the severity of their physical disability as 1 (mild), 21% reported severity as 2, 30% reported severity as 3, 18% reported severity as 4, 14% reported severity as 5, and 10% of participants identified the severity of their disability as a 6 (severe). Participants identified as having a range of physical disabilities. See Table 2 for a list of disabilities reported by participants in the sample.

Table 2

*Nature of Disability*

Disability Description	Number	%
Cerebral Palsy	6	7.79
Hearing Loss	5	6.49
Fibromyalgia	4	5.19
Lupus	4	5.19
Spinal Cord Injury	4	5.19
Spinal Muscular Atrophy	4	5.19
Visual Impairment	4	5.19
Scoliosis	3	3.9
Spina Bifida	3	3.9
Amputation	2	2.6
Arthritis	2	2.6
Deaf <sup>a</sup>	2	2.6
Diabetes, Type 1	2	2.6
Diabetes, Type Unspecified	2	2.6
Muscular Dystrophy	2	2.6

*Note.* There was one mention of each of the following disabilities, representing 1.3% each of the data set: Arthrogyriposis, Asthma, Asthma and Severe Tendonitis, Bell's Palsy, Brain Injury, Celiac Disease, Chronic Fatigue Syndrome, Chronic Headaches, Chronic Myofacial Pain, Compression Fractures, Dwarfism, Endometriosis, Epilepsy, Friedreich's Ataxia, Generalized Dystonia, Hunchback, Hydrocephalus, Larsen Syndrome, Muscular Atrophy, Non-Diabetic Hypoglycemia, Osteogenesis Imperfecta, Polycystic Ovary Syndrome, Polio, Psoriasis, Rheumatoid Arthritis and Hashimoto's Disease, TAR Syndrome, Undiagnosed Neuromuscular Disorder, Venous Malformation.

<sup>a</sup>Participants were identified separately as deaf if they specifically identified deafness as their primary disability (rather than more generally identifying hearing loss).



## **Instrumentation**

Participants completed a demographics questionnaire, the Sexual Esteem subscale of the Sexuality Scale (Snell & Papini, 1989), four subscales of the Childbearing Attitudes Questionnaire (Ruble et al., 1990), and an author-generated scale measuring identification with pregnancy and perceived societal support for having children. Participants who identified as having a physical disability responded to four additional questions regarding their physical disabilities. The psychometric properties of each instrument are presented below. However, data regarding reliabilities of scales in the current study are presented in the Results chapter.

## **Demographics**

Participants completed an author-generated demographics questionnaire to answer basic demographic questions including gender, age, and race/ethnicity (See Appendix A). Although sexual orientation was originally included in the demographics questionnaire, it was omitted in error from the online survey and information regarding the sexual orientation of participants was consequently not collected. In order to control for the possibility that some women choose to be childfree by choice, regardless of the influence of societal messages regarding their disability status, participants indicated if they identified as childfree and did not plan to have children in the future. Participants also indicated if they identify as having a primary diagnosis of a physical disability and no intellectual or emotional disabilities; as able-bodied with no physical, intellectual, or

emotional disabilities that cause impairment in daily life activities; or as something else, which they were asked to explain further.

Participants who identified as having a physical disability on the demographics questionnaire responded to four additional statements. In order to consider the possible impact of the age of onset for a disability, participants indicated the age at which their primary disability was first apparent. Participants indicated the visibility of their disability by responding to the statement, “My physical disability is visible and can be easily seen by others” with the response choices *yes*, *no*, or *sometimes*. Severity of disability was assessed by asking participants to indicate the perceived severity of their disability on a Likert scale, ranging from mild to severe. Participants were also asked to identify their physical disability so that the researchers could exclude participants who identified as having cognitive or mental health impairments.

### **Sexual Esteem**

Sexual esteem was assessed by using the Sexual Esteem subscale of the Sexuality Scale (Snell & Papini, 1989; See Appendix B). The Sexuality Scale (SS) assesses sexual esteem, sexual-depression, and sexual-preoccupation. Snell and Papini defined sexual esteem as a tendency to give oneself internal reinforcement related to one’s ability to relate sexually to other people. The sexual-depression scale assesses an individual’s tendency to feel sad or discouraged by one’s ability to relate sexually to others. The sexual-preoccupation scale assesses the tendency to become overly concerned with sexual thoughts and behaviors.

The Sexuality Scale is a 30-item questionnaire measured on a 5-point Likert scale. Participants indicate their level of agreement with the statements (1= *Agree* to 5 = *Disagree*). Each of the three subscales consists of 10 items. The survey indicates that the statements listed describe certain attitudes toward human sexuality and that there are only personal responses to these attitudes, rather than right or wrong answers. Thirteen items on the whole measure, including three items on the sexual esteem scale, are reverse-scored. The items on each subscale are summed to create three subscale scores, with higher scores indicating greater sexual esteem, sexual depression, and sexual preoccupation (Snell & Papini, 1989). Sample items include, “I am not very confident in sexual encounters” and “I would rate my sexual skill quite highly.”

Research has indicated the Sexuality Scale is a psychometrically sound measure of sexual esteem. Snell and Papini (1989) reported the Sexuality Scale was first used in 1989 in a sample of 296 college students. The authors reported that a factor analysis indicated all ten items on the sexual esteem subscale loaded onto the factor with coefficients ranging from .52 to .82. Cronbach’s alpha coefficients indicated the internal consistency for the sexual esteem subscale was .92 for women, .93 for men, and .92 for all subjects. In 1992, Snell, Fisher, and Schuh administered the Sexuality Scale in addition to measures of sexual relationships, sexual attitudes, AIDS discussion strategies, and empathy for individuals with AIDS to 386 college students. The sexual esteem subscale demonstrated good reliability, with internal constancy for the scale ranging from .91 to .92.

## **Maternal Confidence**

Perceived maternal confidence was assessed using four subscales of the Childbearing Attitudes Questionnaire (CAQ), which is a scale that measures attitudes toward pregnancy and birth, self-esteem, and interpersonal relationships (Ruble et al., 1990; See Appendix C). The CAQ was originally a 76-item scale composed of 19 subscales consisting of 3-6 items each. Ruble et al. conducted a pilot test and administered the CAQ to 667 women, including women planning to become pregnant, women who were currently pregnant, and women who had recently given birth to their first child. The authors examined the items for evidence of floor or ceiling effects, and chose to drop 3 items from the scale. Ruble et al. investigated the factor structure of the CAQ using principal-components analysis and reported that 20 factors explained 58% of the total variance. The authors reported that 15 of the 20 factors produced interpretable scales. The first factor was divided into subscales 1a (Maternal Worries) and 1b (Maternal Self-Confidence).

Given the pattern of intercorrelations among factors, subscales were grouped together to create four higher order constructs. Ruble et al. (1990) indicated the Relationship with Mother, Identification with Pregnancy, Feelings about Children, and Information Seeking subscales measure identification with motherhood. The Relationship with Husband, Interest in Sex, Body Image, and Social Boredom subscales measure interpersonal relationships involved in feelings of social orientation. The subscales Maternal Worries, Maternal Self-Confidence, Negative Self-Image, and Feelings of

Dependency measure feelings of maternal confidence. Pain Tolerance, Denial, Negative Aspects of Caretaking, and Attitude toward Breastfeeding measure feelings about potentially negative aspects of giving birth. Confirmatory factor analysis utilized chi-square as a measure of goodness of fit. This four-factor model yielded goodness of fit indexes of .85, .90, and .91 for the prepregnant, pregnant, and postpartum groups, and the overall chi-square (294) was 596. The authors reported that from a psychometric point of view, it would be best to base analyses on all of the subscales or on the higher order constructs.

For the purpose of this study, the four subscales which measure maternal confidence, Maternal Worries, Maternal Self-Confidence, Negative Self-Image, and Feelings of Dependency, were utilized (Ruble et al., 1990). There are a total of 17 items across the four subscales. The Maternal Worries subscale contains six items and assesses concerns about the responsibility of caring for a child (e.g., “It will be overwhelming to be completely responsible for the care and welfare of another person”). The Maternal Self-Confidence subscale contains four items to assess confidence in one’s ability to care for a baby (e.g., “I feel confident in my abilities”). The Negative Self-Image subscale contains four items that assess concern about one’s image and comparisons to others (e.g., “I often feel self-conscious”) (Ruble et al., 1990). The Feelings of Dependency subscale contains three items related to concerns about loss of independence due to pregnancy (e.g. “Being pregnant would make me feel more childlike, less grown-up”) (Ruble et al.). Each item is answered on a 7-point scale (1= *Disagree Strongly* to 7 =

*Agree Strongly*). The wording of the items may be adjusted so that they apply to women before, during, or after pregnancy (Ruble et al., 1990). For example, the item that says, “I am certain that I will be a good mother” may be adjusted to say “I am certain I am a good mother.” For the purpose of the current investigation, items were presented in the future tense in order to allow participants to contemplate becoming mothers. Items are counterbalanced for direction to reduce response bias. All four items on the Maternal Self-Confidence and one item on the Negative Self-Image subscales are reverse-scored, with higher total scores representing lower maternal confidence.

The reliability of the CAQ has not been particularly strong, with a coefficient alpha of .50 or higher on 14 of the 16 subscales (Ruble et al., 1990). The Information-Seeking subscale did not demonstrate reliability greater than .5, but was not included in the subscales that were utilized in the current study. Ruble et al. reported that Cronbach’s alpha demonstrated the internal consistency of the Maternal Worries subscale, Maternal Self-Confidence subscale, the Negative Self-Image subscale, and the Feelings of Dependency subscale, was .67, .73, .65, and .53, respectively. A group of women were administered the CAQ 1 month postpartum and again at 3 months postpartum to explore the test-retest reliability of the measure. The reliability coefficient was greater than .60 for 15 out of 16 subscales, and .70 or higher for 11 of the subscales (Beere, 1990).

### **Perceptions of Pregnancy**

The literature regarding the experiences of women with disabilities related to pregnancy and childbearing raised additional questions that were not best measured

through any currently existing scale. Thus, an author-generated scale (See Appendix D) was created to tap into questions regarding identification with pregnancy as well as perceived societal support for having children. The scale consisted of 8 items, with each item answered on a 6-point scale (1= *Strongly Agree* to 6 = *Strongly Disagree*). Items 3, 4, 6, and 7 were reverse-scored, with lower scores reflecting lower identification with pregnancy and lower perceived societal support.

**Identification with pregnancy.** Each item is derived from quantitative or qualitative research related to reproduction issues for women with disabilities or has been adapted from the Identification with Pregnancy Subscale of the Childbearing Attitudes Questionnaire (Ruble et al., 1990). Based on prior literature (Prilleltensky, 2003; Walsh-Gallagher, Sinclair, & McConkey, 2012), items related to identification with pregnancy include, “I do not believe I am physically capable of becoming pregnant,” and “I am fearful that becoming pregnant would hurt my body.”

Items were also utilized from the Identification with Pregnancy Subscale of the CAQ, which assesses a women’s identification with pregnancy as a positive and fulfilling experience (McMahon & Tennant, 1999). Ruble et al. (1990) identified that items related to increased sense of independence and feeling fulfilled as a woman loaded at .50 or higher on the Identification with Pregnancy factor. Based on the prior literature (Grue & Laerum, 2002; Malacrida, 2009; Signore et al., 2011; Thomas, 1997), items developed from the Identification with Pregnancy subscale include, “I believe that being pregnant

would increase my sense of independence,” and “Becoming pregnant would make me feel fulfilled as a woman.”

**Societal support.** The literature has indicated that women with physical disabilities may experience less societal support regarding their reproductive choices compared to able-bodied women (Kallianes & Rubenfeld, 1997; Prilleltensky, 2003). Thus, items reflecting these ideas include, “I believe my physician would not support me should I plan to become pregnant,” and “If I become pregnant in the future, my family and friends will be excited and supportive.”

Women with disabilities may additionally believe society does not support their right to become pregnant when having difficulty finding information about the birthing experiences of women with disabilities similar to their own or when faced with messages that they will not be ideal mothers (Malacrida, 2009; Prilleltensky, 2003). Items that reflect these themes in the literature include, “I feel confident that if I become pregnant I will be able to find information that will prepare me for my pregnancy,” and “If I were to become pregnant, I feel concerned that others will believe I am not capable of effectively parenting.”

### **Procedure**

According to the U.S. Department of Health and Human Services (2011), mothers between the ages of 18 to 39 years old accounted for 94.1% of births in 2009. For the purposes of this study, childbearing age was defined as between the ages of 18 to 39 years old. A distinction is often made between physical and cognitive disability, and as



individuals with cognitive disabilities may face more negative attitudes and have less social support than individuals with physical disabilities (Lippold & Burns, 2009; Ostapczuk, & Musch, 2011), women with cognitive or emotional disabilities may have different experiences and receive different messages related to parenting than women with physical disabilities. As such, the focus of the current investigation was on women with physical disabilities and those without physical, cognitive, or emotional disabilities served as a comparison group. Participants were eligible for participation in the study if they identified as having a primary diagnosis of a visible, invisible, or sometimes visible physical disability with no cognitive or mental health impairments that cause impairment in daily life activities. Women who identified as able-bodied with no known cognitive or mental health impairments were also recruited. The selection criteria outlined in the Recruitment Letter (See Appendix E) were used to identify participants from the target population.

After receiving approval from the Institutional Review Board, participants were recruited for the study from a variety of means. The researcher posted online flyers on the Facebook pages for various disability organizations, such as Spina Bifida Association of North Texas and Empowering Women with Disabilities. Listservs for individuals with physical disabilities were contacted and provided a description of the study and a link to the electronic survey. Flyers (See Appendix F) were posted in the Office of Disability Support Services at local universities. Participants with and without disabilities were recruited through snowball sampling via email and social media websites such as

Facebook and Reddit. Undergraduate students enrolled in psychology courses at a local public university were also invited to participate in the study through SONA as one option for fulfillment of class requirements.

Data were gathered online and participants accessed a link to the study on the Psychdata.com website via the URL provided in the Recruitment Letter. The first page of the proposed study contained the informed consent form (See Appendix G). The informed consent form included a general explanation of the study, research procedures including time commitment (approximately 10-15 minutes), potential risks of participation, benefits of participation, and contact information for the principal investigator, faculty advisor, and TWU Office of Research and Sponsored Programs. Participants who consented to participate in the study were directed to the Demographics Questionnaire. Given that the study's focus on perceptions of pregnancy and maternal confidence is most applicable to women who are interested in having children in the future, women who have chosen to be childfree were not included in the sample. Participants who indicated they have chosen to be childfree on the Demographics Questionnaire did not continue with the study and were automatically directed to the Results and Gift Card Drawing page (See Appendix H).

Participants who indicated they identified as having a physical disability responded to four additional questions regarding the age of onset, severity, and visibility of their disabilities as well as a write-in response to indicate the physical disability with which they most strongly identify. Based on the definition of physical disability from the CDC (2009) as well as the definition provided in the study by Dahlbeck and Lightsey (2008),

disability was defined as any degree of impairment caused by bodily injury, birth defect, or illness that results in difficulty with functional activities and activities of daily living. Physical disabilities may include, but are not limited to, diabetes, epilepsy, any degree of paralysis, amputation, lack of physical coordination, blindness or visual impairment, deafness or hearing impairment, rheumatoid arthritis, or any disability that results in physical reliance on a guide dog, wheelchair, or other assistive device.

Participants then completed the Sexual Esteem subscale of the Sexuality Scale (Snell & Papini, 1989), the author-generated Perceptions of Pregnancy scale, and the Maternal Confidence subscales of the CAQ (Ruble et al., 1990). Although the use of counterbalancing the measures to avoid order effects was considered (Gaito, 1961), it was determined that following the Demographics Questionnaire, it made the most sense logistically for participants to respond to statements regarding sexual esteem, following by statements regarding pregnancy, and then motherhood. After completion of the questionnaires, participants were given the opportunity to indicate if they wished to receive results of the study and/or participate in a gift card drawing. Participants were also provided a list of local and national referrals for mental health services (See Appendix I).

### **Statistical Analyses**

The following hypotheses were analyzed utilizing hierarchical regression, linear regression, and one-way analysis of variance (ANOVA).

Hypothesis 1, which predicted that lower levels of sexual esteem and identifying as having a physical disability would predict lower levels of maternal confidence in

participants, was analyzed using a hierarchical regression. The first block entered sexual esteem and the second block added disability status, which was dummy-coded with able-bodied as the reference group.

Hypothesis 2, which predicted that able-bodied participants would endorse the highest levels of sexual esteem, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities, was analyzed using one-way analysis of variance (ANOVA).

Hypothesis 3, which predicted that that able-bodied participants would endorse the highest levels maternal confidence, followed by participants with invisible disabilities, then participants with sometimes visible disabilities, and then participants with visible disabilities, was also analyzed using one-way analysis of variance (ANOVA).

Hypothesis 4, which predicted that more severe reported disability would predict lower sexual esteem in participants with disabilities, was analyzed using a linear regression.

Hypothesis 5, which predicted that more severe reported disability would predict lower maternal confidence in participants with disabilities, was also analyzed using a linear regression. Severity was assessed by the participants' self-reports of severity of disability (mild to severe).

Hypothesis 6, which predicted that able-bodied participants would endorse the highest identification with pregnancy, followed by participants with invisible disabilities,

participants with sometimes visible disabilities, and then participants with visible disabilities, was analyzed using a one-way ANOVA.

Lastly, Hypothesis 7, which predicted that able-bodied participants would endorse the highest perceived societal support, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities, was analyzed using a one-way ANOVA.

## CHAPTER IV

### RESULTS

#### **Preliminary Analyses**

Before conducting the analyses of the hypotheses, a matched sample was created to balance the significantly larger number of able-bodied participants who completed the study relative to participants with physical disabilities. The matched sample was also created in an effort to ensure the participants with disabilities were being compared to able-bodied participants with similar demographic backgrounds. Whenever possible, participants with physical disabilities were matched with a participant from the able-bodied sample of the same age and race/ethnicity, with the greatest age difference being 5 years (18 and 23) for participants who identified as Middle Eastern. Assessments of skewness and kurtosis determined the data were normally distributed.

Exploratory analyses revealed significant differences in the reported severity of disabilities between groups [ $F(2, 74) = 4.43, p = .015$ ]. A Tukey post-hoc test revealed that participants who identified as sometimes visibly disabled identified as having significantly less severe disabilities than those who identified as visibly disabled ( $p = .014$ ). Significant differences in reported severity were not evidenced between participants with visible and invisible disabilities or participants with invisible and sometimes visible disabilities (all  $p$ 's  $> .05$ ).

Exploratory analyses also revealed significant differences in the average age of onset of disability for participants with visible, sometimes visible, and invisible disabilities [ $F(2, 74) = 8.48, p < .001$ ]. On average, participants with visible disabilities had significantly earlier age of onset ( $M = 5.32; SD = 7.30$ ) than participants with invisible disabilities ( $M = 11.88; SD = 8.05$ ), and participants with sometimes visible disabilities ( $M = 12.59; SD = 6.57$ ), all  $p$ 's  $< .05$ . The age of onset for participants with invisible disabilities and sometimes visible disabilities did not significantly differ,  $p = n.s.$  All subsequent analyses involving comparisons between visibly, sometimes visibly, and invisibly disabled participants were conducted with age of onset and severity of disability covaried out and were not found to produce any changes in the patterns of the results.

Descriptive statistics were computed to report the possible range, obtained range, mean, standard deviation, and internal consistency for each measure. The Sexual Esteem subscale was found to have strong internal consistency ( $\alpha = .92$ ) as was The Maternal Confidence subscale ( $\alpha = .87$ ). The author-generated Identification with Pregnancy subscale of the Perceptions of Pregnancy measure was found to have weak internal consistency ( $\alpha = .40$ ). The Perceived Societal Support subscale of the Perceptions of Pregnancy measure had a slightly higher internal consistency ( $\alpha = .64$ ). When the two subscales were combined, the overall internal consistency of the Perceptions of Pregnancy Measure was still found to be weak ( $\alpha = .56$ ). Descriptive data are provided in Table 3.

Table 3

*Descriptive Statistics*

Ability Status	Measure	Possible Range	Obtained Range	<i>M</i>	<i>SD</i>
Disabled	Sexual Esteem	-20 - 20	-20 – 20	3.14	10.51
	Identification with Pregnancy	1 - 6	2 - 6	3.59	.89
	Perceived Societal Support	1 - 6	1.25 – 6.00	4.42	1.09
	Maternal Confidence	1 - 7	1.65 – 5.94	3.59	.96
Able-Bodied	Sexual Esteem	-20 - 20	-19 - 20	4.34	8.499
	Identification with Pregnancy	1 - 6	1.50 – 5.75	3.40	.93
	Perceived Societal Support	1 - 6	2.75 – 6.00	5.00	.81
	Maternal Confidence	1 - 7	1.35 – 6.24	4.10	1.01

**Analyses for Major Hypotheses**

Hypothesis 1 predicted that lower levels of sexual esteem, as indicated by lower scores on the Sexual Esteem subscale and identifying as having a physical disability, would predict lower levels of maternal confidence, as indicated by a higher total score on the Maternal Confidence subscales. A hierarchical regression revealed a significant model [ $F(2, 151) = 15.20, p < .001$ ] and sexual esteem [ $t(151) = -4.42, p < .001$ ] and disability status [ $t(151) = -3.61, p < .001$ ] were found to be significant predictors of



maternal confidence. Sexual esteem and disability status explained 16% of the variance in maternal confidence. Lower levels of sexual esteem predicted lower maternal confidence ( $\beta = -.33, p < .001$ ). However, identifying as having a physical disability was associated with higher maternal confidence ( $\beta = -.27, p < .001$ ). See Table 4.

Table 4

*Hierarchical Regression Table for Hypothesis 1*

	<i>b</i>	<i>SE b</i>	$\beta$
<b>Step 1</b>			
Constant	3.97	.08	
Sexual Esteem	-.03	.01	-.31*
<b>Step 2</b>			
Constant	4.24	.11	
Sexual Esteem	-.04	.01	-.33*
Ability Status	-.55	.15	-.27*

*Note.*  $R^2 = .10$  for Step 1;  $\Delta R^2 = .07$  for Step 2, \* $p < .001$

Hypothesis 2 predicted that able-bodied participants would endorse the highest levels of sexual esteem, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities. A one-way ANOVA was conducted to evaluate the change in levels of sexual esteem between participants given the presence or relative visibility of a disability. Analysis of variance did not show a statistically significant difference at the  $p < .05$  level for the four groups

[ $F(3, 150) = 1.35, p = \text{n.s.}$ ] and the hypothesis was not supported. Results did not change when either severity or age of onset were covaried out. See Table 5.

Table 5

*Sexual Esteem Scores*

Group	<i>M</i>	<i>SD</i>
Able-Bodied	4.34	8.5
Visible Disability	1.18	10.96
Sometimes Visible Disability	3.18	9.95
Invisible Disability	6.05	10.12

*Note.* Possible range: -20 – 20. Obtained range: -20 – 20 (participants with disabilities) and -19 – 20 (able-bodied participants).

Hypothesis 3, which predicted that able-bodied participants would endorse the highest levels of maternal confidence (as indicated by lower total scores on the Maternal Confidence subscales), followed by participants with invisible disabilities, then participants with sometimes visible disabilities, and then participants with visible disabilities, was also analyzed using a one-way ANOVA. A statistically significant difference was determined between groups [ $F(3, 150) = 4.33, p = .01$ ]. However, the results were not in the predicted order. Participants with visible disabilities had the highest levels of maternal confidence ( $M = 3.47, SD = .84$ ), followed by participants with invisible disabilities ( $M = 3.48, SD = 1.02$ ), participants with sometimes visible disabilities ( $M = 3.89, SD = 1.05$ ), and able-bodied participants ( $M = 4.10, SD = 1.01$ ). Post-hoc comparisons using the Tukey HSD test indicated that participants with visible

disabilities showed higher maternal confidence than able-bodied participants,  $p = .01$ . Participants with invisible disabilities also showed higher levels of maternal confidence than able-bodied participants,  $p = .05$ . No other significant differences were found between groups, all  $p$ 's = n.s. When reported severity of disability and age of onset were covaried out, the results were not impacted. See Table 6.

Table 6

*Maternal Confidence Scores*

Group	<i>M</i>	<i>SD</i>
Able-Bodied	4.10	1.01
Visible Disability	3.47*	.84
Sometimes Visible Disability	3.89	1.05
Invisible Disability	3.48**	1.02

*Note:* Possible range: 1 – 7. Obtained range: 1.65 – 5.94 (participants with disabilities) and 1.35 – 6.24 (able-bodied participants).

\* indicates group significantly differed from the able-bodied group

\* $p = .01$ . \*\* $p = .05$

Hypothesis 4, which predicted that more severe reported disability would predict lower sexual esteem in participants with disabilities, was analyzed using a linear regression. Severity was not found to predict sexual esteem in participants with disabilities and the hypothesis was not supported [ $R^2 = .02$ , ( $F(1, 74) = 1.79$ ,  $p = .19$ ).

Hypothesis 5, which predicted that more severe reported disability would predict lower maternal confidence in participants with disabilities, was also analyzed using a linear regression. Severity was not found to predict maternal confidence in participants

with disabilities and the hypothesis was not supported [ $R^2 = .03$ , ( $F(1, 74) = 2.02$ ,  $p = .16$ ).

Hypothesis 6, which predicted that able-bodied participants would endorse the highest identification with pregnancy, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities, was analyzed using an ANOVA. Analysis of variance did not show a statistically significant difference at the  $p < .05$  level for the four groups [ $F(3, 150) = 2.05$ ,  $p = .11$ ] and the hypothesis was not supported. The results remained the same even when severity and age of onset were held constant. See Table 7.

Table 7

*Identification with Pregnancy Scores*

Group	<i>M</i>	<i>SD</i>
Able-Bodied	3.40	.93
Visible Disability	3.80	.98
Sometimes Visible Disability	3.27	.74
Invisible Disability	3.60	.82

*Note.* Possible range: 1 - 6. Obtained range: 2 - 6 (participants with disabilities) and 1.50 - 5.75 (able-bodied participants).

Lastly, Hypothesis 7, which predicted that able-bodied participants would endorse the highest perceived societal support, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities, was analyzed using an ANOVA. Analysis of variance showed a statistically

significant difference at the  $p < .05$  level for the four groups ( $F(3, 150) = 13.09, p < .001$ ). The hypothesis was partially supported although the results were in a slightly different order than predicted. The results indicated the participants with invisible disabilities had the highest perceived societal support ( $M = 5.10, SD = 1.00$ ), followed by able-bodied participants ( $M = 5.00, SD = .81$ ), then participants with sometimes visible disabilities ( $M = 4.48, SD = .91$ ), and lastly by participants with visible disabilities ( $M = 3.92, SD = 1.02$ ). Post-hoc comparisons using the Tukey HSD test indicated statistically significant differences ( $p < .001$ ) between the mean scores for participants with visible and invisible disabilities and the scores for visibly disabled and able-bodied participants. The results were consistent after severity and age of onset were covaried out. See Table 8.

Table 8

*Perceived Societal Support Scores*

Group	<i>M</i>	<i>SD</i>
Able-Bodied	5.00*	.81
Visible Disability	3.92	1.02
Sometimes Visible Disability	4.48	.91
Invisible Disability	5.10*	1.00

*Note:* Possible range: 1 - 6. Obtained range: 1.25 – 6.00 (participants with disabilities) and 2.75 – 6.00 (able-bodied participants).

\* indicates group significantly differed from the visible disability group at  $p < .001$

## CHAPTER V

### DISCUSSION

#### **Summary of Major Findings**

The purpose of the current study was to explore the impact of a physical disability on women's sexual esteem, perceptions of pregnancy, and maternal confidence. In addition, the study examined the potential influence of severity or visibility of a disability on sexual esteem, perceptions of pregnancy, and maternal confidence. Significant hypotheses are summarized first, followed by a brief statement regarding those hypotheses that did not reach significance.

Hypothesis 1 predicted that having lower levels of sexual esteem and identifying as having a physical disability would predict lower levels of maternal confidence. Sexual esteem and disability status were found to be significant predictors of maternal confidence and lower levels of sexual esteem did predict lower maternal confidence. However, in contrast to the prediction, identifying as having a physical disability was associated with higher maternal confidence.

Hypothesis 3, which predicted that able-bodied participants would endorse the highest levels of maternal confidence, followed by participants with invisible disabilities, then participants with sometimes visible disabilities, and then participants with visible disabilities, was also partially supported. While a statistically significant difference was found between groups, unexpectedly, participants with visible disabilities had the highest

levels of maternal confidence, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and able-bodied participants.

Similarly, Hypothesis 7, which predicted that able-bodied participants would endorse the highest perceived societal support if they were to become pregnant, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and then participants with visible disabilities, was partially supported. Again, while statistically significant differences were found between the groups, contrary to predictions, participants with visible disabilities reported significantly higher perceived societal support than participants with invisible disabilities and able-bodied participants. The results failed to confirm Hypothesis 2 and Hypotheses 4-6. While it was expected that the presence or visibility of a disability would impact sexual esteem and identification with pregnancy, significant differences were not found between groups and Hypotheses 2 and 6 were not supported. The results also failed to confirm Hypotheses 4 and 5, as severity of disability was not found to predict sexual esteem nor maternal confidence in participants with disabilities.

### **Integration of Findings with Theory and Prior Literature**

Because women with disabilities may not be assumed to be competent parents, which may be related to the stereotype of women with disabilities as asexual (Malacrida, 2009; Prilleltensky, 2003), it was predicted that having lower levels of sexual esteem and identifying as having a physical disability would predict lower levels of maternal confidence. As expected, lower levels of sexual esteem did predict lower maternal

confidence, which, to this author's knowledge, is the first empirical study that has demonstrated a relationship between these variables. However, contrary to predictions, identifying as having a physical disability was associated with higher maternal confidence. It was additionally found that when exploring the impact of the presence or visibility of a disability on maternal confidence, contrary to expectations, participants with visible disabilities had the highest levels of maternal confidence, followed by participants with invisible disabilities, participants with sometimes visible disabilities, and finally able-bodied participants.

Given the pressures placed on women in Western cultures to be able to physically attend to their children and fulfill the role of the ideal mother (Malacrida, 2009), it was presumed that women with disabilities might internalize stereotyped images of individuals with disabilities as being dependent and unfit parents (Nario-Redmond, 2010) and consequently have lower maternal confidence. Additionally, as the visibility of one's disability may impact his or her experiences as a person with a disability (Stone, 2005), it was expected that women whose disabilities are more readily apparent to others may have received more explicit messages about their ability to become pregnant or parent, and might have lower maternal confidence compared to able-bodied women or women whose disabilities are not consistently visible to others.

One explanation for these findings is that given the topic of the study, regardless of the severity or visibility of their disability, women who plan to have children in the future may have been more drawn to participate in the study than women who have



concerns regarding their ability to become pregnant or parent in the future. Additionally, motherhood is a role that carries such social significance that women may not feel comfortable voicing doubt about their abilities to parent (Malacrada, 2009; Russo, 1976). The participants with visible disabilities in the current study were found to have the earliest age of onset of their disability compared to the participants with invisible and sometimes visible disabilities. It is possible that participants with visible disabilities began building confidence in their abilities to adapt to their disabilities at an earlier age, and this confidence in their abilities to successfully make adjustments may generalize to other areas, such as maternal confidence.

Women with disabilities may be especially concerned that they will be perceived as unfit and are not expected to meet the standards of an ideal mother; research has shown that mothers with disabilities may make extra efforts to demonstrate that they are competent and involved parents (Malacrada, 2009). Given that individuals with visible disabilities may experience more stigmatization because their disabilities are more readily obvious to others (Phemister & Crewe, 2004), it is possible that the participants with visible disabilities in the current study reported higher maternal confidence than able-bodied women due to a belief that they will need to be even more attentive to their parenting skills as well as potentially having increased awareness of the ways they will plan for motherhood, such as seeking social support or adaptive equipment that will make daily tasks of parenting more achievable. This finding may parallel research that suggests that lesbian mothers may encounter societal obstacles and face stigma due to their sexual

orientation (Shapiro, Peterson, & Stewart, 2009) and must plan very carefully when exploring options for parenting. For example, lesbian mothers may have to plan in advance to ensure they have adequate health coverage or that their insurance provisions for infertility cover lesbian women (Renaud, 2007). Thus, perhaps the perception that there will be additional obstacles to overcome when planning for pregnancy or motherhood may make individuals who face societal stigma, such as lesbian parents or parents with disabilities, more likely to plan in advance and as a result, more confident in their abilities to parent.

The literature indicates that women with physical disabilities may experience less societal support regarding their reproductive choices, which may include criticism from family or friends or difficulty finding information about considerations for pregnancy and delivery given their specific disability (Kallianes & Rubenfeld, 1997; Malacrida, 2009; Prilleltensky, 2003). Thus, it was predicted that the presence and visibility of a disability would impact perceived societal support when imagining a pregnancy. The results indicated that participants with invisible disabilities reported the highest degree of perceived societal support, followed by able-bodied participants, then participants with sometimes visible disabilities, and lastly by participants with visible disabilities. Participants with visible disabilities reported significantly lower perceived societal support than able-bodied participants or participants with invisible disabilities.

One possible reason that significant differences were not found between able-bodied and individuals with invisible disabilities for perceived societal support is that

individuals with invisible disabilities may not be frequently recognized as having disabilities (Stone, 2005), and therefore may experience less criticism and fewer obstacles when considering becoming pregnant than individuals with more readily apparent disabilities. Given that individuals with invisible disabilities may have increased control over the disclosure of their disabilities to others, it is also possible women with invisible disabilities may feel confident that they are able to pass as able-bodied, which may impact their expectations regarding the societal support they would receive should they express a desire to become pregnant (Clair et al., 2005; Olney & Brockelman, 2005). The results also suggest that women with visible disabilities may have more concerns about how family and medical providers will respond or how easily they can access resources if they choose to become pregnant, which is consistent with the literature that suggests individuals with disabilities may face skepticism if it appears they would have difficulty fulfilling the physical tasks of parenting (Prilleltensky, 2004). However, given the poor internal consistency of the Perceived Societal Support subscale, the interpretations that can be drawn from this finding should be made with caution.

Although prior research has found that severity of one's disability can impact sexual esteem or one's relationship status (Mona et al., 1994; Taleporos & McCabe, 2003), the results of this study indicated that the severity of the participants' disabilities did not predict sexual esteem. Severity was also not found to significantly predict maternal confidence in women with physical disabilities. Although these findings contradict prior research that highlights the impact of severity on sexual esteem, it is

possible that severity of disability may not be a primary factor in determining sexual esteem or maternal confidence and these constructs were impacted by other variables that were not measured during the study, such as relationship status, sexual orientation, level of education, or the degree to which participants identified as having a disability identity. Participants were not asked to specify whether their disability was acquired or congenital and maternal confidence could have been impacted by the perceived heritability of a participant's disability. It is also possible that the severity of a participant's disability might have been buffered by socioeconomic status or relative access to resources, which were not assessed in the current study. For example, although disability increases the risk of poverty, which may result in decreased access to health care or resources (APA, 2011), individuals with disabilities from a higher socioeconomic status may be able to access higher quality health care or other resources that help facilitate day-to-day living and increase one's quality of life.

It is also important to consider the manner in which severity was assessed in the current study. Severity of disability was assessed through a basic self-report of perceived severity on a rudimentary scale from mild to severe. Prior research has indicated that individuals with invisible disabilities may minimize their own disabilities when they compare themselves to others with obviously visible disabilities, such as mobility limitations (Olney & Brockelman, 2005). It is possible that reports of severity may have been impacted by participants' tendency to minimize the impact of their own disabilities. For example, when referring to the list of examples of disabilities in the supplementary

questions, it is possible participants adjusted the report of the severity of their disability when comparing their disability to more visible examples such as paralysis, amputation, or a disability that requires the use of an assistive device.

Although it was presumed that internalization of negative messages regarding sexual attractiveness or cultural pressures for physical perfection might reduce feelings of sexual attractiveness and consequently, sexual esteem for individuals with disabilities (Basson, 1998; Howland & Rintala, 2001; Milligan & Neufeldt, 2001), significant differences were not found in the reports of sexual esteem between able-bodied participants and participants with visible, invisible, and sometimes visible disabilities. The use of brief self-report measures for the study may have influenced the finding that there were non-significant differences seen between the groups in several areas, including sexual esteem. On a scale from -20 to 20, the scores on the measure of sexual esteem for participants with and without disabilities were slightly positive ( $M = 3.14$  and  $4.34$ , respectively). Societal pressures may place expectations on all women to have sexualized, flawless bodies while also creating a double standard that may inhibit women from being as sexually expressive as men (Heinrichs, MacKnee, Auton-Cuff, & Domene, 2009; Stone, 1995). Participants tended to answer somewhere in the middle, reflecting difficulties many women, regardless of ability status, may face related to concerns about body image and ability to be a good sexual partner. As many different variables may facilitate or hinder sexual-esteem, such as openness about sexuality from parents, satisfaction with physical appearance, depression, or experiences of abuse (Heinrichs et

al., 2009), it may be helpful in future studies to allow participants to write in additional responses or utilize qualitative approaches in order to explore the ways that sexual esteem may be impacted for women.

It is possible the relatively young average age of the participants in the current study (approximately 25 years old) may also have impacted reports of sexual esteem, although the findings regarding the impact of age on sexuality and body esteem have produced varied results. In a study of women ages 25-89 years, Runfola et al. (2013) found that women ages 35-44 years perceived themselves to be a significantly larger size than other participants and had the highest degree of body dissatisfaction of all age groups. Algars et al. (2009) also found that increasing age tended to be associated with decreasing body satisfaction in a sample of men and women aged 18 to 49 years. However, age did not impact participants' responses regarding their overall attractiveness. In a study of body image throughout adulthood, Davison and McCabe (2005) found that body image concerns tended to be consistent throughout adulthood. However, the researchers found that women in their 30s and 40s tended to be more vulnerable than other groups to lower satisfaction with their bodies and made more frequent attempts to conceal their bodies than other participants. Thus, it is possible that although women of all ages tend to have body image concerns, the ages of the participants in the current sample may have acted as a buffer in some way for sexual esteem.

It is also unknown whether the participants were involved in a romantic or sexual relationship at the time of data collection. Prior literature has found that relationship status may influence sexual well-being, with individuals who are single tending to report lower sexual esteem and less sexual satisfaction (Taleporos & McCabe, 2003). Taleporos and McCabe (2001) found that participants with disabilities strongly disagreed with the statement that they are not interested in sex due to their disability, but agreed that finding a sexual partner can be difficult. It is possible that the sexual esteem of the participants in the current study was not significantly impacted by the presence of the disability, but the participant's relationship status or dating history may have influenced their ratings of sexual esteem. Although there are several possible reasons for the findings related to sexual esteem, it is important to stress that while it is often erroneously assumed that women with disabilities are asexual and may be uninterested or unable to take part in sexual activities (Anderson & Kitchin, 2000; Basson, 1998; Nario-Redmond, 2010), participants in the current study did not differ significantly in their reports of sexual esteem. Although none of the participants reported particularly high sexual esteem, which may reflect gendered proscriptions against sexuality, given the historically negative attitudes toward the sexuality of persons with disabilities (Nario-Redmond, 2010), this finding may highlight important changes that are taking place regarding somewhat increased sexual esteem and relatively more positive sexual experiences for the disability community.

It was also expected that, given the emphasis on expected bodily dysfunction directed toward women with disabilities in addition to concerns about the potential impact of pregnancy on their bodies (Prilleltensky, 2003; Walsh-Gallagher, Sinclair & McConkey, 2012), the presence or visibility of a disability would impact identification with pregnancy. However, results indicated that significant differences were not found between groups. It is possible that due to the poor internal consistency of the Perceptions of Pregnancy Scale, the results were not significant because the scale itself did not adequately measure the construct of identification with pregnancy. Although the current study intentionally sought to explore these constructs quantitatively, it may be more helpful to explore identification with pregnancy qualitatively in future studies in order to explore themes that might arise when discussing feelings or beliefs about becoming pregnant among women with and without physical disabilities. It is also possible that many women, regardless of ability status, might have a moderate level of agreement with several of the questions utilized in the scale, such as “I am fearful that becoming pregnant would hurt my body” or “I do not believe I am physically capable of becoming pregnant.” When responding to surveys, particularly those addressing sensitive topics, participants may respond in ways that are socially desirable (Miller, 2011). Given the aforementioned pressures that women may feel to fulfill an expected societal role by becoming mothers (Russo, 1976), it is also possible many women would moderately or strongly agree with the item “Becoming pregnant would make me feel fulfilled as a woman,” due to a desire to respond in a way that seems more socially acceptable. Thus,



the scale itself may not have been an effective measure of exploring potential differences between these groups and their identification with pregnancy.

In considering the implications of theory for these findings, it is important to consider the movement away from a medical model toward a social model when defining and conceptualizing disability (Esmail et al., 2010). If individuals with disabilities maintain the belief that they are disabled by limitations in their environment, rather than having a health condition that should be changed, it is possible the lens through which participants view their disability identity impacts their sexual esteem, maternal confidence, and identification with pregnancy. Thus, it is possible that the current movement to foster more positive attitudes toward individuals with disabilities and view disability as a social construct that should be addressed so that individuals with disabilities can fully participate in activities has resulted in positive changes for the disability community related to sexual esteem and parenting (Esmail et al., 2010). For example, if an individual believes that rather than personal deficiencies, it is one's environment that is creating the most barriers to dating or parenting, this may leave an individual feeling more hopeful that by eliminating certain barriers, it will be possible to participate more fully in dating or parenting. For example, a woman with cerebral palsy who wants to parent in the future may feel strong feelings of maternal confidence because she is aware of adaptive equipment that may make many of the daily tasks of parenting more feasible, such as a hands-free sling or a crib with a side-door.

## **Implications for Practice**

The results of the study offer several implications for the application of the findings in counseling and medical settings. In general, it is important that psychologists and medical professionals increase their awareness of issues related to ability status. The American Psychological Association (APA) “Guidelines for Psychological Practice with Girls and Women” encourage psychologists to be aware of the effects of gender socialization and stereotyping for girls and women (2007). For example, it is important psychologists recognize the ways in which women are socialized to have a flawless body and achieve the thin ideal (Harper & Tiggemann, 2008). Psychologists should be aware of societal emphasis on women’s bodies and consider the ways socialization and stereotypes might impact clients with physical disabilities. Psychologists are also encouraged to consider that women may experience bias and discrimination at social and organizational levels, and should be aware of the ways female clients may receive unequal treatment in contexts such as work, educational systems, religious institutions, and within the health care and legal systems (APA, 2007). For example, psychologists should keep in mind that a female client with a disability might experience discrimination in the workplace or have financial difficulties due to having a low salary or difficulty advancing within her place of work (APA, 2007).

Although there is evidence in the literature that individuals with disabilities may incorrectly be presumed to be asexual (Nario-Redmond, 2010), participants in the current study did not significantly differ in their reports of sexual-esteem, regardless of ability

status or visibility of disability. O’Dea, Shuttleworth and Wedgwood (2012) studied individuals with neuromuscular disorders (NMDs) and their experiences of the facilitation or inhibition of their sexual expression by health care providers. The researchers found that facilitation of sexual expression by health care providers was significantly higher for participants in the control group than those with NMDs, supporting hypotheses that health care providers may minimize or fail to address the sexual health and concerns of individuals with NMDs. Participants with NMDs reported an increase in quality of life when their health care providers did help them to overcome difficulties related to sexual expression. Higher quality of life was correlated with both the frequency and level of fulfillment of sexual activity for participants (O’Dea et al., 2012). These results highlight that sexuality may play an important role in the lives of clients with disabilities and their sexual expression may be impacted by their experiences with their health care providers, which in turn may impact their overall quality of life. It is imperative that psychologists do not presume that clients are asexual and, depending on the setting, inquire about the sexual health, sexual activity, and interest in pregnancy and motherhood among women with disabilities.

In light of the literature discussing considerations for women with disabilities who want to become pregnant or parent in the future (Nosek et al., 2001; Signore et al., 2011; Smeltzer, 2007), it is important that health care providers are aware of potential concerns for clients. For example, it will be important that an obstetrician-gynecologist asks his or her patient with a physical disability about any potential difficulties she has had finding

access to information about what to expect during a pregnancy given her specific disability. Psychologists should inquire about their clients' experiences of sharing their desire to become pregnant or parent with others and be aware of possible stigmatization from physicians or negative reactions from friends or family members.

In the current study, participants with visible disabilities endorsed the highest levels of maternal confidence but reported significantly lower perceived societal support than able-bodied participants or participants with invisible disabilities. It is important for health care providers to be aware that women with a range of disabilities, including those that are visible (and may be assumed by others to be more severe), may have strong desires and confidence in their abilities to parent. However, women with visible physical disabilities may also have valid concerns they will face more questions or concerns about their desire to become pregnant due to the visibility of their disability.

The literature has indicated that although women with disabilities may face stigmatization and barriers that make pregnancy and motherhood difficult, many women with disabilities are eager to become mothers and may adapt their parenting styles in a variety of ways in order to parent more independently (Malacrida, 2009; Signore et al., 2011). The finding in the current study that participants with visible disabilities had the highest levels of maternal confidence may speak to the resilience of women with disabilities and their desire to become mothers in the future. Consistent with the emphasis in Counseling Psychology to focus on client strengths (Harris, Thoresen, & Lopez, 2007), psychologists are encouraged to highlight the ways in which their clients with disabilities

are resourceful and resilient. Rather than only focusing on the ways a client's ability status might create challenges, psychologists should also recognize their skills and unique strengths (APA, 2011). They may also explore ways clients have experienced positive growth after acquiring a disability (Dunn, Uswatte & Elliott, 2009).

Although a Social Model of Disability was utilized in the current study, Guideline 1 of the APA Task Force on "Guidelines for Assessment and Treatment of Persons with Disabilities" stresses the importance of psychologists learning about various models for disability that provide a basis for defining disability and consider their implications when working with clients (APA, 2011). For example, the Moral Model may view disability as a sin or a type of punishment, while the Medical Model focuses on biological impairments and places emphasis on finding a cure (Palombi, 2010). Psychologists should assess clients' models of disability in order to better understand messages they have received from others and personal perceptions of their disability (Palombi, 2010). For example, a psychologist might ask a client about the messages he or she received growing up about the disability (e.g., if it was a sin or a test of faith) or listen for cues that the client makes efforts to minimize the visibility of his or her disability or is holding out hope for a cure for his or her disability (Palombi, 2010).

Psychologists are encouraged to consider their clients within their sociopolitical context and integrate cultural information, such as race, age, ethnicity, ability status, sexual orientation, SES and religious background into their conceptualizations and interventions (APA, 2007). In an effort to avoid assuming a client is able-bodied when

considering their cultural context, psychologists should ask clients about the presence of chronic illness or disability when gathering their history during an intake or clinical interview. While psychologists should consider the role of a client's disability in his or her presenting issues, they are also encouraged to avoid over-focusing on a client's disability to the extent that other potentially important variables that impact their presenting concerns are overlooked (APA, 2011).

Women with disabilities have reported difficulties with accessibility in physicians' offices, such as narrow doorways or scales that cannot be utilized by patients using a wheelchair (Signore et al., 2011; Smeltzer, 2007). Psychologists should strive to create a therapy environment that is as accessible as possible so that clients with disabilities are able to readily access psychological services (APA, 2011). For example, doors should have automatic openers or easily manipulated handles and clients should be made aware that intake paperwork can be made available in an accessible format, such as Braille or large print (APA, 2011). Psychologists should also consider ways the therapeutic environment may impact the course of therapy (APA, 2011). For example, psychologists are encouraged to be flexible regarding session length depending on potential difficulties with fatigue or pain and tailor the nature or frequency of sessions based on transportation resources or the client's ability to process the content of the sessions (APA, 2011).

In addition to a disability identity, psychologists should also recognize that girls and women may simultaneously belong to multiple privileged and disempowered groups

and should attend to the implications of a multiple minority status (APA, 2007). For example, a psychologist could explore with a client the possible ways her identities as a Christian, lesbian woman with a physical disability intersect and potentially impact each other. Finally, the APA “Guidelines for Psychological Practice with Girls and Women” encourage psychologists to become familiar with relevant community resources for girls and women, such as therapy groups, women’s centers, shelters, and public assistance resources (APA, 2007). The implications of this guideline for working with clients with disabilities are that psychologists should seek out community resources for women with disabilities and make efforts to determine if resources or referrals they typically provide to clients are accessible for clients with disabilities. For example, psychologists should consider whether the self-help books they suggest are available in Braille or if the shelters they recommend to clients are accessible for clients who utilize wheelchairs.

### **Implications for Training**

The current study also offers several implications for training. As disability is an area of diversity that may receive less attention in the research literature than many other diversity variables, trainees in psychology may also receive less training and information about considerations when working with therapy clients with physical disabilities (Olkin, 2002). During discussions regarding diversity and multiculturalism, it is important that ability status is included as a diversity variable to consider when conceptualizing clients. As a part of these discussions, it may be important to facilitate discussions and activities that increase the trainee’s awareness of his or her own ability status and lived experiences

of ability, disability, or chronic pain. Training regarding ability status may include topics such as issues related to the visibility of disabilities; societal views of disability; sexuality and disability; intersections of disability status with other variables such as ethnicity, gender, and social class, faith, and sexual orientation; and models of disability.

Guideline 2 of the APA Task Force on “Guidelines for Assessment and Treatment of Persons with Disabilities” notes that psychologists should examine their own beliefs toward various disabilities (APA, 2011) and training on disabilities issues for both trainees and psychologists should serve to increase awareness of one’s biases and emotional reactions to working with clients or interacting with people with disabilities. Guidelines 13 and 14 of the APA Task Force on “Guidelines for Assessment and Treatment of Persons with Disabilities” stress the importance of considering disability status when selecting tests and conducting psychological assessments (APA, 2011). For example, it would be important for a psychologist to consider the impact of fine motor skill difficulties in a client with cerebral palsy when administering written, timed tests and consider utilizing tests that were normed using oral responses. Training on psychological assessments should include consideration of the ways assessments might be impacted by a client’s disability and discussions of ways to include accommodations such as modifying test presentation format, creating an accessible testing environment, and adjusting time or response format of tests (Hill-Briggs, Dial, Morere, & Joyce, 2007).



## **Implications for Research**

Disability is an area of diversity that receives less attention in the research literature than many other diversity variables and warrants additional research in the future. Given the literature indicating that individuals with cognitive disabilities may have different experiences and face more negative attitudes than individuals with physical disabilities (Lippold & Burns, 2009; Ostapczuk, & Musch, 2011), the current study focused exclusively on individuals with physical disabilities. In future research, it may be beneficial to explore the experiences of women with cognitive and emotional disabilities related to sexual esteem, pregnancy, and motherhood and explore potential similarities or differences between those experiences and those of individual with physical disabilities.

It was also hypothesized that the movement from a Medical Model to a Social Model of disability (Esmail et al., 2010) might positively impact the sexual esteem and expectations for pregnancy and motherhood for individuals with disabilities, as there is more focus on making the world accessible to individuals with disabilities rather than expecting them to either change their health condition or face difficulties on their own. In future studies, it may be helpful to design and conduct qualitative research that explores the participants' views on the nature of their disability and the ways the model of conceptualizing disability they utilize might impact their experiences of sexual esteem or expectations for pregnancy and motherhood. For example, it might be helpful to explore whether a participant's beliefs about his or her sexual esteem are influenced by beliefs

that disability may be a punishment or a test of faith (i.e., Moral Model) or that disability is a result of physical limitations and should be treated or cured if possible (i.e., Medical Model) (APA , 2011).

The current study explored the impact of the presence or visibility of a physical disability on constructs such as sexual esteem and perceptions of pregnancy and motherhood. Given that the visibility of a disability did not consistently impact these constructs in expected ways given the literature, it is possible that other aspects of the participants' physical disabilities impacted their experiences of sexual esteem and expectations of pregnancy and motherhood. In future studies it may be helpful to also explore whether these constructs are impacted by the type of disability (e.g., mobility versus sensory impairment) or manner of onset (e.g., congenital versus acquired through an injury).

Although data regarding the sexual orientation of the participants in the current study was not gathered, in future studies it may be useful to explore the ways sexual orientation intersects with disability identity. For example, future research might explore the experiences of sexual esteem and perceptions of pregnancy for sexual minority women. It may also be useful to explore the experiences of maternal confidence or expectations of parenting for women who want to be mothers and identify as asexual.

As previously mentioned, given the pressures women may feel to become mothers (Russo, 1976), it is possible some participants might adjust their responses to questions regarding pregnancy and motherhood due to a desire to respond in ways that seem

socially acceptable. In future research, it may also be helpful to also include a measure of social desirability to assess for the potential impact of this on participant responses.

During data collection for the current study, several participants provided feedback that they participated because their chronic illness or condition was listed as an example of a physical disability, but indicated they did not necessarily consider themselves to have a disability. Disability identity has been defined as having a positive sense of self and feelings of connection with the disability community (Dunn & Burcaw, 2013). Disability identity may be conceptualized as being on a continuum and some individuals may strongly identify as having a disability and act as an advocate for the community while others objectively have a physical disability but do not personally identify as having a disability (Dunn & Burcaw, 2013). Given the stigmatization of disability and concerns individuals might have that they may be devalued based on a disability identity, individuals with a less visible or less static disability (such as chronic illness) may be hesitant to acknowledge a disability identity (Rhodes, Small, Ismail & Wright, 2008).

Research has also indicated that identification with the disability community may result in positive feelings about oneself and the disability community, which may support the idea that group identification may be self-protective (Nario-Redmond, Noel, & Fern, 2013). It may be important that future researchers continue to explore the process of adopting a disability identity (e.g., whether it was clear early in life or a choice point the individual may make on a daily basis) to further explore the idea that acceptance of a

disability identity (versus rejection or hesitance to openly disclose a disability identity) may be protective or in some way improves the quality of life of individuals with disabilities. It may also be helpful in future research to explore the ways one's place on a disability identity continuum influences variables such as sexual esteem or expectations of parenting. Additionally, it may be useful to explore whether participants distinguish between chronic illness and disability and whether those with chronic illnesses may be hesitant to adopt a disability identity, even if they may objectively have a disability.

### **Strengths of the Study**

Although studies have been conducted that explored issues related to sexual esteem and motherhood in women with disabilities, many of the studies have been qualitative in nature and have explored the experiences of a limited number of women. While qualitative research can gather rich and detailed information about the lived experiences of disability for participants, the current study sought to fill a gap in the literature by exploring these issues quantitatively with a larger sample of participants with physical disabilities. One strength of the study is the use of quantitative methodology, which also allowed comparison between the experiences of able-bodied participants and participants with physical disabilities.

An additional strength of the study is the diversity within the sample regarding the participants' ages as well as type and severity of physical disability. The participants in the study represented a range of ages (18-39). The participants with physical disability identities also identified a wide range of disabilities, such as cerebral palsy, dwarfism,

spinal cord injury, osteogenesis imperfecta, polio, amputation, lupus, scoliosis, hearing loss, and visual impairment.

Given existing literature that highlights the stereotypes of women with disabilities as asexual as well as the assumption that they may not be perceived as competent parents (Malacrida, 2009; Prilleltensky, 2003), the current study explored the possible connection between sexual esteem and maternal confidence. One strength of this study is the finding that lower levels of sexual esteem predicted lower levels of maternal confidence. Given that women have historically been defined by their sexuality and their ability to have children (Kallianes & Rubenfeld, 1997), it is possible that when women have positive feelings toward their sexuality and sexual expression, this also positively impacts maternal confidence. Women with disabilities may also be infantilized and assumed they are dependent on others (McFarlane, 2004). It is possible that women with disabilities with a strong sense of sexual esteem may feel less infantilized, and consequently, more independent, which may also lead them to feel more confident in their ability to parent in the future. This unique finding highlights a connection between feelings about one's sexuality and confidence as a parent and further stresses the importance of psychologists exploring sexuality and sexual expression with women in general as well as women with disabilities in particular, as it may impact them in several areas of their lives.

### **Limitations of the Study**

While the current study explored issues for women with disabilities that have received less attention than other facets of diversity, there were several limitations of the

study that are important to note. A power analysis was conducted using G\*Power 3.1 to determine the minimum number of participants needed to obtain statistical significance and power given the statistical analyses that were utilized. In order to obtain power of .80, a minimum of 159 participants needed to be recruited with a minimum of 53 participants per group (i.e., able-bodied, invisibly disabled, and visibly disabled). Although more than the minimum required number of able-bodied participants were recruited, in spite of the investigator's multiple and extensive efforts, the minimum number of participants with physical disabilities ( $n = 106$ ) were not able to be recruited. Although the final number of participants with disabilities ( $n = 77$ ) allowed for analysis, in future studies it will be important to increase the number of participants in order to increase power. The participants in the current study were largely collected through online distribution of the recruitment flyer on various disability-related support groups. It is possible that additional participants could be recruited if future researchers discuss the study face-to-face with potential participants at local meetings for disability-related groups.

Although the scales assessing for maternal confidence and sexual esteem were found to have strong internal consistencies, additional limitations of the study are the weak internal consistencies found in the Identification with Pregnancy ( $\alpha = .40$ ) and Perceived Societal Support ( $\alpha = .64$ ) subscales of the author-created Perceptions of Pregnancy Scale. This finding indicates that the scale created for the current study may not have been a reliable measure of the participants' perceptions of future pregnancies

and findings drawn from those measures should be interpreted with caution. It is possible that identification with pregnancy and perceived societal support related to pregnancy may be difficult constructs to effectively quantify or at the very least, were not adequately represented with the statements used in the scale in the current study.

In the current sample, participants represented a range of ages and physical disabilities. However, there were limitations regarding the racial/ethnic makeup of the group and a lack of information about the participants' sexual orientations and other demographic variables. Although the study was distributed nationally in an attempt to avoid generalizability issues that might arise from limiting the distribution to a local university, the majority of the participants (74.68%) identified as White or European American, with comparably fewer participants identifying as members of racial/ethnic minorities. Although sexual orientation was originally intended to be included as part of the demographics questionnaire, this question was omitted from the final online survey in error, further limiting the researcher's ability to describe the diversity of the participants in the current study. It would have additionally been useful to collect information on the participant's relationship status, as being single has been found to influence sexual esteem and sexual satisfaction (Taleporos & McCabe, 2003). Although the creation of the matched sample was intended to ensure the groups being compared were the same size and comprised of participants with similar demographic backgrounds, age and race/ethnicity only represent a small part of the participant's demographic and cultural backgrounds. It is possible that the participant's income and level of education might

have influenced their responses regarding their perceptions of pregnancy and expectations of motherhood. For example, women from low socioeconomic status (SES) backgrounds typically have less access to resources, such as housing and health care, experience poorer health, live in neighborhoods they perceive to be unsafe, and may be exposed to acute and chronic stress (APA, 2007). Thus, women from more privileged backgrounds may anticipate they will be able to more easily access prenatal care or find resources and social support to assist them during pregnancy and motherhood, which may influence their perceptions of pregnancy and confidence in their ability to parent. In future research, it would be important to include a measure of social class to determine if this demographic variable influences participant's experiences of sexual esteem or perceptions of pregnancy or motherhood. Lastly, although there were a range of disabilities reported, it is unknown to what degree those disabilities impacted participants on a day-to-day basis and if something about the types of disabilities represented impacted the overall results. In future studies, it may be helpful to also include questions that ask participants to speak to potential difficulties with tasks of daily living. Additional questions of this nature may also strengthen measurement of the reported severity of the participants' disabilities, and provide a more objective report of severity.

Participants were asked to participate in the study if they had not had children in the past but planned to in the future. However, participants were not specifically asked to identify the method by which they planned to have children in the future. It is possible that some participants plan or hope to adopt, foster parent, utilize a surrogate, or



stepparent children in the future, which may have impacted their responses regarding their expectations of pregnancy. Given that the recruitment flyer for the current study indicated that participants were eligible if they were interested in having children, but did not specify that they intend to become pregnant themselves, it is possible that the Perceptions of Pregnancy scale was not applicable to some participants in the study who may have both been interested in having children and simultaneously been unable to become or uninterested in becoming pregnant.

An additional limitation of the study is the potential lack of accessibility of the study to participants with a range of physical disabilities. Given the scope of the current study, the researcher was not able to provide accommodations for individuals who have a visual impairment. Although four participants in the study identified as having a visual impairment, it is possible the use of online data collection limited the ability of additional visually impaired individuals to participate in the study. It is important to ensure research is as accessible as possible to participants with a range of physical disabilities in all types of studies, but particularly in future studies related to disability issues. Ways to increase accessibility might include ensuring printed materials are available in large print (at least 18 point font), ensuring videos are captioned, and making research materials compatible with assistive technology, such as screen reading software (Olkin, 2004). It may also be helpful in future studies related to disability issues for researchers to offer participants the opportunity to provide feedback about any potential difficulties related to accessibility they experienced or believe others might experience when participating in the study.

## **Conclusion**

A significant number of individuals in the United States are impacted by a physical disability, yet this area of diversity continues to receive relatively less attention when compared to other diversity variables. Negative societal attitudes toward women with disabilities may lead to inaccurate conclusions about their sexuality or interests and abilities to become pregnant or parent (Malacrida, 2009; Milligan & Neufeldt, 2001; Prilleltensky, 2003). However, women with disabilities may have strong desires to become pregnant and parent and may feel confident in their ability to parent effectively and create close and fulfilling relationships with their children, though they may face societal barriers and challenges (Grue & Lærum, 2002; Prilleltensky, 2004). Results of the current study indicated that women with physical disabilities endorse similar levels of sexual esteem as women without physical disabilities. The study supported the idea that given the link between sexuality and reproduction, sexual esteem may predict maternal confidence. Women with visible disabilities may have strong feelings of maternal confidence yet experience the most concerns about receiving societal support if they were to become pregnant when compared to other women with less visible or without disabilities.

However, the current study also indicates that the presence or visibility of a disability does not necessarily impact one's sexual esteem and perceptions of pregnancy and motherhood in ways that were expected based on the current literature discussing negative stigmatization and potential barriers faced by the disability community. The

present findings indicate the need for increased investigation of variables that might serve as protective factors to increase sexual esteem and perceptions of pregnancy or motherhood in women with disabilities. Increased attention to disability issues for women, including discussions of sexuality, reproduction, and parenting should be included in future research and training to continue to bring awareness to the need for greater inclusion and attention to individuals with disabilities both in society more globally and within the field of psychology specifically.

## REFERENCES

- Algars, M., Santtila, P., Varjonen, M., Witting, K., Johansson, A., Jern, P., & Sandnabba, N. (2009). The adult body: How age, gender, and body mass index are related to body image. *Journal of Aging & Health, 21*, 1112-1132. doi: 10.1177/0898264309348023
- American Psychological Association, (2007). Guidelines for psychological practice with girls and women. *American Psychologist, 62*, 949-979. doi: 10.1037/0003-066X.62.9.949
- American Psychological Association (2011). Guidelines for assessment of and intervention with persons with disabilities. Retrieved from <https://www.apa.org/pi/disability/resources/assessment-disabilities.aspx>
- American Psychological Association, Task Force on Socioeconomic Status. (2007). *Report of the APA Task Force on Socioeconomic Status*. Washington, DC: American Psychological Association.
- Anderson, P., & Kitchin, R. (2000). Disability, space and sexuality: Access to family planning services. *Social Science & Medicine, 51*, 1163-1173.
- Aunos, M. M., & Feldman, M. A. (2002). Attitudes towards sexuality, sterilization and parenting rights of persons with intellectual disabilities. *Journal of Applied Research in Intellectual Disabilities, 15*, 285-296. doi:10.1046/j.1468-3148.2002.00135.x

- Badr, L. (2005). Further psychometric testing and use of the Maternal Confidence Questionnaire. *Issues in Comprehensive Pediatric Nursing, 28*, 163-174. doi: 10.1080/01460860500227572
- Barber, G. (2008). Supporting pregnant women with disabilities. *Practice Nursing, 19*, 330-334.
- Barrett, K., O'Day, B., Roche, A., & Carlson, B. (2009). Intimate partner violence, health status, and health care access among women with disabilities. *Women's Health Issues, 19*, 94-100.
- Basson, R. (1998). Sexual health of women with disabilities. *CMAJ: Canadian Medical Association Journal, 159*, 359-362.
- Beatty, J. E., & Kirby, S. L. (2006). Beyond the legal environment: How stigma influences invisible identity groups in the workplace. *Employee Responsibilities & Rights Journal, 18*(1), 29-44. doi:10.1007/s10672-005-9003-6
- Beere, C.A. (1990). *Sex and gender issues: A handbook of tests and measures*. Westport, CT: Greenwood Press:
- Berger, R. (1992). Passing and social support among gay men. *Journal of Homosexuality, 23*, 85-97. Retrieved from Academic Search Complete database
- Bernstein, A. (2008). *Disability and health in the United States, 2001-2005*. Retrieved from <http://www.cdc.gov/>
- Blackford, K.A., Richardson, H., & Grieve, S. (2000). Prenatal education for mothers with disabilities. *Journal of Advanced Nursing, 32*, 898-904.

- Bordieri, J., & Drehmer, D. (1988). Causal attribution and hiring recommendations for disabled job applicants. *Rehabilitation Psychology, 33*, 239-247.  
doi:10.1037/h0091699
- Bruder, M., & Mogro-Wilson, C. (2010). Student and faculty awareness and attitudes about students with disabilities. *Review of Disability Studies: An International Journal, 6*, 3-13. Retrieved from SocINDEX with Full Text database
- Carty, E. (1998). Disability and childbirth: Meeting the challenges. *CMAJ: Canadian Medical Association Journal, 159(4)*, 363-369.
- Centers for Disease Control (2009). Prevalence and most common causes of disability among adults – United States, 2005. *MMWR: Morbidity and Mortality Weekly Report, 58*, 421-426.
- Centers for Disease Control. (2010a, July 7). *Chronic disease prevention and health promotion*. Retrieved from <http://www.cdc.gov/chronicdisease/overview/index.htm>
- Centers for Disease Control. (2010b, October 4). *People with disabilities, living healthy lives*. Retrieved from <http://www.cdc.gov/Features/Disabilities/>
- Centers for Disease Control (2011). *Developmental disabilities*. Retrieved from <http://www.cdc.gov/ncbddd/dd/dd1.htm>
- Clair, J., Beatty, J., & MacLean, T. (2005). Out of sight but not out of mind: Managing invisible social identities in the workplace. *The Academy of Management Review, 30*, 78-95. doi:10.2307/20159096

- Coleman, L. (1997). Stigma: An enigma demystified. In L. J. Davis (Ed.), *The Disability Studies Reader* (pp. 216-231). Florence, KY US: Taylor & Frances/Routledge.
- Concannon, J. (2012). Mind matters: Mental disability and the history and future of the American with Disabilities Act. *Law & Psychology Review*, *36*, 89-114.
- Cutrona, C. E., & Troutman, B. R. (1986). Social support, infant temperament, and parenting self-efficacy: A mediational model of postpartum depression. *Child Development*, *57*, 1507-1518. doi:10.1111/1467-8624.ep7252276
- Dahlbeck, D., & Lightsey, O. R. (2008). Generalized self-efficacy, coping, and self-esteem as predictors of psychological adjustment among children with disabilities or chronic illnesses. *Children's Health Care*, *37*, 293-315. doi: 10.1080/02739610802437509
- Dalgin, R., & Bellini, J. (2008). Invisible disability disclosure in an employment interview: Impact on employers' hiring decisions and views of employability. *Rehabilitation Counseling Bulletin*, *52*, 6-15. doi: 10.1177/0034355207311311
- Davison, T., & McCabe, M. (2005). Relationships between men's and women's body image and their psychological, social, and sexual functioning. *Sex Roles*, *52*, 463-475. doi:10.1007/s11199-005-3712-z
- DeLoach, C. P. (1994). Attitudes toward disability: Impact on sexual development and forging of intimate relationships. *Journal of Applied Rehabilitation Counseling*, *25*(1), 18-25.

- Demasio, K., & Magriples, U. (1999). Pregnancy complicated by maternal paraplegia or tetraplegia as a result of spinal cord injury and spina bifida. *Sexuality and Disability, 17*, 223-232.
- Di Giulio, G. (2003). Sexuality and people living with physical or developmental disabilities: A review of key issues. *Canadian Journal of Human Sexuality, 12(1)*, 53-68.
- Duguay, L. (2011). Sexuality: Still a taboo subject? *Exceptional Parent, 41(2)*, 16-17.
- Dunn, D.S., & Burcaw, S. (2013). Disability identity: Exploring narrative accounts of disability. *Rehabilitation Psychology, 58*, 148-157. doi: 10.1037/a0031691
- Dunn, D. S., Uswatte, G., & Elliott, T. R. (2009). Happiness, resilience, and positive growth following physical disability: Issues for understanding, research, and therapeutic intervention. In S. J. Lopez, C. R. Snyder (Eds.) , *Oxford handbook of positive psychology (2nd ed.)* (pp. 651-664). New York, NY, US: Oxford University Press.
- Emmett, T., & Alant, E. (2006). Women & disability: Exploring the interface of multiple disadvantage. *Development Southern Africa, 23*, 445-460.  
doi:10.1080/03768350600927144
- Esmail, S., Darry, K., Walter, A., & Knupp, H. (2010). Attitudes and perceptions towards disability and sexuality. *Disability & Rehabilitation, 32*, 1148-1155.



- Fichten, C., Robillard, K., Judd, D., & Amsel, R. (1989). College students with physical disabilities: Myths and realities. *Rehabilitation Psychology, 34*, 243-257.  
doi:10.1037/h0091729
- Folsom-Meek, S., Nearing, R., Groteluschen, W., & Krampf, H. (1999). Effects of academic major, gender, and hands-on experience on attitudes of preservice professionals. *Adapted Physical Activity Quarterly, 16*, 389-402.
- Gaito, J. (1961). Repeated measurements designs and counterbalancing. *Psychological Bulletin, 58*(1), 46-54. doi:10.1037/h0046169
- Ghidini, A., Healey, A., Andreani, M., & Simonson, M. R. (2008). Pregnancy and women with spinal cord injuries. *Acta Obstetrica Et Gynecologica Scandinavica, 87*, 1006-1010. doi:10.1080/00016340802356909
- Goreczny, A. J., Bender, E. E., Caruso, G., & Feinstein, C. S. (2011). Attitudes toward individuals with disabilities: Results of a recent survey and implications of those results. *Research in Developmental Disabilities: A Multidisciplinary Journal, 32*, 1596-1609. doi: 10.1016/j.ridd.2011.02.005
- Grabois, E. (2001). Guide to getting reproductive health care services for women with disabilities under the Americans with Disabilities Act of 1990. *Sexuality and Disability, 19*, 191-208. doi:10.1023/A:1013104614828
- Granello, D., & Wheaton, J. E. (2001). Attitudes of undergraduate students toward persons with physical disabilities and mental illnesses. *Journal of Applied Rehabilitation Counseling, 32*(3), 9-16.

- Green, S. E. (2007). Components of perceived stigma and perceptions of well-being among university students with and without disability experience. *Health Sociology Review, 16*, 328-340.
- Grue, L., & Lærum, K. (2002). 'Doing motherhood': Some experiences of mothers with physical disabilities. *Disability & Society, 17*, 671-683. doi: 10.1080/0968759022000010443
- Hampton, N., & Xiao, F. (2007). Attitudes toward people with developmental disabilities in Chinese and American students: The role of cultural values, contact, and knowledges. *Journal of Rehabilitation, 73*(4), 23-32.
- Harper, B. (2000). Beauty, stature and the labour market: A British cohort study. *Oxford Bulletin of Economics & Statistics, 62*(5), 771-800.
- Harper, B., & Tiggemann, M. (2008). The effect of thin ideal media images on women's self-objectification, mood, and body image. *Sex Roles, 58*, 649-657.  
doi:10.1007/s11199-007-9379-x
- Harris, A. S., Thoresen, C. E., & Lopez, S. J. (2007). Integrating positive psychology into counseling: Why and (when appropriate) how. *Journal of Counseling & Development, 85*, 3-13.
- Heinrichs, K. F., MacKnee, C., Auton-Cuff, F., & Domene, J.F. (2009). Factors affecting sexual-self esteem among young adult women in long-term heterosexual relationships. *Canadian Journal of Human Sexuality, 18*, 183-199.

- Henderson-King, E., & Henderson-King, D. (1997). Media effects on women's body esteem: Social and individual difference factors. *Journal of Applied Social Psychology, 27*, 399-417. doi:10.1111/j.1559-1816.1997.tb00638.x
- Hill-Briggs, F., Dial, J.G., Morere, D.A., & Joyce, A. (2007). Neuropsychological assessment of persons with physical disability, visual impairment or blindness, and hearing impairment or deafness. *Archives of Clinical Neuropsychology, 22*, histo389-404. doi:10.1016/j.acn.2007.01.013
- Hosoda, M., Stone-Romero, E. F., & Coats, G. (2003). The effects of physical attractiveness on job-related outcomes: A meta-analysis of experimental studies. *Personnel Psychology, 56*, 431-462.
- Howland, C. A., & Rintala, D. H. (2001). Dating behaviors of women with physical disabilities. *Sexuality and Disability, 19*(1), 41-70. doi: 10.1023/A:1010768804747
- Kallianes, V. V., & Rubinfeld, P. P. (1997). Disabled women and reproductive rights. *Disability & Society, 12*, 203-222.
- Kirshbaum, M., & Olkin, R. (2002). Parents with physical, systemic, or visual disabilities. *Sexuality and Disability, 20*(1), 65-80.
- Kleck, R., & Strenta, A. (1980). Perceptions of the impact of negatively valued physical characteristics on social interaction. *Journal of Personality and Social Psychology, 39*, 861-873. doi:10.1037/0022-3514.39.5.861

- Letherby, G. (2002). Childless and bereft?: Stereotypes and realities in relation to 'voluntary' and 'involuntary' childlessness and womanhood. *Sociological Inquiry*, 72(1), 7-20.
- Link, B., & Phelan, J. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27, 363-385. Retrieved from Academic Search Complete database
- Lippold, T. T., & Burns, J. J. (2009). Social support and intellectual disabilities: A comparison between social networks of adults with intellectual disability and those with physical disability. *Journal of Intellectual Disability Research*, 53, 463-473. doi:10.1111/j.1365-2788.2009.01170.x
- Lipson, J., & Rogers, J. (2000). Pregnancy, birth, and disability: women's health care experiences. *Health Care for Women International*, 21(1), 11-26.
- Louvet, E. (2007). Social judgment toward job applicants with disabilities: Perception of personal qualities and competences. *Rehabilitation Psychology*, 52, 297-303.
- Malacrida, C. (2009). Performing motherhood in a disablist world: Dilemmas of motherhood, femininity and disability. *International Journal of Qualitative Studies in Education*, 22(1), 99-117. doi:10.1080/09518390802581927
- Martz, E. (2003). Invisibility of disability and work experience as predictors of employment among community college students with disabilities. *Journal of Vocational Rehabilitation*, 18, 153-161. Retrieved from PsycINFO database

- McDonald, K. E., Keys, C. B., & Balcazar, F. E. (2007). Disability, race/ethnicity and gender: themes of cultural oppression, acts of individual resistance. *American Journal of Community Psychology*, 39(1/2), 145-161. doi:10.1007/s10464-007-9094-3
- McFarlane, H. (2004). *Disabled women and socio-spatial 'barriers' to motherhood*. Retrieved from Glasgow Theses Service.
- McKeever, P., Angus, J., Lee-Miller, K., & Reid, D. (2003). 'It's more of a production': Accomplishing mothering using a mobility device. *Disability & Society*, 18, 179-197. doi: 1080/0968759032000052824
- McMahon, C., & Tennant, C. (1999). 'Don't count your chickens': A comparative study of the experience of pregnancy after. *Journal of Reproductive & Infant Psychology*, 17, 345-356.
- McMullin, V. (2003). 'Normal' on the outside. *Off Our Backs*, 33(1/2), 35-37. Retrieved from Women's Studies International database
- Meyer, H. (2010). Framing disability: Comparing individualist and collectivist societies. *Comparative Sociology*, 9, 165-181. doi:10.1163/156913310790788453
- Miller, A. (2011, May). *Investigating social desirability bias in student self-report surveys*. Paper presented at the annual forum of the Association for Institutional Research, Toronto, Ontario.
- Milligan, M., & Neufeldt, A. (2001). The myth of asexuality: A survey of social and empirical evidence. *Sexuality and Disability*, 19, 91-109

- Mitra, M., Manning, S., & Lu, E. (2012). Physical abuse around the time of pregnancy among women with disabilities. *Maternal & Child Health Journal, 16*, 802-806. doi:10.1007/s10995-011-0784-y
- Moin, V., Duvdevany, I., & Mazor, D. (2009). Sexual identity, body image, and life satisfaction among women with and without physical disability. *Sexuality and Disability, 27*, 83-95. doi:10.1007/s11195-009-9112-5
- Mona, L., Gardos, P., & Brown, R. (1994). Sexual self views of women with disabilities: The relationship among age-of-onset, nature of disability and sexual self-esteem. *Sexuality and Disability, 12*, 261-277.
- Montgomery, D. (2006, October 25). Rush Limbaugh on the offensive against ad with Michael J. Fox. *The Washington Post*. Retrieved from <http://washingtonpost.com/wp-dyn/content/article/2006/10/24/AR2006102400691.html>
- Nario-Redmond, M. (2010). Cultural stereotypes of disabled and non-disabled men and women: Consensus for global category representations and diagnostic domains. *British Journal of Social Psychology, 49*, 471-488. doi: 10.1348/014466609X468411
- Nario-Redmond, M.R., Noel, J.G., & Fern, E. (2013) Redefining disability disability, re-imagining the self: Disability identification predicts self-esteem and strategic responses to stigma. *Self and Identity, 12*, 468-488, doi: 10.1080/15298868.2012.681118

- Nosek, M.A., Howland, C., Rintala, D.H., Young, M.E., & Chanpong, G.F. (2001). National study of women with physical disabilities: Final report. *Sexuality and Disability, 19*, 5-39.
- O'Dea, S., Shuttleworth, R., & Wedgwood, N. (2012). Disability, doctors and sexuality: Do healthcare providers influence the sexual wellbeing of people living with a neuromuscular disorder? *Sexuality & Disability, 30*, 171-185. doi: 10.1007/s11195-011-9235-3
- Oliver, M., & Barnes, C. (2010). Disability studies, disabled people and the struggle for inclusion. *British Journal of Sociology of Education, 31*, 547-560.
- Olkin, R. (2002). Could you hold the door for me? Including disability in diversity. *Cultural Diversity & Ethnic Minority Psychology, 8*, 130-137. doi:10.1037/1099-9809.8.2.130
- Olkin, R. (2004). Making research accessible to participants with disabilities. *Journal of Multicultural Counseling & Development, 32*, 332-343.
- Olney, M.F., & Brockelman, K.F. (2003). Out of the disability closet: Strategic use of perception management by select university students with disabilities. *Disability & Society, 18(1)*, 35-50. doi: 10.1080/0968759032000044193
- Olney, M. F., & Brockelman, K. F. (2005). The impact of visibility of disability and gender on the self-concept of university students with disabilities. *Journal of Postsecondary Education and Disability, 18(1)*, 80-91.

- Oshima, S., Kirschner, K., Heinemann, A., & Semik, P. (1998). Assessing the knowledge of future internists and gynecologists in caring for a woman with tetraplegia. *Archives of Physical Medicine & Rehabilitation, 79*, 1270-1276.
- Ostapczuk, M., & Musch, J. (2011). Estimating the prevalence of negative attitudes towards people with disability: A comparison of direct questioning, projective questioning and randomised response. *Disability and Rehabilitation: An International, Multidisciplinary Journal, 33*, 399-411. doi:10.3109/09638288.2010.492067
- Palombi, B.J. (2010). Disability: Multiple and intersecting identities – Developing multicultural competences. In J.A.E. Cornish, B.A. Schreier, L. I. Nadkarni, L. H. Metzger, E. R. Rodolfa (Eds.). *Handbook of Multicultural Counseling Competencies* (pp. 55-92). Hoboken, NJ: John Wiley and Sons, Inc.
- Patterson, J. B., & Witten, B. J. (1987). Myths concerning persons with disabilities. *Journal of Applied Rehabilitation Counseling, 18*, 42-44.
- Peleg-Sagy, T., & Shahar, G. (2012). Depression and sexual satisfaction among female medical students: Surprising findings from a pilot study. *Psychiatry: Interpersonal & Biological Processes, 75*(2), 167-175. doi:10.1521/psyc.2012.75.2.167
- Phemister, A., & Crewe, N. (2004). Objective self-awareness and stigma: Implications for persons with visible disabilities. *Journal of Rehabilitation, 70*(2), 33-37.  
Retrieved from Health Source: Nursing/Academic Edition database



- Prilleltensky, O. (2003). A ramp to motherhood: The experiences of mothers with physical disabilities. *Sexuality and Disability, 21*(1), 21-47. doi: 0146-1044/03/0300-0021/0
- Prilleltensky, O. (2004). My child is not my carer: Mothers with physical disabilities and the well-being of children. *Disability & Society, 19*, 209-223. doi: 10.1080/0968759042000204185
- Ramey, M. (2007). The Americans with disabilities act: A history of rights. *Journal of Philosophy & History of Education, 57*, 128-135.
- Renaud, M. T. (2007). We are mothers too: Childbearing experiences of lesbian families. *Journal of Obstetric, Gynecologic, & Neonatal Nursing: Clinical Scholarship for the Care of Women, Childbearing Families, & Newborns, 36*, 190-199. doi:10.1111/j.1552-6909.2007.00136.x
- Rhodes, P., Small, N., Ismail, H., & Wright, J. (2008). 'What really annoys me is people take it like it's a disability', epilepsy, disability and identity among people of Pakistani origin living in the UK. *Ethnicity & Health, 13*, 1-21.
- Rosenzweig, T., Hartman, S., & MacKenzie, E. (2010). Disease-modifying therapy in adult relapsing-remitting multiple sclerosis. *Formulary, 45*, 252-262. Retrieved from EBSCOhost.
- Ruble, D.N., Fleming, A.S., Stangor, C., Brooks-Gunn, J., Fitzmaurice, G., & Deutsch, F. (1990). Transition to motherhood and the self: Measurement, stability, and change. *Journal of Personality and Social Psychology, 58*, 450-463.

- Runfola, C. D., Von Holle, A., Trace, S. E., Brownley, K. A., Hofmeier, S. M., Gagne, D. A., & Bulik, C. M. (2013). Body dissatisfaction in women across the lifespan: Results of the UNC- SELF and gender and body image (GABI) studies. *European Eating Disorders Review, 21*, 52-59. doi:10.1002/erv.2201
- Russo, N. (1976). The motherhood mandate. *Journal of Social Issues, 32*, 143-153.
- Sakellariou, D. (2006). If not the disability, then what? Barriers to reclaiming sexuality following spinal cord injury. *Sexuality and Disability, 24*, 101-111.
- Shapiro, D. N., Peterson, C., & Stewart, A. J. (2009). Legal and social contexts and mental health among lesbian and heterosexual mothers. *Journal of Family Psychology, 23*, 255-262. doi:10.1037/a0014973
- Signore, C., Spong, C., Krotoski, D., Shinowara, N., & Blackwell, S. (2011). Pregnancy in women with physical disabilities. *Obstetrics & Gynecology, 117*, 935-947.
- Sipski, M., Alexander, C., & Rosen, R. (2001). Sexual arousal and orgasm in women: Effects of spinal cord injury. *Annals of Neurology, 49(1)*, 35-44.
- Smart, L., & Wegner, D. (2000). The hidden costs of hidden stigma. In T. Heatherton, R. Kleck, M. Hebl, & J. Hull (Eds.), *The Social Psychology of Stigma* (pp. 220-242). Retrieved from PsycINFO database
- Smeltzer, S. (2007). Pregnancy in women with physical disabilities. *Journal of Obstetric, Gynecologic & Neonatal Nursing, 36(1)*, 88-96. doi: 10.1111/J.1552-6909.2006.00121.x

- Snell Jr., W. E. & Papini, J.R. (1989). The sexuality scale: An instrument to measure sexual esteem, sexual-depression, and sexual-preoccupation. *Journal of Sex Research*, 26, 256-263.
- Snell, Jr., W.E., Fisher, T.D., & Schuh, T. (1992). Reliability and validity of the sexuality scale: A measure of sexual esteem, sexual depression, and sexual-preoccupation. *Journal of Sex Research*, 29, 261-273.
- Stansfield, A. J., Holland, A. J., & Clare, I. H. (2007). The sterilisation of people with intellectual disabilities in England and Wales during the period 1988 to 1999. *Journal of Intellectual Disability Research*, 51, 569-579. doi: 10.1111/j.1365-2788.2006.00920.x
- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist*, 52, 613-29.
- Steinmetz, E. (2004). Americans with disabilities: 2002. Retrieved from <https://www.census.gov/hhes/www/disability/sipp/disab02/awd02.html>
- Stone, S. (1995). The myth of bodily perfection. *Disability & Society*, 10, 413-424. doi:10.1080/09687599550023426
- Stone, S. (2005). Reactions to invisible disability: The experiences of young women survivors of hemorrhagic stroke. *Disability & Rehabilitation*, 27, 293-304. doi: 10.1080/09638280400008990
- Stubblefield, A. (2007). "Beyond the pale": Tainted whiteness, cognitive disability, and eugenic sterilization. *Hypatia*, 22, 162-181.

- Switzer, J. (2003). *Disabled rights: American disability policy and the fight for equality*. Washington DC: Georgetown University Press.
- Taleporos, G., & McCabe, M. (2001). Physical disability and sexual esteem. *Sexuality and Disability, 19*, 131-148.
- Taleporos, G., & McCabe, M. (2002). The impact of sexual esteem, body esteem, and sexual satisfaction on psychological well-being in people with physical disability. *Sexuality and Disability, 20*, 177-183.
- Taleporos, G., & McCabe, M. (2003). Relationships, sexuality and adjustment among people with physical disability. *Sexual & Relationship Therapy, 18(1)*, 25-43.
- Thomas, A. (2001). The multidimensional character of biased perceptions of individuals with disabilities. *Journal of Rehabilitation, 67(2)*, 3-9. Retrieved from Health Source: Nursing/Academic Edition database
- Thomas, C. (1997). The baby and the bath water: Disabled women and motherhood in social context. *Sociology of Health & Illness, 19*, 622-643. doi:10.1111/1467-9566.ep10935518
- Thornton, C. E. (1979). Sexuality counseling of women with spinal cord injuries. *Sexuality and Disability, 2*, 267-277. doi:10.1007/BF01101392
- United States Department of Labor (2010). *October 2010 Disability Employment Statistics Released*. Retrieved from <http://www.dol.gov/odep/>

- U.S. Department of Health and Human Services (2011). *Child health USA 2011: Maternal age*. Retrieved from <http://mchb.hrsa.gov/chusa11/popchar/pages/109ma.html>
- U.S. Department of Justice (2008). *Americans with Disabilities Act of 1990: As amended*. Retrieved from <http://www.ada.gov/pubs/adastatute08.htm>
- Valeras, A.B. (2010). "We don't have a box": Understanding hidden disability identity utilizing narrative research methodology. *Disability Studies Quarterly*, 30, 1-20.
- Vignes, C., Godeau, E., Sentenac, M., Coley, N., Navarro, F., Grandjean, H., & Arnaud, C. (2009). Determinants of students' attitudes towards peers with disabilities. *Developmental Medicine & Child Neurology*, 51, 473-479. doi:10.1111/j.1469-8749.2009.03283.x
- Walter, L., Nosek, M., & Langdon, K. (2001). Understanding of sexuality and reproductive health among women with and without physical disabilities. *Sexuality and Disability*, 19, 167-176.
- Walsh-Gallagher, D., Sinclair, M., & McConkey. (2012). The ambiguity of disabled women's experiences of pregnancy, childbirth and motherhood: A phenomenological understanding. *Midwifery*, 28, 156-162. doi:10.1016/j.midw.2011.01.003
- Wates, M. (2002). Disability and adoption: how unexamined attitudes discriminate against disabled people as parents. *Adoption & Fostering*, 26, 49-56.

- Waxman, B. (1994). Up against eugenics: Disabled women's challenge to receive reproductive health services. *Sexuality and Disability, 12*, 155-171.
- Waxman-Fiduccia, B. (1999). Sexual imagery of physically disabled women: Erotic? Perverse? Sexist? *Sexuality and Disability, 17*, 277-282.
- Weinberg, N. (1976). Social stereotyping of the physically handicapped. *Rehabilitation Psychology, 23*, 115-124.
- Weisel, A., & Florian, V. (1990). Same- and cross-gender attitudes toward persons with physical disabilities. *Rehabilitation Psychology, 35*, 229-238. doi: 101037/h0079066
- Whipple, B. R., Gerdes, C.A., & Komisaruk, B.R. (1996). Sexual response to self-stimulation in women with complete spinal cord injury. *Journal of Sex Research, 33*, 231-240.

APPENDIX A  
DEMOGRAPHICS QUESTIONNAIRE

## Demographics Questionnaire

Before completing the surveys, please complete the following demographic questionnaire by clicking the following boxes or filling in the blanks with the response that best describes you:

1. Please indicate your gender:

Woman \_\_\_\_\_  
Transgender \_\_\_\_\_  
Other \_\_\_\_\_

2. Please indicate your age: \_\_\_\_\_

3. Please indicate your race/ethnicity:

Black/African American \_\_\_\_\_  
White/European American \_\_\_\_\_  
Asian/Asian American \_\_\_\_\_  
Hispanic/Latino(a) \_\_\_\_\_  
Native American/Alaskan Native \_\_\_\_\_  
Other: \_\_\_\_\_

4. Please indicate your sexual orientation:

Heterosexual \_\_\_\_\_  
Lesbian \_\_\_\_\_  
Bisexual \_\_\_\_\_  
Other \_\_\_\_\_

5. I have not yet had children but hope to in the future.

Yes \_\_\_\_\_  
No \_\_\_\_\_

For the purposes of this study, disability will be defined as any degree of impairment that is caused by bodily injury, birth defect, or illness that results in difficulty with functional activities and activities of daily living. Physical disabilities may include, but are not limited to, diabetes, epilepsy, any degree of paralysis, amputation, lack of physical coordination, blindness or visual impairment, deafness or hearing impairment, rheumatoid arthritis, or any disability that results in physical reliance on a guide dog, wheelchair, or other assistive device. Though individuals with physical disabilities may also experience symptoms of anxiety or depression, in this study, physical disability would be considered the primary diagnosis that causes impairment.



6. Please indicate which description best describes you:

I identify as having a primary diagnosis of a physical disability \_\_\_\_\_

I identify as able-bodied with no physical, intellectual, or emotional disabilities that cause impairment in daily life activities.

Other (please explain) \_\_\_\_\_

If you identify as having a physical disability, please answer the following questions. If you do not have a physical disability, press *next* to continue the survey.

If you have multiple physical disabilities, when answering the following questions, please consider the disability with which you most strongly identify.

7. At what age were you when your primary disability was first apparent? \_\_\_\_

8. My physical disability is visible and can be easily seen by others.

Yes \_\_\_\_\_

No \_\_\_\_\_

Sometimes \_\_\_\_\_

9. How severe would you rate your physical disability?

1-----2-----3-----4-----5-----6  
Mild Moderate Severe

10. Please indicate the physical disability with which you most strongly identify (e.g., spina bifida, multiple sclerosis, rheumatoid arthritis, etc.). \_\_\_\_\_

APPENDIX B  
SEXUAL ESTEEM SUBSCALE OF SEXUALITY SCALE



APPENDIX C  
MEASURE OF MATERNAL CONFIDENCE

Childbearing Attitudes Questionnaire-  
Maternal Confidence Subscales (Ruble et al., 1990)

Instructions: The statements listed below describe certain attitudes toward childbearing. Consider how you might respond if you were to become pregnant and decide to have a child. For each item you will be asked to indicate how much you agree or disagree with the statement listed in that item. Use the following scale to provide your responses:

1-----	2-----	3-----	4-----	5-----	6-----	7-----
Strongly Disagree	Disagree	Disagree Somewhat	Undecided	Agree Somewhat	Agree	Strongly Agree

1. There is so much to know about babies, I wonder if will ever learn enough to feel comfortable.
2. I worry that being a mother would replace the real me.
3. I am certain that I will be a good mother.
4. I will feel completely ready for motherhood.
5. I will feel confident about my abilities.
6. Being pregnant would make me feel more childlike, less grown-up.
7. I feel inferior to most of the people I know.
8. I will feel anxiety over providing for my family.
9. I handle myself well at social gatherings.
10. I wonder if I would be able to give my child all the love he/she will need.
11. I often feel there is nothing I can do well.

12. It would be overwhelming to be completely responsible for the care and welfare of another person.
13. I would be concerned about becoming too dependent on others during a pregnancy.
14. I often feel self-conscious.
15. I will often find myself worrying about my baby's health.
16. I am concerned that I would not know what to do when my baby cries.
17. I anticipate no difficulties in becoming comfortable caring for my child.

APPENDIX D  
PERCEPTIONS OF PREGNANCY SCALE

## Perceptions of Pregnancy

Please indicate how strongly you agree or disagree with the following statements:

1. *I do not believe I am physically capable of becoming pregnant.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		

2. *I am fearful that becoming pregnant would hurt my body.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		

3. *I believe that being pregnant would increase my sense of independence.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		

4. *Becoming pregnant would make me feel fulfilled as a woman.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		

5. *I believe my physician would not support me should I plan to become pregnant.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		

6. *If I become pregnant in the future, my family and friends will be excited and supportive.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		

7. *I feel confident that if I become pregnant I will be able to find information that will prepare me for my pregnancy.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		

8. *If I were to become pregnant, I feel concerned that others will believe I am not capable of effectively parenting.*

Strongly Agree	Agree	Agree	Disagree	Disagree	Strongly Disagree
		Somewhat	Somewhat		



APPENDIX E  
RECRUITMENT LETTER

Hello,

I am a Counseling Psychology doctoral student at Texas Woman's University seeking participants for my doctoral dissertation. My study is examining sexual esteem and perceptions of pregnancy and motherhood in disabled and able-bodied women.

The study calls for women between the ages of 18-39 who do not currently have children and are interested in possibly having children in the future to participate. Participants will respond to a demographics questionnaire and complete three brief measures, which should take between 10-15 minutes. Upon completion of the study, participants may enter to win a \$50 Amazon gift card.

There is a potential risk of loss of confidentiality in all emails, downloading, and internet transactions. Psychdata.com employs several procedures to keep your personal information as confidential as possible.

My advisor and the co-principal investigator for this study is Dr. Debra Mollen. This study has been approved for data collection by the Institutional Review Board at Texas Woman's University (IRB approval number 17237).

I would be very appreciative if you could forward this message to other women who are eligible for participation who can follow the link <https://www.psychdata.com/s.asp?SID=154237> to the study. Please feel free to contact me with any questions or concerns at [Eschrader@twu.edu](mailto:Eschrader@twu.edu)

Thank you very much.

Sincerely,

Erin Schrader, M.A.  
Doctoral Candidate  
Texas Woman's University  
Counseling Psychology

APPENDIX F  
RECRUITMENT FLYER

CONTRIBUTE TO OUR KNOWLEDGE ABOUT  
SEXUALITY AND PARENTING IN DIVERSE WOMEN

Are you:

- A woman between the ages of 18-39 who currently does not have children
- Would like to have children in the future
- Either able-bodied or identify as having a physical disability

If so, you are invited to participate in a study being conducted by Erin Schrader, M.A., who is a doctoral student at Texas Woman's University. You will be asked to fill out questionnaires about sexuality and your perceptions of pregnancy and motherhood. Participation should take approximately 10-15 minutes. In exchange for your participation, you will have the opportunity to enter to win a \$50 Amazon gift card and you can request a summary of the results of the study. Participation in this study is voluntary.

If you would like to participate, please go to the website [www.PsychData.com](http://www.PsychData.com) and go to survey #154237 to participate in this study.

I appreciate your interest! If you have any questions, please contact the principal investigator at [eschrader@twu.edu](mailto:eschrader@twu.edu) or Dr. Debra Mollen at [Dmollen@twu.edu](mailto:Dmollen@twu.edu)

\*There is a potential risk of loss of confidentiality in all email, downloading, and internet transactions.

APPENDIX G  
INFORMED CONSENT

TEXAS WOMAN'S UNIVERSITY  
CONSENT TO PARTICIPATE IN RESEARCH

Title: Sexual Esteem, Perceptions of Pregnancy, and Maternal Confidence in Women with and without Physical Disabilities

Investigator: Erin Schrader, M.A.....eschrader@twu.edu xxx.xxx.xxxx  
Advisor: Debra Mollen, Ph.D.....dmollen@mail.twu.edu 940.898.2317

Explanation and Purpose of the Research

You are being asked to participate in a research study for Erin Schrader's dissertation at Texas Woman's University. The purpose of this research is to explore topics such as sexuality and expectations of pregnancy and motherhood in diverse women who have not yet had children.

Description of Procedures

If you agree to be in this study, you will be asked to complete a basic demographics form and complete three short measures. The study is completed entirely online and will take approximately 10 to 15 minutes. In order to be a participant in this study, you must be a woman between the ages of 18 to 39, must not have children, and identify as either able-bodied with no known cognitive or mental health impairments or as having a physical disability with no known cognitive or mental health impairments that would make it significantly difficult to complete the surveys.

Potential Risks

Potential risks related to participation in the study include loss of confidentiality. There is a potential risk of loss of confidentiality in all emails, downloading, and internet transactions. Responses and personal information will be kept confidential through Psychdata.com, which stores information in a secure data facility. To preserve confidentiality, your session will expire after 20 minutes of inactivity. The principal investigator will be the only person who has access to your records. You will not be required to submit identifying information unless you elect to receive study results, have inquiries about the nature of the study, and/or participate in the optional drawing for the Amazon.com gift card. Information revealed for the purposes of the drawing will be kept independent of the data collected from the surveys. No identifying information will be included when study results are published.

An additional risk in this study is loss of time. The study is estimated to take 10 to 15 minutes.

Due to the sensitive nature of this topic, there is also the risk of psychological or emotional discomfort due to self disclosure. If you experience discomfort during the survey and wish to stop, you may quit at any time. A list of national referrals for counseling support will be provided to all participants in case of emotional discomfort. All information will be strictly confidential and will not contain any personal identifying information.

A final risk in this study is coercion of individuals known by the investigator. Participation in the study is entirely voluntary. Individuals known to the investigator will not be sent multiple emails requesting participation in the study.

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

#### Participation and Benefits

Your involvement in this study is completely voluntary and you may withdraw from the study at any time. Benefits include an opportunity following the completion of the study to enter to win a \$50 Amazon gift card. If you would like to know the results of this study we will email them to you.

#### Questions Regarding the Study

If you have any questions about the research study you should ask the researchers; their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940-898-3378 or via e-mail at [IRB@twu.edu](mailto:IRB@twu.edu). The IRB approval number for this study is 17237. All reports or correspondence will be kept confidential.

If you have read and understand the statements presented above, please click the *Continue* button below to acknowledge your consent to participate in this study. Thank you for your time.

APPENDIX H  
RESULTS AND GIFT CARD DRAWING PAGE



Thank you for your participation in this study. If you have any questions or concerns, please feel free to contact the principal investigator, Erin Schrader, at [eschrader@twu.edu](mailto:eschrader@twu.edu) or xxx.xxx.xxxx. You may also contact Dr. Debra Mollen at [dmollen@mail.twu.edu](mailto:dmollen@mail.twu.edu) or 940.898.2317.

If you would like to receive results of the study please enter your email address below. Your email address will remain separate from the data collected from the surveys.

If you would like to enter to possibly win a \$50 Amazon gift card, please enter your email address below. Again, your email address will remain separate from the data collected from the surveys.

If you do not wish to receive study results or enter the gift card drawing please close your browser to end the study.

APPENDIX I  
REFERRAL LIST

## Referral Agencies

### Dallas-Fort Worth Area:

Galaxy Counseling Center  
Garland, Texas  
972-272-4429

Timberlawn Trauma Program  
Dallas, Texas  
800-426-4944

Counseling Institute of Texas  
Garland, Texas  
972-494-0160

### National:

American Psychological Association Referral Service  
1-800-964-2000  
[Http://locator.apahelpcenter.org](http://locator.apahelpcenter.org)

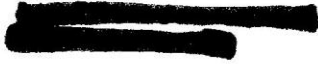
National Register of Health Service Providers in Psychology  
<http://www.nationalregister.org/>

APPENDIX J  
IRB APPROVAL LETTER



**Institutional Review Board**  
Office of Research and Sponsored Programs  
P.O. Box 425619, Denton, TX 76204-5619  
940-898-3378 FAX 940-898-4416  
e-mail: IRB@twu.edu

February 1, 2013

Ms. Erin Schrader  


Dear Ms. Schrader:

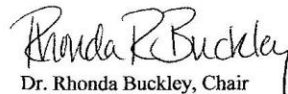
*Re: Sexual Esteem, Perceptions of Pregnancy, and Maternal Confidence in Disabled and Able-bodied Women (Protocol #: 17237)*

The above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and appears to meet our requirements for the protection of individuals' rights.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. A copy of the approved consent form with the IRB approval stamp is enclosed. Please use the consent form with the most recent approval date stamp when obtaining consent from your participants. A copy of the signed consent forms must be submitted with the request to close the study file at the completion of the study.

This approval is valid one year from January 18, 2013. Any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any unanticipated incidents. If you have any questions, please contact the TWU IRB.

Sincerely,



Dr. Rhonda Buckley, Chair  
Institutional Review Board - Denton

cc. Dr. Dan Miller, Department of Psychology & Philosophy  
Dr. Debra Mollen, Department of Psychology & Philosophy  
Graduate School