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## The primiparous experience : an examination of body satisfaction and self-esteem

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Keri Godfrey  
The Primiparous Experience:  
An Examination of Body  
Satisfaction and Self-Esteem

## ABSTRACT

This study was undertaken in order to determine whether or not first-time mothers-to-be experience differences in body satisfaction and self-esteem, either positively or negatively, depending on the current trimester. The researcher hypothesized that differences would be evident, and that women in their second trimester would present with higher levels of self-esteem and body satisfaction than their first and third trimester counterparts.

This relational study uses a cross-sectional design and uses one group, primiparous women, to examine the correlations between body satisfaction, stage of pregnancy and self-esteem. This study is quantitative and uses an online website, Survey Monkey, to administer an anonymously taken questionnaire. The questionnaire includes standardized instruments including the Body Change Inventory (Ricciardelli & McCabe, 2002), the Objectified Body Consciousness Scale (McKinley, 1995), and the Rosenberg Self-Esteem Scale (1965) as well as open-ended questions for experiential reflections. Thirty-eight women completed the questionnaire and were fairly homogenous in their characteristics. Most women were white, married to an opposite-sex partner, college-educated, were employed at least part-time, and became pregnant through vaginal intercourse.

Major findings included no statistically significant differences in self-esteem or body satisfaction among women in different trimesters. However, differences were found

in women's body change efforts during pregnancy as compared to before pregnancy.

Furthermore, a positive correlation was found between self-esteem and body satisfaction, and a negative correlation was found between self-esteem and control beliefs.

Application of findings to social work is discussed.

THE PRIMIPARIOUS EXPERIENCE: AN EXAMINATION OF BODY  
SATISFACTION AND SELF-ESTEEM

A project based upon an independent investigation,  
submitted in partial fulfillment of the requirements  
for the degree of Master of Social Work.

Keri Godfrey

Smith College School for Social Work  
Northampton, MA 01063

2009

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## CHAPTER I

### INTRODUCTION

In general, pregnancy is seen by most as a period of joy and happiness. Pregnancy also marks a time in which a great number of changes and transitions occur. Family dynamics shift, physical and social activities may become altered or minimized, and rapid bodily changes occur throughout a term. These changes can often be embraced if a couple or individual is ready to have a child. For others, feelings of anxiety or regret may surface if a pregnancy is not desired at that time. Some may experience certain aspects of pregnancy as positive or rewarding and may find others to be tolling or challenging. For primiparous women, or first-time mothers-to-be, the experience of pregnancy in its entirety is new. This may lead to mixed feelings or ambiguities about pregnancy-related changes as well as concerns about what to expect at birth and post-birth.

Physical changes to a woman's body is one of the most obvious characteristics of pregnancy, with a typical increase in the size of the abdomen, swelling of the breasts and other areas of the body, and for some a general sense of discomfort. The ways in which women cope with these changes has implications for the mental health and overall wellbeing of both the mother and the developing child.

In examining the current literature, it came to the attention of this researcher that little was available about how the experience of pregnancy can impact or be impacted by self-esteem and body satisfaction. Much of the literature on body image and self-esteem



looks at certain female populations and points to the negative mental and physical health issues that poor self-esteem or body satisfaction can influence. When applied to the female population that is currently pregnant, these risks are exacerbated by the repercussions it could have on the growing fetus as well. Given this, it seemed evident that more research was needed to assess for both the commonalities women have pre-pregnancy and during pregnancy as well as what clinical implications may be needed for addressing the specific issues and challenges around difference faced by first-time mothers-to-be during their pregnancy.

This current study looked to see if the conception of a first child has an impact on a woman's body satisfaction and self-esteem, either positively or negatively. This researcher also wondered if there was a difference in satisfaction throughout the course of pregnancy which may indicate to clinicians and other mental health workers particular points for intervention. The researcher also sought to analyze whether or not there is a relationship between body satisfaction and self-esteem.

The following chapters will explore the current literature on body image satisfaction and self-esteem, both as it applies to the general population as well as how it specifically relates to women who are pregnant. The methods used for this study will be discussed, followed by an analysis of the findings of this research. Lastly, chapter five will discuss the findings of this chapter as it relates to previous research and give suggestions for future areas of study as well as some of the clinical implications of this research.

## CHAPTER II

### LITERATURE REVIEW

This chapter evaluates current literature and research about how pregnant women experience their bodies and what effects this may have on their perceptual accuracy and affective, cognitive, and behavioral well-being. In the following two sections, a brief overview of the two leading theories behind the occurrence of body image disturbance will be given as well as an explanation for their applicability to first-time mothers-to-be. Next, a wider examination of both the prevalence and effects negative body image has on young women in the United States followed by sections looking specifically at body image disturbance and cognitive dietary restraint. Finally, this literature review concludes with a brief description of why such research is necessary and relevant to the social work field and offers suggestions and implications for future work. As previously noted, there is much writing on negative body image and body image dissatisfaction, and to cover it exhaustively would be beyond the scope of this project.

Body image satisfaction and the effects it has on one's mental health has been a widely examined topic in social work research. However, there has been far less research on how this phenomenon specifically affects women during pregnancy. Given that pregnancy is a time in which the body undergoes a number of changes, it is surprising that this topic has not been more closely examined, particularly for those women undergoing this experience for the first time. After an initial review of the literature, it was determined that the objective of this research would be to examine how primiparous

women experience their pregnancy and what effect this first-time pregnancy has on their body image satisfaction and their self-esteem.

Beauty is a subjective term that can be defined as an external and unstable characteristic, “that varies with personal circumstances and that is particularly susceptible to arbitrary changes in cultural standards” (Jarry & Kossert, 2007, p. 47). Western society currently idealizes very specific body features, and such characteristics of beauty are both well identified and frequently represented in the external environment. Commonly, however, the defined ideals are outside of what is culturally normative and are thus difficult, if not unviable, to attain.

Body image refers to a multi-dimensional concept that includes many different insightful, evaluative, and devoteful aspects (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008). This includes, but is not limited to “perception of one’s current shape and size, ideas about what size and shape is ‘ideal’, satisfaction with general appearance, subjective experience of body size satisfaction, the perception of being strong and fit, and the salience of weight and shape” (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008, p. 505).

In recent years, there has been a national movement to raise awareness about the effects that unrealistic standards about ideal shape and size have, particularly on young women and adolescent girls. Studies have shown that media and popular culture have had a strong influence on presenting these ideals and have a tendency to significantly lower body image satisfaction among individuals who are exposed to these media (Jarry & Kossert, 2007). It is commonly portrayed that youth and slimness are the keys to

success and happiness, and some individuals will go to great lengths to try to achieve these.

Even more recently, there has been additional attention to how body image dissatisfaction affects women who are pregnant. The literature in this area is small in comparison to previous research on body image, but is growing. Primiparous women, or first-time mothers-to-be, are thought to be at a higher risk for body image dissatisfaction than multiparous women, as they are not previously accustomed to the changes their bodies undergo throughout the course of pregnancy (Jordan, Capdevila, & Johnson, 2005). Concerns have risen in regards to the possible effects negative body image during pregnancy may have on maternal attachment to her child, adjustment to a new social role, and potential for postpartum depression.

#### *Body Image among Pregnant Women*

Pregnancy is marked as a time in a woman's life in which a number of bodily changes occur. The average woman gains approximately 29 pounds during a 40-week pregnancy, and experiences a notable increase in both breast size and waist circumference (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008). Such changes often reflect the largest deviation from the ideal body that most women will experience in their lifetime (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008; Jordan, Capdevila, & Johnson, 2005). Given that body image concerns are extremely prevalent among young women, it is possible that this period in a woman's life may trigger additional anxiety about her body shape and size (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008). However, there is conflicting data on this.

In a study conducted by Duncombe and her colleagues (2008), pregnant women were asked to retrospectively evaluate their pre-pregnancy body ideals, feelings of general attractiveness, feelings of fatness, and their perceived fitness and strength. They sampled 158 women throughout the duration of their pregnancy to examine whether there was any shift in how they perceived their body. They also looked at whether their ratings of current and ideal shape fluctuated. They found that body image among these women remained fairly stable across pregnancy, such that women with greater body image concerns maintained these concerns over time. Furthermore, they found that as women progressed through pregnancy and experienced greater changes in body size, their ideals often shifted in parallel to their own body changes.

On the other hand, the researchers acknowledge their limitations in regards to the diversity of their sample. They report that most of the women who participated in the research were university educated and had stable partners. Given that body image concerns and eating behaviors tend to vary among socioeconomic and cultural groups, it would be helpful to have a sample that more accurately reflects the demographics of the general population.

Pregnant women from a variety of cultures express concern about gaining excessive amounts of weight and some report feeling less attractive than they did pre-conception (Chang, Chao, & Kenney, 2006). In a study of eighteen women in their third trimester in Taiwan, one woman states:

“Before I got pregnant, my breasts were big. But now, they look huge, heavy, and droopy... I feel puffed, and I don't think I look good even when I dress up” (Chang, Chao, & Kenney, 2006, p. 149).

The women in this study partook in open-ended interviews which concentrated on reactions to changes in their bodies. Another woman reports “I am so ugly that any makeup won’t change my appearance because I am swollen and fat. I cannot be that ‘I’ I was before pregnancy” (Chang, Chao, & Kenney, 2006, p. 150). The researchers note that pregnancy is a time in which there is a clash between actual body size and “normal standards of thinness, beauty, and sexual attractiveness” (p. 151). They believe that this experience women have during pregnancy is not restricted to the population sampled in Taiwan. However, given that this study was conducted in Taiwan, it’s applicability to women living in the United States may be limited when taking into account cultural differences surrounding ideal size and shape.

Some of the literature suggests that these concerns increase throughout pregnancy and that attitudes toward body image and overall self-esteem become increasingly negative (Johnson, Burrows, & Williamson, 2004). Johnson and his colleagues conducted an inductive qualitative study, interviewing six women aged 26-34 who were in the later stage of pregnancy. The women in this study were all pregnant for the first time and were asked questions regarding the meaning of their pregnancy and more specific questions targeting attitudes about their body, weight, and eating habits. The women they interviewed spoke particularly about the changing boundaries that occur during pregnancy in which outsiders feel entitled to touch the stomach of a noticeably pregnant woman. One woman also experienced issues of feeling as though she would be “on display” during the birth of her child and longed for a more intimate and private birthing experience (p. 366).

Some of the women in the study also described their bodies as aesthetically displeasing, but recognized it as within the context of transitioning into motherhood. Returning to a “normal” state post-pregnancy was often emphasized (p. 367). Although this study provides great insight into the thoughts and feelings women have regarding their changing bodies, the sample in this study is very small and relatively homogenous. All of the women were in heterosexual marriages and five out of six identified as white. The sixth participant identified as British Asian. Furthermore, all six women either worked for or were affiliated with a higher education university through which a recruitment email was initially sent out.

The appearance of striae gravidarum (stretch marks) during pregnancy, for example, is observed as being particularly distressing for some women (Chang, Chao, & Kenney, 2006). “I don’t look in the mirror to rub cream into my skin,” one woman reports, “I do it by touch alone. I am upset. The stretch marks upset me... They are terrible” (Chang, Chao, & Kenney, 2006, p. 150).

It has been suggested that women who experience poorer body image earlier in pregnancy are more susceptible to higher levels of depression and have a tendency to restrain eating later in pregnancy (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008). However, other studies have indicated that although women may have a negative attitude toward their changing body, most will refrain from dieting behaviors until post-pregnancy for fear of jeopardizing the developing fetus’s health (Johnson, Burrows, & Williamson, 2004). For example, one woman states “I’m eating for two now. I’ve got an excuse to eat as much as I like, as much as I want” (Johnson, Burrows, & Williamson, 2004, p. 367)

Contrary to the idea that body image satisfaction deteriorates as pregnancy progresses, some women report increased satisfaction in later trimesters as it became obvious they were expecting and that others would be able to distinguish that they were not simply gaining weight (Johnson, Burrows, & Williamson, 2004). Along these same lines, some women report a great sense of relief at not having to conform to the ingrained societal expectations of thinness. This temporary respite is reported by some women as a “license to not worry” due to a shift in emphasis on that of a healthy and successful pregnancy (Chang, Chao, & Kenney, 2006; Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008; Fairburn & Welch, 1990; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

There have also been some studies (Fairburn & Welch, 1990; McMahon, Tennant, Ungerer, & Saunders, 1999) that have compared certain characteristics of pregnant women to see if any serve as risk factors for body image dissatisfaction. For example, one study compared seventy women who had undergone in vitro fertilization (IVF) treatment as a means to conceive with sixty-three women who conceived through natural means. The researchers used both questionnaires and interviews during the participants’ thirtieth week of pregnancy and found that the IVF women tend to have a better adjustment, overall, to the bodily changes that occur during pregnancy (McMahon, Tennant, Ungerer, & Saunders, 1999). Commonly, the achievement of a long-awaited goal to conceive takes precedent to the discomforts and anxieties that are more frequently exhibited in women who conceive through natural means (McMahon, Tennant, Ungerer, & Saunders, 1999).



It is extremely important during pregnancy for women to adapt to bodily changes without a great deal of distress. According to McMahon, et al. (1999) “positive identification with pregnancy predicts positive postnatal adjustment” (p. 352).

### *Negative Body Image*

In the United States, studies have indicated that most women and girls perceive themselves to be overweight or are dissatisfied overall with their shape, size, or appearance (Chang, Chao, & Kenney, 2006; Frederick, Peplau, & Lever, 2006; Peterson, Tantleff-Dunn, & Bedwell, 2006). This widespread dissatisfaction and longing for change has been termed ‘normative discontent’ (Johnson, Burrows, & Williamson, 2004; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

Negative body image may yield a substantial quantity of harmful outcomes, including body dissatisfaction, a drive for thinness, low self-esteem, an increase in stress, symptoms of depression, restricted food intake, and smoking to suppress appetite (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008; Peterson, Tantleff-Dunn, & Bedwell, 2006; Putterman & Linden, 2006). As one could infer, all of the above-mentioned could have serious negative implications on a developing fetus. In a study conducted by Duncombe, et al (2008), pregnant women completed measures of general attractiveness, feeling fat, ideal size and shape, and fitness and shape. Those with the most concerns regarding body image reported a tendency toward the above-mentioned risky behaviors and thus increased their risk for health-related complications with their pregnancy.

Individuals with negative body image are also at an accelerated risk for an array of medical and psychological disorders, including the development of disordered eating

patterns and body dysmorphic disorder (Frederick, Peplau, & Lever, 2006; Geschwind, Roefs, Lattimore, Fett, & Jansen, 2008; Jarry and Kossert, 2007; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Furthermore, those suffering with eating disorders have lower recovery rates, acute health problems, and the uppermost mortality rate of any mental illness (Peterson, Tantleff-Dunn, & Bedwell, 2006). Some studies suggest that with an overwhelming prevalence of body image concerns among women, it is possible that the body changes that occur may trigger additional body image concerns (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008; Johnson, Burrows, & Williamson, 2004)

The degree to which an individual is satisfied or dissatisfied with their body image is not stagnant and may alter depending on the environment in which the person perceives they are being evaluated (Biro, Striegel-Moore, Franko, Padgett, & Bean, 2006; Geschwind, Roefs, Lattimore, Fett, & Jansen, 2008). It may also change with fluctuations in weight so that their stated ideal reflects something that they are capable of reaching (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008). For most women carrying a child, this ideal reflects a desire to return to their pre-pregnancy shape and size (Chang, Chao, & Kenney, 2006).

Such flexibility is also true of self-esteem, which is understood to directly interact with body satisfaction (Biro, Striegel-Moore, Franko, Padgett, & Bean, 2006). Self-esteem has been defined both as a trait which may represent a certain level of stability over time, and as a response to cues and reactions in the external environment (Biro, Striegel-Moore, Franko, Padgett, & Bean, 2006). If self-esteem and body satisfaction are correlated as the research suggests, it is important that women who are pregnant maintain

a positive sense of self to minimize the level of psychological and physical risk for both herself and her unborn child. Some researchers have suggested that women who feel incompetent in other domains of their life (such as in intimate relationships, the work environment, etc.) may turn to appearance as a more easily controllable source of self-esteem (Jarry & Kossert, 2007). Jarry & Kossert (2007) have coined this term “body image compensatory self-enhancement” (p.39). Thus, it is equally as important that the external environment be as supportive as possible during this time of development and change.

A person’s outlook on body image is conceptualized as consisting of two parts. The evaluative component refers to an individual’s contentment with appearance and the investment component signifies the importance attached to appearance. Disturbance in this area indicates dissatisfaction with appearance and an over-reliance on body image as a core feature of one’s identity. Furthermore, an increased investment in appearance is associated with lower body image satisfaction (Jarry & Kossert, 2007). For most women, however, pregnancy is a time in which they can be less evaluative of their bodies and recognize the changes as a function of growing a healthy baby (Chang, Chao, & Kenney, 2006; Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008; Fairburn & Welch, 1990; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

### *Objectification Theory*

Objectification theory infers that with life’s experiences and gender socialization, women are routinely subjected to instances in which her sexual parts or functions are seen as separate entities capable of representing her whole being (Moradi & Huang, 2008). Pregnancy is a time in which the noticeable physical changes in a woman’s body

is, in a sense, a display of her sexual functions. Much attention is given to the woman's stomach as an object separate from the whole self. Objectification theory was proposed by Fredrickson and Roberts (1997) as an explanatory model with the purpose of revealing the experiences and mental health risks of young girls and women who experience sexual objectification (Andrist, 2008; Fredrickson & Roberts, 1997). Within this same framework, these experiences become internalized and are thought to socialize women to compliantly view their own bodies as objects to be evaluated and subsequently treat them as such (Moradi & Huang, 2008; Peterson, Tantleff-Dunn, & Bedwell, 2006). This process is known as self-objectification, and is displayed through constant body surveillance, body shame, and anxiety regarding potential outside evaluations made about one's body (Moradi & Huang, 2008).

According to Frederick, Peplau, and Lever (2006), "Western women learn to assess their own value as a function of how they believe their bodies are viewed by others" (p. 413). Consequently, women are more likely than men are to experience distress and anxiety concerning their body image (Frederick, Peplau, and Lever, 2006). Perhaps even more concerning, is that this self-objectification process has been directly linked to the occurrence of eating disturbance (Peterson, Tantleff-Dunn, & Bedwell, 2006).

Objectified body consciousness includes an external surveillance of one's own body, a belief that one has the ability to control one's appearance and subsequently modify their body to conform to cultural ideals, and shame around the inability to conform to these internalized standards of beauty. As surveillance and shame increase, body esteem is negatively affected (Thompson, Heinberg, Altabe, & Tantleff-Dunn,

1999). Objectification theory presumes that women often adopt an observer's perspective and that the "cultural milieu of objectification functions to socialize girls and women to, at some level, treat *themselves* as objects to be looked at and evaluated" (Fredrickson & Roberts, 1997, p. 177). Additionally, an individual's ability to be cognizant of the body's internal emotional and physiological states is thought to be compromised when body shame and anxiety are present. Ultimately, these experiences contribute to a woman's risk for depression, sexual dysfunction, and eating disorders (Breines, Crocker, & Garcia, 2008; Moradi & Huang, 2008).

The above mentioned psychological and physical risks could have negative consequences for the developing fetus. According to Andrist (2008), the shame and anxiety that are experienced during objectification has lead to a drastic increase in the number of women choosing to have a caesarean delivery by request rather than vaginal birth which would further alter the body and potentially lead to further scrutinizing. Furthermore, if negative body image attitudes persist post-pregnancy, it may influence her intention for breast feeding her child (Foster, Slade, & Wilson, 1996). A study conducted with 38 women between the 32<sup>nd</sup> and 38<sup>th</sup> week of pregnancy completed interviews and questionnaires regarding their body satisfaction, maternal attachment, and breast feeding habits. The researchers found that a woman's attitude toward her body, rather than actual size, seemed to predict feeding intention.

According to Moradi and Huang (2008), self-objectification is "an experience that is sustained by and sensitive to contextual experiences of sexual objectification" (p. 379). Furthermore, the experience of heightened self-objectification extends further than the situation which triggered it. It may lead to cognitive dietary restraint (Putterman &

Linden, 2006), hinder task performance (Moradi & Huang, 2008), lower self esteem (Biro, Strigel-Moore, Franko, Padgett, & Bean, 2006), or result in psychological problems including, but not limited to, depressive symptoms (Breines, Crocker, & Garcia, 2008; Frederick, Peplau, & Lever, 2006; Moradi & Huang, 2008). Several articles reference Fredrickson's 1998 study in which women who were asked to put on a swimsuit rather than a sweater performed lower on a math test, showed signs of disordered eating, and reported an increase in body shame (Breines, Crocker, & Garcia, 2008; Frederick, Peplau, & Lever, 2006; Moradi & Huang, 2008). Frederick and his colleagues used Fredrickson's study as motivation for their own research in which they posted a 27-item online survey which sampled 52,677 heterosexual adults between the ages of 18 and 65. The researchers discovered that women were twice as likely as men to have poor body image satisfaction and would avoid wearing a swimsuit in public. Only a third of women surveyed reported being satisfied with their weight; most reported feeling too heavy.

One criticism of the research that has been conducted on self-objectification is that it has been carried out in laboratory settings rather than natural ones that may emphasize more realistic daily life experience. Furthermore, due to this setting, the studies may not account for other factors such as women who may also be high in neuroticism (Breines, Crocker, & Garcia, 2008). Despite this, all of the possible outcomes discussed in this section can become even more concerning if the woman exhibiting them is carrying a child. Stress to the unborn child could lead to complications with the pregnancy and may compromise both the mother and child's physical and mental well-being.

The following section looks at social comparison theory. Engaging in social comparisons is one way in which individuals may cope with their objectified sense of self. As the theory will explain, comparisons can be positive or negative depending on the object of comparison, and can have either positive or negative implications for the internalized meaning of these comparisons and the perceived messages received from others.

### *Social Comparison Theory*

Social comparison is an expansion of sociocultural theory (Tsiantis & King, 2001) and is a process by which individuals are “both engaged in comparison as well as being the target of others’ comparisons” (Hildebrant, Shiovitz, Alfano, & Greif, 2008, p. 300). According to Buunk and Mussweiler (2001), the term social comparison was coined by Festinger in 1954 and had a more restricted focus for target comparisons as being used for self-evaluation. Over the decades, it has undergone a number of reformulations and has been used in several applications and approaches (Buunk & Mussweiler, 2001). In order to gain a better understanding of where an individual stands in relation to others, comparisons are made and information is gathered with regards to a particular attribute (Leahey, Crowther, & Mickelson, 2007). Theorists believe that women in particular do this as a result of their constant exposure to pervasive cultural ideals and expectations that dictate the standards of attractiveness. The degree to which a woman experiences body image disturbances is believed to positively correlate with the frequency of comparing oneself with others (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999; Tsiantis & King, 2001). Tsiantis and King (2001) conducted research on 41 closest-in-age sisters

through self-report questionnaires and found that internalization of these comparisons predicted body dissatisfaction, body size distortion, and preference for thinness.

Social comparisons present themselves in two ways. The first occurs when an individual believes that the other (or target) is at an advance standing in the area of focus. When they compare themselves to this dominantly perceived other, they engage in what is called an upward comparison. Because they view the other as more affluent than they perceive themselves to be, such comparisons often lead to feelings of decreased self-esteem, negative affect, and emotional distress (Leahey, Crowther, & Mickelson, 2007; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). When the asset is in relation to a part of the body and the individual chooses an inappropriate comparison target, these comparisons can have a negative effect on body satisfaction and increase the individual's vulnerability to sociocultural appearance pressures (Leahey, Crowther, & Mickelson, 2007; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Some women will engage in body deception to make themselves appear more equal to their comparison target. The woman may self-disclose about weight, shape, or size in a way that misrepresents her actual attributes. For example, self-disclosing that "this shirt is a size small" would be considered body deception if the person disclosing knowingly did so inaccurately (Hildebrant, Shiovitz, Alfano, & Greif, 2008).

On the other hand, if the individual believes he or she is more prosperous than the other, they engage in a downward comparison. As cited by Buunk and Mussweiler (2001), downward comparisons were not part of Festinger's initial theory on social comparison and was expanded to include this by Wills in 1981. Buunk and Mussweiler (2001) reference a study that was conducted in 1983 by Taylor, Wood, and Lichtman on



women with breast cancer and found that the majority of these women engaged in downward comparisons with other cancer victims, regardless of the severity of their condition. Downward comparisons are said to have a positive effect on self-esteem and produce a more positive affect, yet they are believed to have no effect on body satisfaction (Leahey, Crowther, & Mickelson, 2007).

Leahy, Crowther, and Mickleson (2007) report that there are two primary reasons why people engage in upward comparisons: for information seeking and the desire for affiliation. “These two motives reflect attempts at problem- and emotion-focused coping (Leahey, Crowther, & Mickelson, 2007, p. 140). Research also suggests that comparisons are frequently made when the compared target is a perceived threat. These comparisons may be more meaningful to the individual when the other person is someone that the individual previously knows and has some sort of connection to. Comparisons that are made with strangers may be deemed irrelevant in some cases (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

Overall, women who are more dissatisfied with their body engage in more comparisons- the majority of which are upward comparisons. This subsequently leads to an increase in diet- and exercise-related thoughts. However, motivation for positive self-change may occur as a result of these comparisons and may be healthy if the goals are realistically attainable (Leahey, Crowther, & Mickelson, 2007; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Thus, it is not always the case that high body-dissatisfied women who engage in upward comparisons are at risk for self-destructive cognitions or behaviors.

Women who are pregnant also engage in social comparisons. Duncombe, et al. (2008), report that women in early pregnancy may compare the changes in their body to that of an individual who has gained weight rather than to a woman who is pregnant. This can have a negative effect on self-esteem and body image satisfaction. Although there is little research in this area, it is possible that as pregnancy progresses and becomes more obvious to outside observers, the number of upward comparisons or false comparisons decreases (Johnson, Burrows, & Williamson, 2004). Research has indicated that women's reported ideal body size increases in parallel to their current size and shape (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008)

#### *Body Image Disturbance and Cognitive Dietary Restraint*

Body image disturbance (BID) is “a disorder of perception, cognition, and behavior. A subcomponent of this construct, body dissatisfaction, comprises the cognitive-affective component of BID” (Leahey, Crowther, & Mickelson, 2007, p. 132). Unhappiness with one's appearance or body type has been shown to lead to dysfunctional thoughts and feelings regarding weight and shape. When these maladaptive cognitions and negative body image exist, the individual has a tendency to engage in thinking errors so as to reinforce the dysfunctional beliefs. Furthermore, it puts the person at an increased risk for negative, and often self-inflicted emotional and behavioral consequences (Leahey, Crowther, & Mickelson, 2007).

Since appearance beliefs seem to be closely tied to body satisfaction, and body dissatisfaction has been shown to predict dietary restraint, researchers have begun looking at what they call cognitive dietary restraint (CDR). CDR has been defined as “a mental preoccupation with dieting and food” (Putterman & Linden, 2006, p. 64) This

focus may shift during pregnancy as some women may become more lenient in their restraints, allowing oneself to embrace the idea of “eating for two” (Johnson, Burrows, & Williamson, 2004). Others may become stricter regarding the types of foods they consume, making sure that they are receiving adequate nutrients to maintain a healthy pregnancy.

Researchers who assess for CDR evaluate an individual’s attitude towards food, separate of any actual dieting behaviors. Therefore, someone who has been given the label ‘restrained eater’ is not necessarily dieting or losing weight, rather the focus is that they have a keen awareness and preoccupation with food and dieting (Putterman & Linden, 2006). CDR has been associated with increased menstrual irregularity, lower bone density, impairments in cognitive functioning, and higher levels of self-reported stress (Sprangler, 2002).

The women in Putterman and Liden’s research (2006) who were labeled restrained eaters were shown to excrete higher levels of cortisol than non-restrainers. The women researched were undergraduates at the University of British Columbia and were asked to provide a saliva sample upon waking as well as 6-8 hours later. The researchers discovered that women with heightened body image concerns had higher levels of cortisol in the afternoon. The results suggested a relationship between CDR and elevation in cortisol secretion. Although the researchers do not focus specifically on women who are pregnant in this study, the bodily changes and changes in body satisfaction could put this population at risk for potentially becoming restrained eaters. This could result in physical health problems for both the mother-to-be and her child.

Cortisol is a hormone that is produced when an individual is under stress. Additionally, the researchers found that after the consumption of food, restrained eaters' task performance significantly deteriorated. Putterman and Liden (2006) believe that this is due to the individual's preoccupation with plans to restrict food intake in the future as well as possessing overwhelming feelings of guilt, anxiety, and loss of control. Thus, it appears that negative body image can be debilitating in a number of ways and prevent normative daily functioning. For a woman carrying a child, these overwhelming feelings could induce significant distress on the fetus and have negative implications for the well-being of the child.

Suggested treatment for the reduction or elimination of CDR includes extensive internal work on both self-acceptance and acceptance of the differences of others (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

#### *Social Work Implications*

Given the findings of previous researchers, it is my hypothesis that women who are pregnant, with an emphasized focus on those who are pregnant for the first time, are at an elevated risk for the development of or increase in negative body image satisfaction and self-esteem. Although supporting evidence is limited, it is also my belief that women will experience a greater difference in their satisfaction and self-esteem in the first and third trimesters. During the first trimester, it is still difficult for outside observers to determine whether the woman is pregnant or has gained weight for other reasons which may lead to an increase in self-objectification and lower self-esteem. In late pregnancy, the woman is often experiencing a great deviation in her current body size from her

former self and her body ideals. This could be particularly distressing for the woman, leading to a decrease in self-esteem and body image satisfaction.

On a broader scope, there has been a steady increase in the prevalence of obesity in the United States. Due to a strongly supported correlation between body mass index (BMI) and body satisfaction it is expected that the human services field may see an increase in psychological problems and impairments related to body image issues. Early interventions that suggest and promote healthier lifestyles may be a helpful way to combat these issues before they arise (Frederick, Peplau, & Lever, 2006).

More specifically, when working with primiparous women, it is important to be mindful of the increased potential for lower body image satisfaction. If indications of poor body image satisfaction arise, it would be clinically beneficial to monitor these thoughts and behaviors carefully as they tend to persist through middle and late pregnancy and may put the woman at an increased risk for a multitude of problems (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008). In accordance with social comparison theory, one proposed intervention would be to encourage the woman to engage in more realistic comparisons of herself to others (Leahey, Crowther, & Mickelson, 2007). Education about the variance and degree of changes that occur and experiences that other women have throughout pregnancy may also help to normalize her experience.

## CHAPTER III

### METHODOLOGY

The following chapter describes the methods used to select the sample, collect data, adhere to ethical standards and safeguards, and analyze the data. The objective of this research is to examine how primiparous women experience their pregnancy and what effect pregnancy has on their body image satisfaction and self-esteem. Does the conception of a first child have an impact on the woman's body satisfaction? If there is a difference in satisfaction, do women tend to have an increase in body satisfaction or do they become less satisfied during pregnancy? How are body satisfaction and self-esteem related? Lastly, is there a difference in body satisfaction and self-esteem among women in the first, second, or third trimester? It is the researcher's hypothesis that both a woman's body satisfaction during pregnancy and her self-esteem will resemble that of a bell curve in which a woman's body satisfaction decreases during the first trimester, increases during the second trimester and decreases again toward the end of their pregnancy.

During the first trimester, it is sometimes difficult to determine if a woman is gaining weight because of pregnancy or through other means. If the woman feels strongly about others' opinions of her, this may lead to a decrease in body satisfaction during this time.

Around four months, it begins to become apparent that a woman is pregnant. This may attract positive attention from others which may then lead to an increase in the

woman's body satisfaction. During the last months of pregnancy the body has undergone significant changes including noticeable and perhaps excessive weight gain. This may be a period of time in which the woman begins worrying about post-partum weight loss and a decrease in body satisfaction during this time is possible.

### *Research Design*

This is a relational study that uses a cross-sectional design. Relational studies employ fixed methods. This study uses one group, primiparous women, to examine the correlations between body satisfaction, stage of pregnancy and self-esteem. Although there is limited literature available on how expectant women experience their bodies and the changes it undergoes, this research will examine the phenomenon of body image and self-esteem within the context of pregnancy (Anastas, 1999).

One of the larger limitations to this approach is that it utilizes a snapshot view of the phenomenon within its particular observational context and is specifically seen from the researcher's point of view. However, questionnaires are often used to address attitudes, opinions, and beliefs, and enhance the efficiency of studying larger groups. Fixed method research involves "types of research designs that depend on invariant methods and procedures as a means of bias control" (Anastas, 2009, p. 558). A strength of using a fixed method approach for this study is that it will elicit data to further understand how the phenomenon of body image can affect first-time mothers-to-be and their self-esteem over the course of their pregnancy (Anastas, 1999, p. 124). Another advantage of a cross sectional design is that it examines the relationships between phenomena such as body image, body satisfaction and self-esteem. The next two advantages speak more to the sampling and data collection methods than to the research

design. Another advantage to this approach is that by using a snowball sample, the scope of this research shall not be limited by geography. Lastly, the use of Survey Monkey as a venue for administering these questionnaires also ensures the participants' anonymity and may thus be perceived as less threatening or invasive (Anastas, 1999). Overall, responses to the questions will be close-ended and constrained to the available answers given.

However, there will also be a few open-ended questions that will ask for more detailed information and will thus allow the participant to insert brief narrative data specific to their situation or experience.

### *Sample*

In this study, a non-probability snowball sampling technique will be used to recruit participants. Individuals interested in completing a questionnaire will be considered for participation if they are a woman at least 18 years of age who is currently pregnant for the first time and living in Massachusetts, Connecticut, or North Carolina. Women of childbearing age who are under the age of 18 are excluded from this study on the basis that the researcher would need to obtain parental consent in order for the minor to participate in the research. The stage of pregnancy will vary among the participants in this study which may pose a problem in the analysis of data however. Women who have conceived in the past but did not carry the fetus to term will be excluded from this study, as the purpose is to examine those carrying for the first time and such individuals' experience may be vastly different than those who have conceived in the past. Looking at this population, however, may be an area that warrants future research. Women completing this questionnaire must also be literate and fluent in the English language. Those who are visually impaired or who lack comprehensive skills in the written English



language may not be represented in this study unless they utilize assisting technologies or individuals to participate. Furthermore, women who wish to participate in this study must have access to the internet in order to do so.

The recruitment process began by making contact with three midwives who are currently practicing in the Western Massachusetts area. These midwives are personal contacts established through the researcher's colleague at the Child Guidance Clinic in Springfield, Massachusetts. Upon establishing contact with these women, the researcher provided these key contacts with a recruitment letter (see Appendix A) that includes pertinent information, such as statement of purpose, this researcher's role in the project, the nature of the study as well as detailed information on how to participate. Third, these key contacts were asked to inform their colleagues and clients about this research and distribute the provided recruitment letter as a basis for providing information to potential participants.

Contact was also made with the head of the parent education department at Baystate Hospital who agreed to place the above mentioned flyers at birthing classes so that interested participants may take one home with them. These flyers were mailed to this individual, with the agreement that these flyers were placed in a way that such information was accessible to individuals taking part in their parenting courses. The recruitment letter specifies the link to be used to access the survey online and also provides potential participants with the researcher's email address should they have any questions or concerns prior to participation.

Lastly, a personal contact at a medical family care center in Clayton, North Carolina was approached and sent flyers to post or distribute in the family care center. By accessing different services that are available to pregnant women it was expected that the sample would be both diverse and representative of the larger population. Demographic information is gathered at the

end of each survey, and no participants shall be excluded on the basis of age, race, ethnicity, sexual orientation, marital status, or economic status and thus the researcher shall not recruit for diversity.

Although the majority of women do not begin to “show” until about 3-4 months, it is expected that women in each trimester will be fairly represented in this study so that greater insight can be gained into the impact of the pregnancy in its entirety. However, participants shall not be excluded on the basis of current trimester. This will help minimize the potential for biases (Steinberg, 2004). Potential differences among women in each trimester may serve as helpful information in creating certain interventions or preventative measures based on how far along a woman is in her pregnancy.

Women who participated in this study ranged from age 19-40, with a mean age of 27 years. The majority (73.7%) self-identified as White or Caucasian (not of Hispanic decent). 86.8% reported working at least part-time, whereas the remainder were either a full-time homemaker, unemployed, or on temporary leave from their previous positions. The average household income varied greatly among the participants, with the majority (23.7%) falling within the \$25,000-\$49,999 range. Almost half (47.4%) of the women reported having a 4-year degree, and an additional 18.4% had continued on to obtain a higher degree.

The majority (78.9%) of respondents were married to/in a civil union with a partner of opposite sex. 10.5% were in a relationship with a partner of the opposite sex, 2.6% reported a current engagement to a partner of the opposite sex, 2.6% reported being married to/in a civil union with a same-sex partner, and 2.6% reported her marital status as “single/never married.” This data is presented in Table 1.

Table 1

Demographic Characteristics of Sample

<i>Age</i>	<i>Frequency</i>	<i>Valid Percent</i>
19-24	9	23.7
25-28	12	31.6
29-32	14	36.8
33+	3	7.9
<i>Race/Ethnicity</i>	<i>Frequency</i>	<i>Valid Percent</i>
Alaskan Native / Native American	1	2.6
Black / African American	2	5.3
Hispanic / Latino	3	7.9
Native Hawaiian / Other Pacific Islander	1	2.6
White / Caucasian	28	73.7
Bi- / Multiracial	3	7.9
<i>Relationship Status</i>	<i>Frequency</i>	<i>Valid Percent</i>
Single, never married	1	2.6
In a relationship (opposite sex)	4	10.5
In a relationship (same sex)	1	2.6
Married / civil union (opposite sex)	30	78.9

Married / civil union (same sex)	1	2.6
Other (engaged, opposite sex)	1	2.6

<i>Employment Status</i>	<i>Frequency</i>	<i>Valid Percent</i>
Full-time	26	59.1
Part-time	7	15.9
Full-time homemaker	1	2.3
Unemployed	2	4.5
On temporary leave	2	4.5

<i>Avg. Household Income</i>	<i>Frequency</i>	<i>Valid Percent</i>
\$0-\$24,999	3	7.9
\$25K-\$49,999	9	23.7
\$50K-\$74,999	7	18.4
\$75K-\$99,999	6	15.8
\$100K-\$149,999	5	13.2
\$150K-\$199,999	5	13.2
\$200K-\$249,999	1	2.6
\$250,000 +	2	5.3

<i>Highest Level of Educational Attainment</i>	<i>Frequency</i>	<i>Valid Percent</i>
HS diploma / GED	3	7.9
Some college	9	23.7
2yr college degree (assoc)	1	2.6

4yr college degree (BA/BS)	18	47.4
Masters degree	5	13.2
Doctoral degree	1	2.6
Professional degree (MD/JD)	1	2.6
<hr/>		
Total	38	100.0

### *Data Collection*

Data for this study were collected through a pen and paper questionnaire. The questionnaire was administered via Survey Monkey, an online data collection website. This website is encrypted and does not provide the researcher with any identifying information, such as the IP address of the individual completing the survey, and thus ensures the anonymity of the participants.

Once participants go the web address where the questionnaire will be given, a set of preliminary questions, such as “Is this a first pregnancy in your life?” are asked for screening purposes. If their answers did not meet the inclusion criteria, they were redirected to a screen that thanks them for their time and explains that they are not eligible for participation in this study. The researcher’s contact information is also provided on this screen in case these individuals have any questions or concerns regarding their exclusion.

Once it is determined that a woman is eligible for participation, she is brought to a screen showing the informed consent form (see Appendix B) which outlines the risks and benefits of participation in this study, as well as the purpose of the study and its inclusion

criteria. The potential risk of participating in this study may be that some of the questions asked in the interview may trigger uncomfortable thoughts and feelings. Participants must agree that they have read and understood the consent form, and that they have had the chance to ask any questions regarding their participation in the study. This page also informs them that they may withdraw their participation at any time during the questionnaire. The questionnaire takes approximately 15-25 minutes to complete depending on the length of the participant's responses. In case the participants feel the need for additional support after participating in this study, they will be given a list of mental health resources specific to Massachusetts, Connecticut, and North Carolina as well as resources that are applicable nationwide. Participants are also given information on how to further contact the researcher via email with any questions or concerns they may have.

#### *Data Collection Instrument*

Open-ended questions, such as “what are the best qualities of being pregnant?” “what are the worst qualities of being pregnant?” and “what are your post-pregnancy hopes and expectations?” are asked to gather more insight into the particular experiences of how the women feel about becoming a mother. Using open-ended responses in a written data collection tool can be useful for allowing respondents to provide essential and perhaps unconscious information about themselves or the topic of research (Anastas, 1999). However, using this format may fatigue some participants and may result in incomplete or inadequate responses (Anastas, 1999).

The questionnaire also utilizes a number of close-ended questions, some of which use a Likert scale. Among these items are standardized instruments, including the Body Change Inventory (Ricciardelli & McCabe, 2002), the Objectified Body Consciousness Scale (McKinley, 1995), and the Rosenberg Self-Esteem Scale (1965).

The Rosenberg Self-Esteem scale is ten-item self-report instrument used to assess global self-esteem. It is the most widely used measure and has received the most psychometric analysis and empirical validation of any other self-esteem scale. It has showed strong convergent validity for both men and women, various ethnic groups, and with both college students and community members (Robins, Hendin, & Trzesniewski, 2001). Participants rate each statement on a four-point scale ranging from “strongly agree” to “strongly disagree.” Patten (1981) used this scale to study 37 single, pregnant women between the ages of 13-24 and reports that Selber and Tippet found a test-retest correlation of .85 for the Rosenberg Self-Esteem scale. Although the mean age for the primiparous participants in my study was 27, this scale is still a useful tool for measuring global self-esteem.

Kamysheva and her colleagues (2007) also used the Rosenberg Self-Esteem scale in a cross-sectional study of 215 women who were 15-25 weeks pregnant. Their study examined relationships between physical symptoms of pregnancy, women’s body attitudes, self-esteem, depression, and quality of sleep during pregnancy. They found that “the experience of more frequent and distressing physical symptoms was associated with poorer sleep quality, greater depressive symptoms, and lower self-esteem” (Kamysheva, Skouteris, Wertheim, Paxton, & Milgrom, 2008, p. 160). These results speak to the importance of continued and more extensive research with this population.

This research uses the Objectified Body Consciousness Scale adapted from McKinley (1995) which was originally developed using feminist theory regarding the social construction of the female body. This 23-item scale uses a 7-point Likert scale to assess for body surveillance, beliefs about the ability to control how one's body looks, and the internalization and shame that comes from not being able to uphold internalized standards of beauty. This scale was initially used to study 121 undergraduate women, but has since been used with other populations, including middle-aged women, mother-daughter pairs, and men. Internal consistencies of this scale were moderate to high, and the researcher used this tool in hopes that it would give a deeper insight into the satisfaction women have with their bodies during pregnancy as their bodies undergo a series of changes in a short period of time (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999).

The Body Change Inventory was initially developed as an instrument to assess body change strategies used by adolescents. Ricciardelli and McCabe (2002) conducted four studies that sampled over 1700 adolescents and found that the 60-item instrument demonstrated "content validity, construct validity, internal consistency, and concurrent and discriminant validity" (p. 45). Although it does not appear that this tool has yet been used with pregnant women, the researcher adapted this inventory and focused on 15 of the 60 items that related specifically to dietary habits and motivation for exercise. This allowed the researcher to assess for certain behaviors which may be correlated with issues of self-esteem or body satisfaction.

A limitation to this approach is that it relies on the respondents to provide accurate and honest reports. The information gathered is what the participants *say* they



feel or do and may differ from what they actually feel or do (Anastas, 1999).

Furthermore, the quantity of information that can be gathered using close-ended questions is limited. Participants are also permitted to quit the survey at any time or skip over questions that may be uncomfortable for them. This poses a problem when analyzing the data as it may create some inconsistencies and make it difficult to draw on correlations.

Lastly, demographic information such as age, marital status, and highest level of education attained is gathered from the participants, and no one was eliminated based on their responses to these questions so as to obtain as much variety in the sample as possible in order to expand its applicability to the larger population.

The design for this study has undergone approval by the Smith College School for Social Work Human Subjects Review Committee (see Appendix C).

### *Data Analysis*

Data collected through Survey Monkey will be evaluated using inferential statistics. The inferential statistics will be used to make generalizations from the sample to the population to see how women may experience changes in their overall body satisfaction and self-esteem throughout the course of their pregnancy (Anastas, 1999). In the final thesis you should indicate more specifically which tests were used to analyze each of the hypotheses posed. To test the hypotheses posed in this study t-tests, chi-square, and Pearson correlations will be conducted. Frequency distributions, measures of central tendency and variance will also be reported.

### *Ethics and Safeguards*

Through the use of Survey Monkey, the anonymity of the participants can be guaranteed as the site is encrypted and IP addresses are removed from the data collected. Should participants provide any information that may make their identity known, such as identifying information will be removed from the data to ensure confidentiality. Strict confidentiality will be maintained, as consistent with federal regulations and the mandates of the social work profession. The data may be used in other educational activities as well as in the preparation for this Master's thesis. However, coding the information and storing the data in a locked file for a minimum of three years will protect confidentiality. After three years, the information will be destroyed unless the researcher continues to need it, in which case it will be kept secured.

## CHAPTER IV

### FINDINGS

The major questions addressed in this research were: Does the conception of a first child have an impact on the woman's body satisfaction? Is there a difference in the level of body satisfaction throughout the course of pregnancy? Does the conception of a first child impact a woman's self-esteem? Is there a difference in the level of self-esteem throughout the course of pregnancy? What is the relationship between self esteem and body satisfaction?

#### *Sample Characteristics*

Some women (N=8) reported that they were not trying to conceive at the time that they became pregnant. Some became pregnant on the first try, most (N=11) conceived within 1 to 6 months while others had been trying for a while- including one woman who had been trying for six years. This data is illustrated in Table 2. Of the 38 female respondents 89.5% report becoming pregnant through vaginal intercourse. Slightly more than 7 percent (7.9%) used in-vitro fertilization techniques, and 2.6% reported using "other" fertilization techniques, which they specified as intrauterine insemination using frozen anonymous donor sperm. Most did not experience complications during their pregnancies and more than half were expected to deliver during the summer of 2009.

Table 2

Sample Characteristics

<i>Time trying to conceive</i>	<i>Frequency</i>	<i>Percent</i>
Not trying	8	
<1 month	5	
1-6 months	11	
6 months – 1 year	2	
1-2 years	3	
3+ years	3	
<i>Method of conception</i>	<i>Frequency</i>	<i>Percent</i>
Vaginal Intercourse	34	89.5
In-Vitro Fertilization	3	7.9
Other	1	2.6
<i>Complications</i>	<i>Frequency</i>	<i>Percent</i>
Yes	10	24.4
No	31	75.6
<i>Due Date</i>	<i>Frequency</i>	<i>Percent</i>
Spring 2009	5	11.4
Summer 2009	24	54.5
Fall 2009	13	29.6
Winter 2009-2010	2	4.5
Total	38	100.0

### *Survey Results*

Participants were initially asked a few open-ended questions regarding their experience as a first-time mother-to-be. These questions have been coded for themes. The researcher read each participant's response, grouped them according to similarities, assigned them a label, and then reread each participant's answers to determine the number of participants in each group. How a woman felt about becoming a mother had ten codes, including "excited", "nervous", and "can't wait to meet the child." Best qualities about being pregnant had fourteen codes whereas worst qualities had twenty-two. Others' views about the woman's body and eating habits had seven codes, including "healthy/normal", "heavy/overweight", and "constant judgment." The effects these views had on each woman had five codes and helpful things that others could say or do to make their pregnancy an easier one had twelve codes. Lastly, post-pregnancy hopes and expectations was assigned nine codes.

Participants were first asked how they felt about becoming a mother. The feelings identified by most people in the sample were "excited" (75.6%), "nervous/scared" (57.8%), "blessed/fortunate" (26.7%), concerns about not being good enough, doing something wrong or not knowing what to do (13.3%), and the anticipation of meeting their child (11.1%). One woman wrote:

"I am very excited about becoming a mother. This pregnancy was unplanned, so at first I was nervous. Now that I have made it this far I must say I am very excited to meet the little man or lady [who has] been dancing in my uterus."

Another woman reports:

“I’m excited and of course nervous for how our lives will change.

Everyone says that motherhood is the best and the hardest thing they’ve ever done so I’m looking forward to the challenge but know it won’t be easy.”

The percentage of cases that indicated each feeling is presented in Table 3.

Table 3

Becoming a mother

<i>Feeling</i>	<i>Frequency</i>	<i>Percentage</i>
Excited	34	75.6
Nervous	26	57.8
Fear of unknown / Not being “good enough”	6	13.3
Apprehensive / Overwhelmed	2	4.4
Blessed / Fortunate	12	26.7
Looking forward to the challenge	2	4.4
Ready	2	4.4
Hopeful	1	2.2
Can’t wait to meet the child	5	11.1
Lost	1	2.2

When asked about the best and worst qualities of pregnancy, there was a larger variation in the responses . Some of the more common themes about the best qualities of being pregnant included feeling the baby move inside of them (35.6%), the changes in

their body (22.2%), the love/bond they feel for their growing child (17.8%), the positive and caring attention they receive from others (13.3%), and the perceived strengthening of their relationship with their partner (8.9%). “Feeling the baby moving around inside me is unlike any other experience you could have. I suppose I also like the special attention I receive from friends/family.” Some of the outlier responses included amazing sex dreams and increased sexual desire (4.4%), eating without guilt (6.7%), and the opportunity to indulge in self-care (4.4%).

“The fact that everything slows down. All priorities shift. Suddenly the trivial things no longer matter and it is all about self-care and looking into the future.”

With regards to the worst qualities of pregnancy, sickness (24.4%) and pain/discomfort (31.1%) were two major themes that were identified by the sample. Weight gain or physical changes in the body, including the appearance of stretch marks, was seen by many (37.8%) as one of the worst qualities of pregnancy. Other responses included emotional/hormonal changes (11.1%), worrying about the health of the baby (6.7%), uninvited comments or advice from others (8.9%), and the fear of not loving the baby unconditionally (2.2%). One woman spoke to a number of concerns and negative qualities of pregnancy:

“The stereotypes and unprovoked comments that come out of some well-intentioned peoples’ mouths, i.e. “pregnant women are hypersensitive”, “you’re having a girl because she’s stolen your beauty”, questions about my body (breasts, weight gain, etc). Sometimes people look at you like you’re a freak of nature. Eczema. Fear of the unknown – what if

something's wrong with the baby but there's no way to know until she is born? What if something is wrong because of something I've done while pregnant?"

One woman spoke to losing, in part, her sense of self: "Fat person clothes, not being able to participate in triathlons, not being able to lead the super active lifestyle I previously had." These responses are illustrated in Table 4 and Table 5.

Table 4

Best Qualities of Pregnancy

<i>Best Qualities</i>	<i>Frequency</i>	<i>Percentage</i>
End result = baby	3	6.7
Positive attention from others	6	13.3
Life inside me	7	15.6
Increased sexual desire	2	4.4
Baby moving	16	35.6
Changes in body	10	22.2
Ability to be a positive influence on someone	3	6.7
Relaxing	3	6.7
Having a supportive partner/ strengthening the relationship	4	8.9
Self-care	2	4.4
Love/bond for child	8	17.8
Maternity clothes	1	2.2
Eating without guilt	3	6.7



Feel more like a woman	1	2.2
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Table 5

Worst Qualities of Pregnancy

<i>Worst Qualities</i>	<i>Frequency</i>	<i>Percentage</i>
Getting/being sick	11	24.4
Weight gain/physical changes	17	37.8
Pain/discomfort	14	31.1
Difficulty sleeping	4	8.9
Sex is harder	2	4.4
Fear of not loving baby unconditionally	1	2.2
Restrictions on lifting	1	2.2
Boredom	1	2.2
Tired/Fatigue	4	8.9
Gas	1	2.2
Emotional/Hormonal Changes	5	11.1
Bed rest	1	2.2
Going to the bathroom frequently	2	4.4
Eating too much	1	2.2
Worry about health of baby	3	6.7
Pregnancy is too long	1	2.2
Not knowing	2	4.4

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Uninvited comments/advice	4	8.9
Maternity Clothes	2	4.4
Anxiety	2	4.4
Complications	1	2.2

The women in the sample were then asked questions inquiring about how others, including friends, family, and medical professionals might view their body and/or eating habits, what effect this has on them, and their thoughts on helpful things that others can say or do to make their time of pregnancy an easier one. The majority of women (53.8%) felt that others would view their body and/or eating habits as “normal”, “healthy”, or “glowing.”

“Everyone has been saying that I look glowing and gorgeous; most people comment that I haven’t put much weight on despite my being pregnant (my OB confirms that I’m gaining a healthy amount of weight). Before becoming pregnant, I know people used to worry about my eating habits (skipping meals and exercising).”

Others felt that they would be perceived by outsiders as “heavy” or “overweight” (23.1%). A few individuals felt that they are constantly being judged (7.7%), would be perceived as having bad eating habits, or even dressing unprofessionally at work due to their weight gain (2.6%).

“They probably assume I am a pig because of my size, but I’m sure I eat the same or better than most thin women. Maybe now that I’m pregnant

people judge me for not being in optimal shape for a healthy pregnancy/baby.”

Another woman wrote “I don’t think anyone really knows my true eating habits because I don’t tend to behave that way in public.”

The majority of women (43.6%) stated that the views of others had no effect on them. “It doesn’t bother me too much. I’m softer than some women. That’s okay.” Some viewed others’ perceptions as having a negative effect on them (23.1%), “It makes me feel as like I have done something wrong”, whereas others saw feedback from others as being positive (15.3%) or even motivational (10.3%). “It gives me more confidence...that someday I can have my pre-baby body back if I can get back into regular exercising.”

Suggestions for helpful things that others can say or do included telling her that she is doing the right thing for herself and/or her baby (20.5%), not to worry about body changes (10.3%), that they look good (7.7%), and giving her an overall sense of support (33.3%). “That it’s all worth it...” one woman states, “the weight gain, the exhaustion, the anxiety... that it will all pay off when your baby enters the world!” One woman spoke specifically to her dissatisfaction with being pregnant and the fears she had around it potentially affecting her marriage in a negative way, the sickness and discomfort she has experienced thus far, and that her pregnancy is not yet tangible to her – “I am not currently enjoying being pregnant too much at the moment. But I think it will get better when I can feel the baby move.” She feels that the most important thing others can do is to give her reliable information, not old wives tales or what she considers to be useless advice. Another woman writes:

“Just being approachable and easy to talk to. When doctors or nurses act as if they are ‘above’ or ‘better’ than you, you feel apprehensive when asking the littlest of questions.”

This data is illustrated in Table 6.

Table 6

Others’ views, effects and suggestions

<i>Others’ views of self</i>	<i>Frequency</i>	<i>Percentage</i>
Excused due to pregnancy	2	5.1
Heavy/Overweight	9	23.1
Healthy/Normal	21	53.8
Constant Judgment	3	7.7
Bad eating habits	2	5.1
Room for improvement	1	2.6
Dressing “unprofessionally”	1	2.6
<i>Effects on self</i>	<i>Frequency</i>	<i>Percentage</i>
None	17	43.6
Negative	9	23.1
Positive	6	15.3
Motivational	4	10.3
“Some”	5	12.8
Missing	1	2.6
<i>Helpful things to say/do</i>	<i>Frequency</i>	<i>Percentage</i>
“I’m doing the right thing for myself/my baby”	8	20.5

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“Don’t be ashamed”	1	2.6
“I look good”	3	7.7
“I’m going to be a good mom”	1	2.6
“Enjoy it”	2	5.1
“Don’t worry about body changes”	4	10.3
Be supportive	13	33.3
Give useful information	4	10.3
Give permission not to work	1	2.6
More massages	1	2.6
Cook for me	1	2.6
Not Sure	9	23.1
Missing	2	5.1

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Lastly, women were asked “what are your post-pregnancy hopes and expectations?” The desires identified by the most people in the sample were “be a good mom” (38.5%), to have a healthy baby (30.8%), to get back in shape (30.8%), and to maintain a strong partner relationship (17.9%).

“I hope that the baby is healthy and happy. I hope her arrival strengthens my relationship with my husband. I hope this will be a wonderful new chapter in our lives, and that we’ll wonder why we didn’t have kids sooner.”

Another woman writes

“I hope to be a wonderful mother and continue to have a great relationship with my fiancé despite all of the new responsibilities and worries. I also hope that I can get back to my pre-baby body.”

This data is presented in Table 7.

Table 7

Post-pregnancy hopes and expectations

<i>Hopes/Desires</i>	<i>Frequency</i>	<i>Percentage</i>
Back in shape/lose weight	12	30.8
Have a healthy baby	12	30.8
To be a good mom	15	38.5
Heal quickly	2	5.1
Stay healthy and happy	2	5.1
Strong partner relationship	7	17.9
Go back to work	1	2.6
Breastfeed	2	5.1
Have second pregnancy	1	2.6

In addition to the open-ended questions, each woman was asked to complete measures of self-esteem, body satisfaction, and body consciousness, and body change. The Rosenberg Self Esteem Scale consists of 10 items that uses a 4-point Likert scale ranging from “strongly agree” to “strongly disagree”. Some items are reverse scored. Possible scores have a minimum of zero and a maximum of 30, with scores of 15-25 considered to be in the normal range. Scores are determined by the sum of responses,

and a higher score indicates a higher level of self-esteem. Individuals who did not complete the scale in its entirety were eliminated from the analysis as their overall score could not be determined. The scale has good internal reliability (Cronbach's Alpha=.834, N=38 N of items=10). Participants' scores ranged from 17-30. Approximately two-thirds (63.2%) of participants revealed normal levels of self esteem, while the remainder (36.8%) fell in the high self-esteem range. None of the participants indicated low levels of self-esteem. This data is presented in Table 8.

A one-way ANOVA (Analysis of Variance) was run to determine if there was a difference in self-esteem by trimester and no statistically significant difference was found ( $F(2,35)=.780, p=.466$ ). Due to the limited sample size of women in their first trimester, women were regrouped into "early" (0-20 weeks) and "late" (21-40 weeks) pregnancy. A paired t-test was then run to evaluate differences in self-esteem by early or late pregnancy and still no statistically significant difference was found ( $t(36)=.796, p=.447$ ). These results indicate that self-esteem is not affected by stage of pregnancy, thus rejecting the researcher's hypothesis.

Table 8  
Rosenberg Self-Esteem Scale Scores

<i>Score</i>	<i>Frequency</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
17	2	5.3	5.3
18	2	5.3	10.5
19	1	2.6	13.2
20	3	7.9	21.1
21	2	5.3	26.3
22	5	13.2	39.5
23	2	5.3	44.7
24	3	7.9	52.6
25	4	10.5	63.2
26	3	7.9	71.1
27	3	7.9	78.9
28	2	5.3	84.2
29	2	5.3	89.5
30	4	10.5	100.0
Total	38	100.0	100.0

The objectified body consciousness scale was adapted from McKinley (1995) and uses a Likert scale (ranging from 1=Strongly Agree to 7=Strongly Disagree) to indicate their degree of agreement with 23 statements under three subscales. Eight items measure control beliefs (alpha=.851, N=37, N of items=8), eight measure body surveillance (alpha=.701, N=37, N of items =8), and seven measure body shame (alpha=.836, N=37, N of items=7). The mean score is calculated and a higher score in



each indicates stronger control beliefs, higher surveillance, and higher body shame. Table 9 exemplifies the results of this measure.

Table 9

Objectified Body Consciousness Scale

	$\bar{X}$	<i>Std Dev.</i>	<i>Min</i>	<i>Max</i>
Body shame	4.54	1.01	1.86	6.71
Control beliefs	3.31	1.14	1.00	5.13
Body surveillance	4.83	0.77	3.13	6.38

A one-way ANOVA was run to determine if there was a difference on each of the body consciousness subscales by trimester, and no statistically significant difference was found for control beliefs ( $F(2,34)=.851, p=.436$ ), body shame ( $F(2,34)=.578, p=.567$ ), nor body surveillance ( $F(2,34)=.463, p=.633$ ). A t-test was also run to test for difference between early and late pregnancy and also found no statistical significance for control beliefs ( $t(35)=.148, p=.563$ ), body shame ( $t(35)=.796, p=.092$ ), nor body surveillance ( $t(35)=.961, p=.013$ ).

The Body Change Inventory was adapted from Ricciardelli and McCabe (2002) and consists of 15 items measuring the degree to which an individual attempts to change one's body through diet and exercise. The mean score is taken, and a higher score indicates a greater effort is being made to change the body. This measurement tool was used to assess body change efforts made before (Cronbach's Alpha=.925, N=38, N of items=15) and during (Cronbach's Alpha=.794, N=37, N of items=15) pregnancy. A paired t-test was run to determine if there was a difference in their score on the body

change scale before and during pregnancy and a statistically significant difference was found ( $t(35)=7.360$ ,  $p=.000$ , two-tailed). Their mean score before pregnancy was 2.644, compared to a mean of 1.8296 during their pregnancy. This suggests a decrease in efforts to change their body during pregnancy compared to before they became pregnant. This data is shown in Table 10.

Table 10

T-test Body Change

	$\bar{X}$	$SD$	$df$	$t$	$P$
Before pregnancy	2.644	.831	35	7.360	.000
During pregnancy	1.829	.491			

Women were asked about the type of physical activity they engaged in both prior to and during pregnancy. The primary physical activity women in both categories (89.2%) participated in was going for walks. Going for walks, yoga, and meditation were the only activities that maintained the same number of participants both before and during pregnancy. All others saw declines in their numbers. Running and jogging, for example, came in as the second highest physical activity for women prior to pregnancy (43.2%), but declined drastically during pregnancy (8.1%). Table 11 illustrates this data in more detail.

Table 11

Physical activity before and during pregnancy

<i>Before pregnancy</i>	<i>frequency</i>	<i>Percentage</i>
Run/jog	16	43.2
Go for walks	33	89.2
Yoga	8	21.6
Kickboxing	4	10.8
Weight lift	8	21.6
Pilates	4	10.8
Swimming	5	13.5
Meditation	5	13.5
Other	13	35.1
<i>During pregnancy</i>	<i>frequency</i>	<i>Percentage</i>
Run/jog	3	8.1
Go for walks	33	89.2
Yoga	8	21.6
Kickboxing	0	0.0
Weight lift	2	5.4
Pilates	1	2.7
Swimming	2	5.4
Meditation	5	13.5
Other	0	0

“Other” activities for women pre-pregnancy included other forms of cardio (10.8%), biking (10.8%), hiking (5.4%), dancing (5.4%), horseback riding (2.7%), and

sports (10.8%). A McNemer test was run to determine if there was a difference in each activity before and during pregnancy. There was a significant difference in weightlifting ( $p=.016$ ) and run/jog ( $p=.000$ ), which indicates a significant decline in frequency during pregnancy.

The Body Satisfaction scale was created to evaluate satisfaction with twelve different body parts as well as overall body satisfaction. This measure was used to look at body satisfaction before (Cronbach's Alpha=.869,  $N=38$ ,  $N$  of items=13) and during (Cronbach's Alpha=.868,  $n=39$ ,  $n$  of items=13) pregnancy. A mean score was calculated, and a higher score on this scale indicated lower body satisfaction. This data is shown in Table 12.

Table 12

<u>Body Satisfaction</u>	$\bar{X}$	<i>Std Dev.</i>	<i>Min</i>	<i>Max</i>
Before pregnancy	2.44	0.75	1.00	4.38
During pregnancy	2.61	0.68	1.00	4.08

A one-way ANOVA was run to determine if there was a difference in body satisfaction by trimester, and no statistically significant difference was found ( $F(2,36)=.314$ ,  $p=.737$ ). Participants were again regrouped into "early" and "late" pregnancy in order to run a t-test to determine if there was any difference in body satisfaction by early or late pregnancy. Again, no statistically significance was found ( $t(37)= -1.655$ ,  $p=.106$ , two-tailed). Contradictory to the researcher's hypothesis, these results indicate that body satisfaction is not correlated with the woman's stage of pregnancy.

Parametric correlational tests of association were run to determine if there was a relationship between self-esteem and body satisfaction. A Pearson correlation was run and a statistically significant association was found between self-esteem and body satisfaction during pregnancy ( $r = -.368$ ,  $p = .023$ , two-tailed). There was also a statistically significant correlation between self-esteem and body satisfaction before pregnancy ( $r = -.331$ ,  $p = .042$ , two-tailed). Both of these correlations were negative. Since an increase in the body satisfaction scale actually indicates less body satisfaction a negative correlation suggests that as self-esteem increases body satisfaction increases as well.

Lastly, a Pearson correlation was also run between self-esteem and the three subscales of the Objectified Body Consciousness Scale. There was no statistically significant correlation between self-esteem and body shame ( $r = -.315$ ,  $p = .061$ , two-tailed) nor between self-esteem and body surveillance ( $r = .076$ ,  $p = .658$ , two-tailed). There was, however, a statistically significant negative correlation between self-esteem and control beliefs ( $r = -.462$ ,  $p = .005$ , two-tailed). This suggests that as self-esteem increases control beliefs decrease.

In summary, this research discovered that there were statistically significant differences in efforts to change one's body before and during pregnancy. The research also suggested that there is a statistically significant correlation between self-esteem and body satisfaction as well as self-esteem and control beliefs. The following chapter will further discuss these findings as it relates to previously conducted research and available literature.

## CHAPTER V

### DISCUSSION

This chapter presents this study's findings compared with the current literature on body image satisfaction and self-esteem during pregnancy. The strengths and limitations inherent in the study, and implications for social work practice and future research are also discussed.

#### *Current Findings and Previous Literature*

This study conducted several tests of difference on measures of self-esteem, body consciousness, body change, physical activity, and body satisfaction to assess if participants' scores significantly differed between groups. Participants were grouped in two ways, first by current trimester and second by stage of pregnancy: early (0-20 weeks) or late (21-40 weeks). ANOVA's were run to test for difference by trimester; t-tests were run to test for difference by stage of pregnancy.

Measures of self-esteem and body satisfaction showed no statistically significant difference among women in different phases of their pregnancy by stage or trimester. A Pearson correlation was run to test for associations between self-esteem and body satisfaction and found a statistically significant correlation between the two both before ( $r = -.331$ ,  $p = .042$ , two-tailed) and during ( $r = -.368$ ,  $p = .023$ , two-tailed) pregnancy, indicating that as self-esteem increases, body satisfaction increases as well. This supports the finding that if there is no statistically significant difference in phase of pregnancy for

self-esteem that there would be a lack of significance for body satisfaction as well. Previous research has also supported the positive correlation between self-esteem and body satisfaction (Biro, Striegel-Moore, Franko, Padgett, & Bean, 2006).

The results of the difference tests for self-esteem and body satisfaction came as a surprise to me, as my hypothesis stated that I believed there would be a difference in both depending on trimester, and that second trimester participants would experience the highest level of body satisfaction and self-esteem compared to the other groups. This, as was proved by the study, was not the case. However, the work of some previous researchers suggests that women adapt well to the changes in their body and that their ideal body size increases in parallel to their current body size. Women who have positive self-esteem and body satisfaction are likely to maintain this positivity throughout pregnancy, whereas women with lower self-esteem and body satisfaction may experience more challenges with their changing bodies (Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008). Given that none of the women in this study indicated lower levels of self-esteem or body satisfaction, it was not possible to assess for differences between these groups.

The Body Change Inventory was used to look at the degree to which a woman attempts to change her body and whether or not this changes during pregnancy. A t-test was run to look at behaviors before and during pregnancy and found that women showed a statistically significant decrease in their efforts to change their body during pregnancy as compared to before pregnancy. This evidence is further supported by an evaluation of routine physical activity before and during pregnancy. Women greatly reduced the amount of physical activity they participated in with the exception of low-intensity

activities such as walking, yoga, and meditating. This supports the idea that pregnancy serves as a temporary hiatus from controlled weight management strategies and notions of body image ideals (Chang, Chao, & Kenney, 2006; Duncombe, Wertheim, Skouteris, Paxton, & Kelly, 2008; Fairburn & Welch, 1990; Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999). Furthermore, it appears that the health of the baby takes precedent over the possible strive to be their ideal size or shape (Johnson, Burrows, & Williamson, 2004).

A Pearson's correlation test was also conducted between self-esteem and each of the subscales of the Objectified Body Consciousness Scale. Although no statistically significant correlations were found between self-esteem and body surveillance nor self-esteem and body shame, there was statistical significance between self-esteem and control beliefs. The results of this test indicated that as one's self-esteem increases, one's control beliefs decrease. Examples of control beliefs include: "When I can't control my weight, there must be something wrong with me" and "When I am not exercising enough, I question whether I am a good enough person."

Body changes that occur during pregnancy are a part of the body's natural process and are, for the most part, outside the control of the individual. Thus, it would be psychologically beneficial for the woman to reduce or let go of some beliefs she may have had prior to pregnancy about her ability (or inability) to control her body and allow herself to embrace the body changes that come with pregnancy. Having an explanation for their body changes that they may see to be valid may also help explain a correlational increase in their self-esteem.



### *Strengths and Limitations of the Study*

When I chose to use an online survey for my method of data collection, I knew that many strengths and weaknesses were associated with it. One strength of using a questionnaire is that it is the least expensive way of asking questions to larger groups of people (Anastas, 1999). Using the internet as a venue for my survey allowed me to reach individuals who may not have had the access or willingness to participate in the study otherwise. A major limitation is that participants are not required to answer all questions or complete the survey in its entirety which resulted in a number of participants being excluded from analysis. Also, Survey Monkey does not allow you to return to the survey if exited accidentally or due to poor internet connections, which may have discouraged potential participants from taking the survey from the beginning again if they were not able to finish the first time through.

Two major limitations also presented themselves with the sample. The first was that there were very few participants (N=6) who were currently in their first trimester of pregnancy. Although tests of difference included both ANOVA's which looked for difference among trimester and t-tests which looked for difference between early (0-20 weeks) and late (21-40 weeks) pregnancy, this study could have benefited from purposive sampling for an improved distribution among groups. The second major sample limitation is that none of the participants obtained Rosenberg Self-Esteem scores that indicated low self-esteem. It is possible that the design of this survey did not best benefit those with low self-esteem. It is my hypothesis that individuals who indicate low levels of self-esteem may not experience their pregnancy as positively as those who fall into the

range of “normal” or “high” and may be less appealed to take an online survey that asks questions regarding this experience.

*Social Work Implications and Suggestions for Future Study*

Through my own exploration of the current literature available, it is my impression that the social work field could benefit greatly from more research in this area. The women in this study were grouped by trimester and provided a snapshot of their current beliefs, attitudes and behaviors. Ultimately, I would have liked to have given the questionnaire to each woman for completion during each trimester, and assess for differences within the individual throughout the course of pregnancy. To do this, however, would have been beyond the scope of this project. I also would have liked to have seen more diversity in the sample, both demographically as well as by method of conception to increase its applicability to the larger population. A suggestion for future research design would be to conduct a longitudinal study with more purposive sampling, with the same instruments used in this study.

In this research, it was found that the most significant findings were in comparing pre-pregnancy with a current state of pregnancy. Only some of the instruments were used twice to assess attitudes and behaviors both prior to conception and currently. If I were to conduct another study, I would like to look at each of the measures used in comparison to scores prior to pregnancy. Most realistically, this study would include retrospective reflection on past attitudes and behaviors as was used in the current study. This method has its own limitations, given one’s ability to accurately recall how they felt or acted in the past. However, recruitment for individuals who are trying to conceive may bias results as it negates individuals who perhaps were not trying to conceive and may have

different experiences with how they react to their pregnancy. It also relies on individuals to report to the researcher in a timely manner once they become pregnant.

Although the findings of this study showed that there were no significant differences among self-esteem and body satisfaction depending on trimester, differences were found in attitudes and behaviors during pregnancy as compared to pre-pregnancy. It is important to recognize pregnancy, particularly a first pregnancy, as a time of great transition and change. As with any life stage transition it is critical for mental health professionals to assess the individual's ability to adapt to these changes and cope with physical, emotional, and environmental stressors. Clinicians and other mental health professionals may benefit from using standardized measurements of self-esteem and body satisfaction, such as those used in this study, as part of their regular assessment in practice. Referring back to these measurements at different stages in the woman's pregnancy may indicate how well she is adapting to the transition and may lead the clinician or mental health worker to make better informed clinical decisions depending on the results of these measures.

Even though the sample in this study was relatively homogenous, it is important for clinicians to take into consideration other potential risk factors for low-self esteem, including membership to oppressed populations such as those of lower-class economic status, women of color, or those who are survivors of trauma. All of these could have an effect on the treatment modalities implemented by the clinician. For example, a woman who is a survivor of childhood sexual assault who is presenting with symptoms of low self-esteem and body image dissatisfaction may actually benefit from treatment modalities that focus on the history of trauma, such as trauma-focused cognitive

behavioral therapy (TF-CBT) prior to or in conjunction with addressing issues of poor self-esteem and negative body image. Women who are experiencing financial hardship may have concerns about being able to adequately provide for their unborn child and thus may see a decline in their self-esteem. Practical implications for the clinician may include connecting the client with community resources such as WIC (Women, Infants, and Children), a state-funded program for pregnant women and women with children up to six years of age that provides supplementary food staples such as milk, eggs, peanut butter, and infant formula.

It is my hope that, despite the limitations of this study, this research will shed light on the experience of first-time mothers-to-be and help prepare mental health professionals to work with pregnant women who may present with problems around body image satisfaction, self-esteem, or body change.

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Appendix A

Recruitment Flyer

## Expecting Your First Child?



*Would you like an opportunity to share your experience?*

My name is Keri Godfrey, and I am currently attending Smith College School for Social Work and need your help!

I am conducting research on how first-time mothers-to-be experience their pregnancy. Your participation will only require 15-25 minutes of your time, filling out a brief online survey.

For more information, you can e-mail me at: [first.time.mothers.to.be@gmail.com](mailto:first.time.mothers.to.be@gmail.com)

To access the survey, visit:

[https://www.surveymonkey.com/s.aspx?sm=3hrdxX84EXwG8vdYcTjxpg\\_3d\\_3d](https://www.surveymonkey.com/s.aspx?sm=3hrdxX84EXwG8vdYcTjxpg_3d_3d)



## Appendix B

### Informed Consent Form

Dear Potential Research Participant:

My name is Keri Godfrey. I am conducting an online survey of first time mothers-to-be and how they experience their pregnancy. This research study for my thesis is being conducted as part of the requirements for the Master of Social Work degree at Smith College School for Social Work and future presentations and publications. The data may be used in other educational activities as well as in the preparation for my Master's thesis.

Your participation is requested because you are an English speaking woman 18 years of age or older who is expecting a child for the first time. If you choose to participate, you will be directed to a brief survey that should take approximately 15-25 minutes to complete based on the length of your responses. Following this, you will be asked to provide demographic information about yourself.

The potential risk of participating in this study may be that some interview questions could trigger uncomfortable thoughts and feelings. In case you feel the need for additional support after participating in this study, you will be given a list of resources for mental health services in your area.

You will receive no financial benefit for your participation in this study. However, you may benefit from knowing that you have contributed to the knowledge of how first-time mothers-to-be experience their pregnancy. It is my hope that this study will assist social workers in gaining a better understanding of the sensitive issues women face during this time of transition and further develop effective ways of providing comprehensive services to this population when necessary. You may also benefit from receiving the opportunity to share your experience and gain a new perspective.

Strict confidentiality will be maintained, as consistent with federal regulations and the mandates of the social work profession. Survey Monkey is an encrypted site that does not provide the researcher with an IP address for any of the research participants. If you should include any identifying information on your questionnaire, it will be deleted. Your confidentiality will be protected by coding the information and storing the data in a locked file for a minimum of three years. After three years, the information will be destroyed unless I continue to need it, in which case it will be kept secured.

Your participation is completely voluntary. You are free to refuse to answer specific questions and to withdraw from the study at any time before completion of the survey. Once the survey is submitted, your participation can not be withdrawn. If you decide to withdraw, all materials pertaining to you will be immediately destroyed. If you have additional questions about the study or wish to withdraw, please feel free to contact me at the contact information below. If you have any concerns about your rights or about any aspect of the study, I encourage you to e-mail me or call the Chair of the Smith College School for Social Work Human Subjects Review Committee at (413) 585-7974.

**CHECKING 'Agree' BELOW INDICATES THAT YOU HAVE READ AND UNDERSTAND THE INFORMATION ABOVE AND THAT YOU HAVE HAD AN OPPORTUNITY TO ASK QUESTIONS ABOUT THE STUDY, YOUR PARTICIPATION, AND YOUR RIGHTS AND THAT YOU AGREE TO PARTICIPATE IN THE STUDY.**

Keri Godfrey  
first.time.mothers.to.be@gmail.com

It is recommended that you print and keep a copy of this consent form for your records.

Thank you for your time and participation in my study.

## Appendix C

### Human Subjects Review Approval Letter

March 26, 2009

Keri Godfrey

Dear Keri,

Your final revisions have been reviewed and all is now in order. We are happy to give final approval to your study.

*Please note the following requirements:*

**Consent Forms:** All subjects should be given a copy of the consent form.

**Maintaining Data:** You must retain all data and other documents for at least three (3) years past completion of the research activity.

*In addition, these requirements may also be applicable:*

**Amendments:** If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

**Renewal:** You are required to apply for renewal of approval every year for as long as the study is active.

**Completion:** You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Good luck with your project.

Sincerely,

Ann Hartman, D.S.W.  
Chair, Human Subjects Review Committee

CC: Joyce Everett, Research Advisor

## Appendix D

### Instrument

1. How many weeks pregnant are you currently?
2. Expected due date:
3. Briefly describe how you feel about becoming a mother.
4. What are the best qualities about being pregnant?
5. What are the worst qualities about being pregnant?
6. Using the scale below, indicate how satisfied you are with being pregnant
  - Very satisfied
  - Slightly satisfied
  - Neither satisfied nor dissatisfied
  - Slightly dissatisfied
  - Very dissatisfied
7. Using the scale below, indicate, if applicable, how satisfied your partner is with your pregnancy
  - Very satisfied
  - Slightly satisfied
  - Neither satisfied nor dissatisfied
  - Slightly dissatisfied
  - Very dissatisfied
  - Not applicable

8. Using the scale below (1=never to 5=always) indicate how often you engaged in the following BEFORE pregnancy:

- Diet to lose weight
- Eat foods that are slimming
- Feel like eating less
- Refuse or skip meals
- Fast for a day or longer
- Watch what you eat
- Think about dieting
- Feel like refusing to eat
- Exercise or play sports to lose weight
- Worry about eating
- Worry about exercise
- Feel guilty if you do not exercise
- Take food supplements
- Exercise or play sports to increase muscles
- Exercise for over an hour to lose weight

9. Using the scale below (1=never to 5=always), how often do you CURRENTLY engage in the following:

- Diet to lose weight
- Eat foods that are slimming
- Feel like eating less
- Refuse or skip meals
- Fast for a day or longer

- Watch what you eat
- Think about dieting
- Feel like refusing to eat
- Exercise or play sports to lose weight
- Worry about eating
- Worry about exercise
- Feel guilty if you do not exercise
- Take food supplements
- Exercise or play sports to increase muscles
- Exercise for over an hour to lose weight

10. Instructions: Read each item and indicate to what degree it reflects your own thoughts and feelings using the 4-point scaled below (1=Strongly Agree to 4=Strongly Disagree). Base your responses on your opinion at the present time. To ensure that your answers can be used, please respond to the statements as written.

- I feel that I am a person of worth, at least on an equal plane with others.
- I feel that I have a number of good qualities.
- All in all, I am inclined to feel that I am a failure.
- I am able to do things as well as most other people
- I feel that I do not have much to be proud of.
- I take a positive attitude toward myself.
- On the whole, I am satisfied with myself.
- I wish I could have more respect for myself
- I certainly feel useless at times.
- At times I think I am no good at all.

11. Rate your satisfaction with each of the following body parts BEFORE pregnancy using the following scale (1=Very Satisfied to 5=Very Dissatisfied).

- Arms
- Legs
- Butt
- Thighs
- Stomach
- Hips
- Neck
- Breasts
- Face
- Feet
- Hair
- Hands

12. Rate your OVERALL body satisfaction BEFORE pregnancy:

- Very satisfied
- Slightly satisfied
- Neither satisfied nor dissatisfied
- Slightly dissatisfied
- Very dissatisfied

13. Rate your CURRENT satisfaction with the following body parts using the following scale (1=Very Satisfied to 5=Very Dissatisfied).

- Arms
- Legs

- Butt
- Thighs
- Stomach
- Hips
- Neck
- Breasts
- Face
- Feet
- Hair
- Hands

14. Rate your CURRENT OVERALL body satisfaction.

- Very satisfied
- Slightly satisfied
- Neither satisfied nor dissatisfied
- Slightly dissatisfied
- Very dissatisfied

15. Before pregnancy, did you regularly (at least 1x per week) do any of the following? (check all that apply)

- Run/jog
- Go for walks
- Yoga
- Kickboxing
- Weight lift



- Pilates
- Swimming
- Meditation
- Other (please specify)

16. CURRENTLY, which of the following do you do regularly? (at least 1x per week):

- Run/jog
- Go for walks
- Yoga
- Kickboxing
- Weight lift
- Pilates
- Swimming
- Meditation
- Other (please specify)

17. Using the 1-7 scale below (1= Strongly Disagree to 7= Strongly Agree) indicate your agreement with each item by selecting the appropriate number.

- I rarely think about how I look.
- When I can't control my weight, I feel like something must be wrong with me.
- I think it is more important that my clothes are comfortable than whether they look good on me.
- I think a person is pretty much stuck with the looks they are born with.
- I feel ashamed of myself when I haven't made the best effort to look my best.

- A large part of being in shape is having that kind of body in the first place.
- I think more about how my body feels than how it looks.
- I feel like I must be a bad person when I don't look as good as I could.
- I think a person can look pretty much how they want to if they are willing to work at it.
- I would be ashamed for people to know what I really weigh.
- I really don't think I have much control over how my body looks.
- Even when I can't control my weight, I think I'm an okay person.
- During the day, I think about how I look many times.
- I never worry that something is wrong with me when I am not exercising as much as I should.
- I often worry about whether the clothes I am wearing make me look good.
- When I'm not exercising enough, I question whether I am a good enough person.
- I rarely worry about how I look to other people.
- I think a person's weight is mostly determined by the genes they are born with.
- I am more concerned with what my body can do than how it looks.
- It doesn't matter how hard I try to change my weight, it's probably going to be about the same.
- When I am not the size I think I should be, I feel ashamed.
- I can weigh what I'm supposed to when I try hard enough
- The shape you are in depends mostly on your genes.

18. How do you think others (friends, family, medical professionals) view your body and/or eating habits?

19. What impact, if any, does this have on you?
20. What is the most helpful thing friends, family, and/or medical professionals could say or do to make your pregnancy an easier one?
21. What are your post-pregnancy hopes and expectations?
22. Age:
23. Self-identified race/ethnicity:
- Alaskan Native or Native American
  - Asian
  - Black or African American (not of Hispanic origin)
  - Hispanic or Latino
  - Native Hawaiian or other Pacific Islander
  - White or Caucasian (not of Hispanic origin)
  - Bi-racial/Multi-racial
  - Other (please specify)
24. Relationship status:
- Single, never married
  - Separated
  - Divorced
  - Widowed
  - In a relationship (opposite sex)
  - In a relationship (same sex)
  - Married/civil union (opposite sex)
  - Married/civil union (same sex)

- Other (please specify)

25. Current employment status:

- Full-time
- Part-time
- Full-time homemaker
- Unemployed
- On temporary leave
- Disabled/ Unable to work

26. Average household income:

- \$0 - \$24,999
- \$25,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 - \$149,999
- \$150,000 - \$199,999
- \$200,000 - \$249,999
- \$250,000 +

27. Highest level of education completed:

- Less than H.S.
- High school diploma or G.E.D.
- Some college
- 2-year college degree (Associate's)
- 4-year college degree (BA, BS)
- Master's degree

- Doctoral degree
- Professional degree (MD, JD)

28. How long were you trying to conceive prior to finding out you were pregnant?

29. How did you conceive?

- Through vaginal intercourse
- In-vitro fertilization
- Other fertilization technique (please specify)

30. Any complications with pregnancy? (If yes, please list)