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MOTHERHOOD SITUATION AND LIFE SATISFACTION:

ARE REASONS FOR HAVING NO CHILDREN IMPORTANT?

by

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MOTHERHOOD SITUATION AND LIFE SATISFACTION:

ARE REASONS FOR HAVING NO CHILDREN IMPORTANT?

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University of Nebraska, 2011

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The proportion of adult women without children in the United States has increased in recent years and there are multiple reasons women do not have children. Past research concerning the well-being of women relative to their motherhood status does not recognize the great diversity among women without children. I attempt to fill that gap by classifying women based on the presence or absence of children, fertility barriers, and childbearing intentions. The classification results in five motherhood situations: mothers, voluntarily childfree, women delaying motherhood, involuntarily childless with situational barriers and involuntarily childless with biomedical barriers. This study specifies the relationship between women's life satisfaction and motherhood situation using data from the first wave of the National Survey of Fertility Barriers (N=4,712). I draw on identity theory and life course theory to compare the life satisfaction of women with and without children to see if the status (not having children) is more important than the process (the reason women have no children). I also test the moderating effects of importance of motherhood, age, and marital status. Findings show that women who delay motherhood and childless women with situational barriers are different from women who choose to be childfree or women who have biomedical barriers. Therefore it is important not only to compare mothers to non-mothers, but also to explore the reasons why women do not have children when examining differences in life satisfaction.

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INTRODUCTION

There has been a substantial increase in the proportion of adult women without children in the United States in recent years. According to the U.S. Census Bureau, the proportion of women aged 40-44 without children doubled from 10% in 1976 to 20% in 2006 (Dye 2008). There are many reasons that women do not have children. Among women aged 40-44 without children, 44% are childless by choice and 40% are childless by circumstance (Abma and Martinez 2006). In addition to circumstances delaying or eliminating parenthood (e.g. situational barriers such as a demanding career, caring for elderly parents, or not having a partner), many women and couples have biomedical fertility barriers (Stephen and Chandra 2006).

In their review of parenthood and childlessness over the life course, Umberson, Pudrovska, and Reczek (2010) call for a deeper look at the effects of childlessness within a variety of social contexts. They posit that the pathways to childlessness, not just the status itself, should influence women's well-being. I seek to answer their call by integrating identity theory with life course theory to illuminate the association between motherhood situation (mother, or in one of four categories of women without children) and life satisfaction. Because the characteristics of women who are mothers or not mothers for various reasons could also be associated with life satisfaction, I adjust for characteristics that differ between groups in order to isolate the effect of the reason for having no children itself.

The effects of motherhood on women's well-being has been of interest to sociologists for many years, but was a particular focus in the 1980s and early 1990s. This is evident from the volume of work cited in McLanahan and Adams' (1987) review of

parenthood and well-being. Throughout the 1990s and early 2000s there was a scarcity of research comparing life satisfaction among women with and without children. Therefore I include older studies and works with international samples to help guide my work. Additionally the social landscape for women has changed considerably in the last twenty years; therefore there is a need to revisit the question of motherhood and life satisfaction

There has been a strong emphasis on the challenges of motherhood (Oppenhiemer 1994; Hays 1996; Crittendon 2001), which imply that for many women motherhood may lead to lowered life satisfaction. Yet studies of infertility (Verhaak et al. 2006; McQuillan, Torres Stone and Greil 2007) propose that wanting children and not being able to have them could also lower life satisfaction. Other research suggests that women who choose to be childfree should not suffer lower life satisfaction than mothers (Heaton et al. 1999; Letherby 2002; Gillespie 2003). There has been less emphasis on women who have not had children because of situational barriers to fertility, therefore it is unclear if they are more like women who have biomedical barriers, more like women with no barriers, or are a unique category. There has been considerable interest in women delaying childbearing for education, career or delayed marriage (Cherlin 2010), but less on the association between delaying having children and life satisfaction. Because there has been little work directly on reasons for having no children and life satisfaction, I review research on topics that are related and will help guide my analyses.

I draw from identity theory and the life course perspective to develop and test hypotheses that will help clarify the association between the women's motherhood situations and life satisfaction. I use the first wave of the National Survey of Fertility

Barriers (N=4,712), which has sufficient measures to assess differences in life satisfaction among different motherhood situations which are based on the presence or absence of children, fertility barriers, and childbearing intentions. Therefore I am comparing mothers and women without children who are (1) voluntarily childfree, (2) delaying motherhood, (3) involuntarily childless with a situational barrier, and (4) involuntarily childless with a biomedical barrier. My main goal is to compare the life satisfaction of women without children to see if the status (having children or not) is more important than the process (the reason women have no children). I will also assess the modifying effects of women's importance of motherhood, marital status, and age. Documenting the relationship between women's motherhood situations and life satisfaction can offer insights into future research designed to study groups of women with and without children.

IDENTITY THEORY

Identity theory focuses on how social roles shape individuals' identities (McCall and Simmons 1966). This perspective suggests that mothers and women without children should have different levels of life satisfaction because parenthood is a major social role. Identity theory also postulates that salient identities offer more meaning and purpose in life than less salient identities (Stryker 1980; Stets and Burke 2000). Because identities vary in salience for individuals (Thoits 1999), understanding where motherhood fits in women's identity hierarchy is important for studying the association between motherhood situation and life satisfaction. There is a strong social expectation that adult women in the United States—particularly those in relationships—will become mothers (Bulcroft

and Teachman 2004). Hagewen and Morgan (2005) note that American women have indicated over the past thirty years that the "ideal" family includes two or three children. Therefore being a mother or not being a mother is a component of identity for all women. The centrality of motherhood for adult women is evident in the lack of a positive term for women who have no children. All of the terms reflect a loss—not a mother, childless, women without children—and are based on the absence of something that is expected (Letherby and Williams 1999).

Individuals become highly committed to identities they value (Thoits 1983) and the loss or gain of valued identities has an impact on psychological well-being (Chrouser Ahrens and Ryff 2006; Brook, Garcia and Fleming 2008). Additionally, congruence between desired and achieved identities has potentially lasting consequences for well-being. Just as achieving desired identities should be associated with higher life satisfaction, failing to achieve desired identities should be associated with lower life satisfaction (McQuillan, Greil and Stone 2007).

Among parents, parenthood is often listed as an important identity (Thoits 1991; Rogers and White 1998). Identity theory postulates that possessing a highly valued social identity is associated with greater well-being (Sharma and Sharma 2010). Theoretically, therefore, women with children should have higher life satisfaction compared to women without children because they possess a socially valued identity—that of "mother". Yet past research that compares women with and without children is inconsistent. Some researchers find motherhood to be associated with greater well-being (Ross and Huber 1985; Hansen, Slagsvold and Moum 2009; Holton, Fisher and Rowe 2010), and some

find it associated with lower well-being (Twenge, Campbell and Foster 2003; Evenson and Simon 2005). Others find no difference in well-being between mothers and non-mothers (Callan 1987; Nomaguchi and Milkie 2003).

Prior research has shown that in some cases mothers experience greater life satisfaction (McQuillan et al. 2007; Hansen et al. 2009; Holton et al. 2010), and overall well-being (Ross and Huber 1985) compared to women without children. Additionally, children may enhance women's well-being as a source of love, pride, and self-fulfillment (Schoen et al. 1997; Edin and Kefalas 2005). Children are also viewed as a source of social capital (Astone et al. 1999) and are a resource for parents as they age (Connidis and McMullin 1993; Grundy and Henretta 2006). On the other hand, family scholars and demographers have asked why people have children in a post-industrial society (Schoen et al. 1997; Morgan and King 2001), primarily because of the financial and time burdens children bring (Crittendon 2001). Raising children is expensive and leaves women with less time for leisure or their career (Park 2005; Hewlett 2007). The well-being of mothers may also be strained because of the energy spent raising children. Even in more egalitarian households, the division of labor becomes more gendered after children are born (Bianchi et al. 2000) and women's well-being could suffer because they are responsible for the majority of housework and childrearing (Nomaguchi and Milkie 2003). Prior research has shown that compared to non-parents, parents have lower life satisfaction (McLanahan and Adams 1987), lower marital satisfaction (Twenge et al. 2003) and more depression (Evenson and Simon 2005). Yet many mothers argue that the rewards of motherhood are worth the costs (McMahon 1995; Fox 2009), and many

women with infertility go to great lengths to conceive a child (Greil and McQuillan 2004).

Because of the amount of variation across studies examining the effect of children on women's well-being, it is not surprising that prior research has yielded mixed results. There is, however, a large amount of heterogeneity among women without children, so comparing women based solely on whether or not they have children may not paint an accurate picture. To gain a more comprehensive understanding of the association between women's motherhood situation and life satisfaction I explore the reasons why women have no children.

Involuntarily Childless Women—Biomedical Fertility Barriers

Motherhood is more than a status for many women; it is also an identity. Involuntarily childlessness can be conceptualized as an identity-threatening experience which should therefore lower overall life satisfaction. There are many reasons that women are childless by circumstance (involuntarily childless). Infertility, surgery, and other medical issues constitute biomedical barriers to fertility which often prevent women from having children. This failure to achieve motherhood may have detrimental effects on the well-being of women with biomedical fertility barriers. Many researchers have focused on the experiences of women with infertility (Leiblum, Aviv and Hamer 1998; McQuillan et al. 2003; Greil and McQuillan 2004; McQuillan et al. 2007). McQuillan et al. (2007) reported that infertile women who perceive their infertility as a problem have significantly lower life satisfaction than women who have not had an experience with infertility. Additionally, infertile women (McQuillan et al. 2007) and women with

"infertility-related concerns" (Jordan and Ferguson 1999:31) are shown to have more depressive symptoms compared to women without infertility. Despite advances in science and medicine, biomedical fertility barriers are often long-lasting or permanent (Benokraitis 2005). Therefore being unable to achieve motherhood due to biomedical fertility barriers should be negatively associated with life satisfaction.

Involuntarily Childless Women—Situational Fertility Barriers

In addition to biomedical barriers to fertility, some women are unable to become mothers due to situational fertility barriers. Situational barriers to motherhood, such as not having a partner, also prevent women from achieving a desired identity. Because of the incongruence in their actual and ideal selves (Sharma and Sharma 2010), women who are in a situation which prevents them from having children should have lower life satisfaction compared to women who are mothers. This argument presumes that most mothers consider motherhood an important identity, a presumption that I explore further below. Situational fertility barriers, however, should seem easier to overcome than biomedical barriers. Greater hope of realizing their ideal identity in the future among women with situational compared to biomedical barriers should translate into higher life satisfaction among women with situational compared to biomedical fertility barriers.

Voluntarily Childfree Women

Unlike women who are childless by circumstances, voluntarily childfree women have chosen to forgo childbearing (Gillespie 1999). Abma and Martinez (2006) note that 42% of childless women aged 35-44 are childless by choice. For these women, "mother" is not a desired identity, so there is congruence between the women's actual and ideal

selves. Voluntarily childfree women may develop identities from other sources, such as their partnerships, pets, careers, or communities. Although voluntarily childfree women do not face the dilemma of wanting but not having children, their chosen identity makes them more vulnerable to stigma because their status violates a core norm for women in the United States (Gillespie 2003; McQuillan et al. 2008). This could lead to lower life satisfaction compared to women who are mothers or who want to be mothers. According to Lampan and Dowling-Guyer (1995), voluntarily childfree couples are viewed as "unhappily married, psychologically maladjusted, emotionally immature, materialistic, career driven, selfish, lonely, unhappy, and misguided in their choice to remain childless" by society in general (214). Perceptions of women without children may be changing, however, at least among younger segments of society. While LaMastro (2001) found that undergraduate students viewed mothers as more caring, sensitive, and warm compared to women who were childless by choice, Koropeckyj-Cox, Romano, and Moras (2007) found no differences in attitudes towards these groups.

If voluntarily childfree women are confident in their decision to forgo motherhood, they are likely to be satisfied with their choice (Gillespie 2003). Indeed, prior research shows that voluntarily childfree women have higher life satisfaction compared to parents (Somers 1993). Some studies, however, found no differences in life satisfaction between women with children and the voluntarily childfree (Callan 1987; Connidis and McMullin 1993). Despite the mixed findings comparing mothers and the voluntarily childfree, women who are childless by choice report greater life satisfaction (Callan 1987), greater overall psychological well-being (Jeffries and Konnert 2002) and

fewer depressive symptoms (Connidis and McMullin 1993) compared to women who are childless by circumstance. Because voluntarily childfree women do not face incongruence between their actual and ideal selves, they should have higher levels of life satisfaction than women who have biomedical or situational fertility barriers.

Importance of Motherhood

In addition to the direct effects of motherhood situation on life satisfaction, part of the association might be explained by how much importance women attach to motherhood. Among women with children, the identity of "mother" is often more important than marital and occupational statuses (Rogers and White 1998; Edin and Kefalas 2005). The majority of American women desire motherhood and expect to bear a child at some point in time (Morgan and Rackin 2010). Previous research, however, has shown that the importance of motherhood varies among women (McQuillan et al. 2008). Koropeckyj-Cox (2002:962) finds that women without children who believe "it is better to have a child than to remain childless" (i.e. have high importance of motherhood) have more depression compared to women without children who do not endorse this belief. Therefore importance of motherhood should modify the association between motherhood situation and life satisfaction. For mothers, higher importance of motherhood should be associated with higher life satisfaction. For women who are delaying having children, there should be no difference from mothers, because they should see themselves as future mothers. For women who are childfree, importance of motherhood should have no association with life satisfaction, because motherhood should not be much of a factor in their lives. For women who have barriers to motherhood, higher importance of

motherhood should be associated with lower life satisfaction because they more highly value an unattained identity.

LIFE COURSE PERSPECTIVE

In addition to identity theory, some scholars situate the outcomes of parenthood and childlessness within a life course perspective (Nomaguchi and Milkie 2003; Evenson and Simon 2005; McQuillan et al. 2007; Hansen et al. 2009). This perspective emphasizes a normative trajectory marked by transitions and life events (Elder 1998). Marriage and parenthood are seen as normative steps in adults' lives. There is a general societal expectation in the United States that women will find partners, get married, bear and raise children. The ordering of these events, however, is often class and race/ethnicity specific (Edin and Kefalas 2005). Life events that are "off-time" may have negative consequences for well-being (Koropecky-Cox, Pienta and Brown 2007). Therefore, both marital status and age should be important for life satisfaction. Children are associated with higher life satisfaction among married women and lower life satisfaction among unmarried women (Angeles 2009). Married women and older women who are not mothers should have less well-being because they have not met a highly valued cultural goal. Age and marital status should not matter as much for the life satisfaction of women who are childless by choice, however, because they have rejected the goal of motherhood (Gillespie 2003).

LIFE SATISFACTION

In order to determine if the reason for different motherhood situations matters for women's lives, I use life satisfaction as the outcome measure. Life satisfaction is a useful

indicator of overall well-being. I use the Satisfaction with Life Scale created by Diener and Diener (1995). This is a widely used measure of life satisfaction in sociological research (Pavot and Diener 2008; Pavot and Diener 2009). Although there has been debate whether life satisfaction is a stable trait or a state that fluctuates (Lucas et al. 2004; Lucas 2007), other studies have used life satisfaction to assess women with and without children (Callan 1987; Connidis and McMullin 1993; Holton et al. 2010). Life satisfaction has also been used as an indicator of subjective well-being in response to infertility (McQuillan et al. 2007).

CONTROL VARIABLES

Several variables are associated with motherhood situation and life satisfaction, but do not directly measure concepts in identity theory or a life course perspective. I include measures of women's religiosity, faith in medical science, and income as well as indictors for race/ethnicity, religious status, employment status, importance of leisure and importance of career. Previous research has shown that compared to white women, black women have a greater desire for children (Heaton et al. 1999) and poor women are more likely to value motherhood more than marriage (Edin and Kefalas 2005). Income is included because Ross and Huber (1985) noted that controlling for economic strain is important to the relationship between motherhood status and well-being. Valuing leisure or career are important to the current study because research has shown that voluntarily childfree women are happier than mothers regarding how they spend their free time (Callan 1987). Because these items are not focal variables, but prior research or logic

suggests that they should be associated with both motherhood situation and life satisfaction, I include them as control variables.

STATEMENT OF THE PROBLEM

Samples and methodology in prior work regarding motherhood status and well-being varies across studies and results are mixed. According to identity theory, mothers should have higher life satisfaction than women without children because they have achieved a socially desired identity. But some work that compares women with and without children finds that mothers have less well-being compared to women without children (McLanahan and Adams 1987, Twenge et al. 2003; Evenson and Simon 2005). The present study seeks to rectify the mixed results of previous research by classifying women based on their entire motherhood situation, not just their status of mother or non-mother. Acknowledging the diversity among women without children will help to clarify the relationship between motherhood situation and life satisfaction. Additionally, this study considers women who are delaying motherhood or have situational fertility barriers, which has been largely absent from previous research.

Because women without children are a heterogenous group, I categorize them based on the reason they do not have children—by choice or circumstance. Women who have chosen not to have children are considered voluntarily childfree, whereas women whose circumstances prevent them from having children are considered involuntarily childfree due to situational or biomedical fertility barriers. Women without children who do not have a fertility barrier and expect to have at least one child in the future are

considered to be delaying motherhood. The following hypotheses were developed from identity theory, life course theory, and past research:

Hypothesis 1*:* Based on identity theory, voluntarily childfree women and women delaying motherhood should not differ on life satisfaction from mothers.

Hypothesis 2*:* Mothers, voluntarily childfree women and women delaying motherhood should have higher life satisfaction than both categories of involuntarily childless women.

Hypothesis 3*:* Involuntarily childless women with situational barriers should have higher life satisfaction than involuntarily childless women with biomedical barriers.

Hypothesis 4: Importance of motherhood should modify the association between motherhood situation and life satisfaction. Specifically:

Hypothesis 4a*:* Among mothers, women with lower importance of motherhood should have lower life satisfaction compared to women with higher importance of motherhood.

Hypothesis 4b*:* Among all women without children, those with higher importance of motherhood should have lower life satisfaction compared to women with lower importance of motherhood.

Hypothesis 5*:* Among involuntarily childless women, higher age should be associated with lower life satisfaction compared to lower age.

Hypothesis 6*:* Among involuntarily childless women, those who are married should have lower life satisfaction compared to women who are not married.

DATA AND METHODS

Data

Data are drawn from the first wave (2004-2007) of the National Survey of Fertility Barriers (NSFB), which is a random-digit-dialing telephone panel survey available through the Population Research Institute at the Pennsylvania State University. The NSFB was designed to study biomedical fertility barriers such as infertility. Therefore sampling procedures and selection criteria were employed to make sure that the sample would include women who have experienced or are at risk for biomedical barriers, as well as women from racial/ethnic minority groups. To account for the over-sampling of women from racial/ethnic minority groups and women with fertility barriers, a weight variable is used to make the sample representative of all women ages 25-45 in the United States. The survey uses a "planned missing" design in order to include measures of all the necessary theoretical concepts while minimizing respondent burden. The response rate for this sample is 53 percent.

Measures

Life Satisfaction. Life satisfaction is the dependent variable in this study; it was measured using Diener and Diener's (1995) Satisfaction With Life Scale. Respondents were given a series of statements and asked whether they strongly agreed, agreed, disagreed, or strongly disagreed. The statements were: "In most ways, my life is close to ideal; I am satisfied with my life; if I could live life over, I would change almost nothing; so far, I have gotten the important things I want in life." The mean of these items was

calculated to create a unidimensional scale with an alpha level of .75. Scores on the life satisfaction scale range from 1-4, with higher values indicating greater life satisfaction.

Motherhood Situation. Motherhood situation is the focal independent variable in this study. Women who had at least one biological or adopted child were classified as mothers. It is important to note that some of these women may also have had biomedical barriers to fertility, such as secondary infertility or a history of infertility, but they do not have a current biomedical fertility barrier. Similar to McQuillan et al. (working paper), the women without children were classified into one of four groups according to their reason for having no children (i.e. voluntarily childfree, delaying motherhood, involuntarily childless with situational barriers or biomedical barriers). Women were classified as voluntarily childfree if they responded that their ideal number of children was zero, and they said no to the following questions: “Would you yourself like to have a baby?” and “Do you have a baby?”. There are 116 voluntarily childfree women in the sample. I classified 140 women as women who are delaying motherhood. Women who are delaying motherhood have no children and no fertility barriers, but state that their ideal number of children is greater than one. These women did not meet the criteria for situational or biomedical fertility barriers. There are 281 involuntarily childless women with situational barriers in the sample. Women without children were asked an open-ended question about their reason for not having children. These open-ended responses were coded into 20 categories. Women who gave responses that indicated a situational barrier to having children (e.g., “My partner doesn’t want kids,” “My partner would be a

bad parent," "I am not financially ready") were coded as having a situational barrier if they did not also have a biomedical barrier.

Women were classified as having biomedical barriers if they indicated their ideal number of children is greater than zero and they met the criteria for a biomedical barrier to fertility. Biomedical barriers include miscarriages, sterilization, surgery, and other health problems that would make childbearing difficult, such as diabetes or a bad back. Women who met the medical definition of infertility: not conceiving after having regular, unprotected intercourse over 12 months were also classified as having a biomedical fertility barrier. I classified 357 women in the sample as having biomedical fertility barriers.

Identity Salience

Importance of Motherhood. The importance of motherhood scale was constructed by averaging respondents' answers to four items. The women were asked the extent to which they agreed or disagreed with the following statements: "Having kids is important to my feeling complete as a woman; I always thought I would be a parent; Life will be/is more fulfilling with children; it is important for me to have children." These items were measured using a Likert scale (strongly disagree to strongly agree). The mean of available items from each respondent was calculated to create a unidimensional scale with an alpha level of .76. Values for the importance of parenthood scale ranged from 1-4, with higher values indicating a greater importance of parenthood.

Life Course Variables

Age was measured by asking respondents "How old were you on your last birthday?". *Marital Status* was measured by three dummy variables (*divorced/separated, never married, other marital status)* compared to married.

Control Variables

Race/Ethnicity was measured by four dummy variables (*Black, Hispanic, Asian, Other)* compared to non-Hispanic white. *Employment status* was measured by two dummy variables (*employed part-time, other employment status)* compared to employed full-time. *Education* was assessed by asking respondents, "How many years of schooling have you completed?". *Importance of leisure time* and *Importance of career success* were measured by asking, "How important is having leisure to enjoy my own interests" and "How important is being successful in my line of work?". Answers to these questions were recoded so that 1=very important and 0=less than very important. An indicator for *no religious preference* was included, where 1=no religious preference and 0=religious preference. The scale for *religiosity* was measured by standardizing and then taking the mean of the following items: "How often do you attend religious services?"; "How often do you pray?"; "How close do you feel to God most of the time?"; "In general, how much do religious beliefs influence your daily life?". Higher scores indicated greater religiosity. The scale for religiosity is unidimensional with high reliability (Cronbach's alpha= .78). *Faith in medical science* was assessed by taking the mean of four items: "Medical science can be a big help to women having trouble getting pregnant."; "Women who have trouble getting pregnant would benefit from consulting a doctor."; "With medical advances today, women can wait to have baby until their late 30s and still have a good chance of

having a baby." Responses to these items were measured on a Likert scale from strongly disagree to strongly agree. These items form a single factor and have good reliability (Cronbach's alpha= .74). Higher scores indicate greater faith in medical science. The variable measuring *total family income* consisted of twelve categories ranging from 1 (under $5,000 per year) to 12 (over $100,000 per year).

Analytic Approach

I used a one-way ANOVA and the Tukey post hoc test to examine significant differences in life satisfaction by motherhood situation. I used Ordinary Least Squares regression to examine the relationship between motherhood situation and life satisfaction, controlling for other characteristics. I also tested the modifying effects of importance of motherhood, age, and marital status on the life satisfaction of each motherhood situation. To test the focal relationship between motherhood situation and life satisfaction, I ran an OLS regression of life satisfaction by motherhood situation measured by indicators for voluntarily childfree, women delaying motherhood, involuntarily childless-situational barriers and involuntarily childless-biomedical barriers. Mothers are the reference group. Therefore, the regression coefficients for each motherhood situation indicator represent the difference in life satisfaction between each sub-group and mothers. I also created dichotomous variables for each of the nominally measured variables. Married women are the comparison group for marital status, full-time employment serves as the employment status comparison group, and white non-Hispanic women are the comparison group for race. All continuous variables were centered at their means for the regression analyses.

I used list-wise deletion to handle missing data in the regression analyses. This technique only includes women in the regression if they are not missing on any of the items in the equation. List-wise deletion results in a sample size of 4,280 for the regression analyses. Because there are 4,712 women in the entire sample, I lose about 10% of the sample with list-wise deletion. This is more than is preferable for listwise deletion (5% is the recommended cut off), but with a large sample should have a small impact on the results. Comparison of those with missing data and those with out missing data show that most cases were missing information on the income variable. Because there are differences between women who were and were not missing information on income, there is the potential for some bias in these results. Women who were missing on the income variable were more likely than women with income information to be: voluntarily childfree, involuntarily childless with situational barriers, non-White, and non-religious. Additionally, compared to women with income information, women missing on the income variable were less likely to be mothers, employed full-time, and married. Women missing income information had had lower importance of motherhood scores and lower education than women with income information. Future research should use multiple imputation to reduce bias and gain statistical power.

RESULTS

(TABLE 1 ABOUT HERE)

Descriptive statistics for the entire sample are shown in Table 1. Descriptive statistics by motherhood situation are displayed in Table 2. Of the 4,712 women included in the present study, 3,817 are mothers, 116 are voluntarily childfree, 140 are delaying

motherhood, and 638 are involuntarily childless. Among women classified as involuntarily childless, 281 have situational barriers and 357 have biomedical barriers. Mothers have the highest mean life satisfaction (3.11), followed by women delaying motherhood (3.08), childless women with situational barriers (3.00), and the voluntarily childfree (2.98). Childless women with biomedical barriers have the lowest mean life satisfaction (2.85). The difference between the group with the highest (mothers) and lowest (biomedical barriers) life satisfaction is .26, which is nearly half a standard deviation difference.

(TABLE 2 ABOUT HERE)

To test the first three hypotheses, I used one-way analysis of variance combined with Tukey's post hoc test to test for differences in life satisfaction based on motherhood situation. Tukey’s post hoc test is appropriate for addressing my first three hypotheses because the test adjusts for multiple comparisons. Hypothesis 1 posited that mothers, voluntarily childfree women and women delaying motherhood would not differ on life satisfaction. Consistent with expectations, this hypothesis is supported by the data.

Hypothesis 2 proposed that mothers, voluntarily childfree women, and women delaying motherhood should have higher life satisfaction than women who are involuntarily childless due to situational and biomedical fertility barriers. Hypothesis 2 is also partially supported. Mothers have significantly higher life satisfaction compared to involuntarily childless women with situational fertility barriers and involuntarily childless women with biomedical barriers ($p<.001$). Women delaying motherhood have significantly higher life satisfaction compared to childless women with biomedical

barriers (p<.001). The life satisfaction of voluntarily childfree women, however, does not differ significantly from either category of involuntarily childless women.

Hypothesis 3 expected involuntarily childless women with biomedical barriers to have significantly lower life satisfaction compared to involuntarily childless women with situational barriers. The difference in life satisfaction between childless women with situational barriers and childless women with biomedical barriers approaches significance (p=.07), providing partial support for Hypothesis 3.

Table 2 also shows the average importance of motherhood for each motherhood situation. Mothers have the highest average importance of motherhood (3.37), followed by involuntarily childless women with situational barriers (2.92), biomedical barriers (2.92) and women delaying motherhood (2.84). Consistent with expectations, voluntarily childfree women have the lowest average importance of motherhood (1.68). In fact, voluntarily childfree women's importance of motherhood is over two and a half standard deviations lower than mothers'. This finding lends support to the idea that motherhood is a more salient identity among women with children than women without children. A one-way ANOVA with Tukey's post hoc test confirms that mothers' importance of motherhood is significantly higher than all categories of women without children (p<.001).

(TABLE 3 ABOUT HERE)

Table 3 reports the multiple regression results. The coefficients for each reason for not having children estimate the differences in life satisfaction compared to mothers (the omitted category). Compared to the unadjusted means in Table 2, Model 1 in Table 3

includes control variables. Like the one-way ANOVA, the regression results in Model 1 of Table 3 show that mothers and women delaying motherhood do not significantly differ on life satisfaction. Model 1 also shows that mothers have higher life satisfaction compared to voluntarily childfree women and both groups of involuntarily childless women.

As anticipated, several of the control variables are associated with life satisfaction. For example, black women have significantly lower life satisfaction than white women. Women with higher income, years of education, and religiosity have higher life satisfaction than women with lower income, years of education, and religiosity. These associations remain significant in each of the subsequent models.

In Model 2 of Table 3 I add the life course indicators: age and marital status. It appears that the associations between life satisfaction and the voluntarily childfree and situational barriers statuses are spurious because they are no longer significant upon inclusion of the life course variables. Part of the reason women in these two situations have lower life satisfaction compared to mothers could be because they are not married. Model 2 also shows that childless women with biomedical barriers have lower life satisfaction than mothers even when the life course variables are added to the model.

The life course variables also have direct associations with women's life satisfaction. Married women have significantly higher life satisfaction than women who are not married (divorced/separated, never married, or have another marital status). Additionally, there is a negative association between age and life satisfaction: increases in age (ranging from 25-45) are associated with lower life satisfaction.

I added the focal identity salience indicator, importance of motherhood, to Model 3 of Table 3. Importance of motherhood has a direct, positive effect on life satisfaction; a one unit increase above the mean of importance of motherhood is associated with an expected .15 increase in life satisfaction. In Model 3, voluntarily childfree women have significantly higher life satisfaction than mothers with average importance of motherhood. The coefficient for the voluntarily childfree changed signs and remained significant between Model 1 and Model 3, a pattern that indicates a suppression effect. It appears that voluntarily childfree have lower life satisfaction than mothers in Models 1 and 2, but this is because a crucial variable—importance of motherhood—is omitted from the model. The model is therefore mispecified without this variable. This pattern of coefficients suggests that some women experience "voluntarily childfree" status as less voluntary than others. For example, some may have decided that being a mother is important but it is just not something that they can do well.

Model 3 also indicates that, compared to mothers, women delaying motherhood have higher life satisfaction after controlling for importance of motherhood. This difference approaches statistical significance. Involuntarily childless women with situational barriers do not differ from mothers on life satisfaction, and involuntarily childless women (situational and biomedical barriers) remain lower on life satisfaction compared to mothers when importance of motherhood is included.

I also tested the modifying effects of the life course variables on the association between motherhood situation and life satisfaction. To assess Hypothesis 5, which proposed that increasing age should be associated with lower life satisfaction among

involuntarily childless women, I added interactions between motherhood situation and age (results not shown). Surprisingly, none of these interactions are significant, signaling that the association between motherhood situation and life satisfaction is not modified by age. Therefore, Hypothesis 5 is not supported by the data. The same steps were taken to test Hypothesis 6, which proposed that being married should be associated with lower life satisfaction among involuntarily childless women because marriage is a life course cue for childbearing. Hypothesis 6 is not supported by the data. In fact, just the opposite is revealed. Among involuntarily childless women, married women have *higher* life satisfaction than women with other marital statuses. The interaction loses significance, however, when interactions of importance of motherhood and motherhood situation are included in the same model. Therefore, the interaction terms for marital status by motherhood situation are not included in the final regression model.

(FIGURE 1 ABOUT HERE)

Hypothesis 4 posited that importance of motherhood should modify the association between motherhood situation and life satisfaction. Figure 1 displays a graphical representation of life satisfaction based on interactions between motherhood situation and importance of motherhood. Model 6 of Table 3 shows the regression results, including the motherhood situation by importance of motherhood interactions. Hypothesis 4 had two parts: a) lower importance of motherhood should be associated with lower life satisfaction among mothers; b) higher importance of motherhood should be associated with lower life satisfaction among all categories of women without children. Mothers represent the omitted motherhood situation category in the multiple

regression analyses. Therefore, to test Hypothesis 4a I performed a simple slopes test (Holombeck 2004) by re-running the regression with a different motherhood situation as the omitted category (results not shown). The direct effect for motherhood situation and the interaction between motherhood situation and importance of motherhood are statistically significant. Consistent with my expectations, Hypothesis 4a is supported. Importance of motherhood modifies the association between motherhood situation and life satisfaction among mothers. Hypothesis 4b is partially supported by the data. Except in the case of involuntarily childless women with situational barriers, higher importance of motherhood is associated with lower life satisfaction among women without children. Interestingly, high importance of motherhood is associated with higher life satisfaction among women with situational barriers.

CONCLUSION AND DISCUSSION

Guided by identity theory and life course theory, I tested six hypotheses and two sub-hypotheses regarding the association between women's motherhood situation and life satisfaction. A table summarizing the results of each hypothesis can be found in Appendix A. I did not expect voluntarily childfree women and women who are delaying having children to differ in life satisfaction from mothers because all three groups of women have congruence between their actual and ideal identities. I support for this hypothesis. As expected, mothers, voluntarily childfree women, and women delaying motherhood did not differ in life satisfaction. This finding is consistent with previous research that found no difference in life satisfaction between mothers and voluntarily childfree women (Callan 1987; Somers 1993).

I also expected that mothers, women who are delaying motherhood, and voluntarily childfree women would have higher life satisfaction than both categories of involuntarily childless women. I anticipated that women who want children but cannot have them would experience their situation as a threat to their identity and a non-normative life course status and therefore would have lower life satisfaction compared to mothers or women delaying motherhood. I found partial support for Hypothesis 2. Mothers and women delaying motherhood report significantly higher life satisfaction than women who are childless by circumstance. The life satisfaction of voluntarily childfree women, however, is only higher than women whose childlessness is due to biomedical barriers. Consistent with my expectations, women delaying motherhood and mothers do not differ significantly on life satisfaction. I presume that this is because women delaying motherhood plan to have children in the future and have no known threat to achieving this identity.

In Hypothesis 3 I proposed that women who are childless due to situational reasons should have higher life satisfaction compared to women who are childless due to biomedical barriers. I argued that situational childlessness should be perceived as easier to remedy than biomedical barriers to fertility, and therefore be less damaging to life satisfaction. The results support Hypothesis 3—women with situational barriers have higher life satisfaction than women with biomedical barriers. It was possible that the factors associated with biomedical or situational barriers and not the motherhood situation itself was associated with life satisfaction. The multiple regression results

indicate that controlling for other variables, the difference in life satisfaction between women with situational compared to biomedical barriers approaches significance.

I also tested the modifying effects of identity salience and life course variables on the association between motherhood situation and life satisfaction. I presumed that women without children who believe motherhood is important should have lower life satisfaction because they are not fulfilling a highly valued role. For childless women with biomedical barriers, this proved to be the case. I was surprised, however, to find that increases in importance of motherhood were associated with decreases in life satisfaction for women who are voluntarily childfree. This is an interesting finding because I had presumed that women who choose not to have children do so because motherhood is not important to them. It could be, however, that some women consider motherhood so highly important that they choose not to become mothers if they believe that they cannot give a child all that it needs (Park 2005). This finding suggests the need to further explore the pathways to becoming voluntarily childfree. It is possible that the survey questions did not capture all of the possible situational barriers to motherhood.

Because motherhood is a highly valued status for most women in the United States and birth control and abortion presumably limit unwanted births, it is often surprising that importance of motherhood varies among mothers (McQuillan et al. 2008). Consistent with identity theory, mothers with low importance of motherhood have less life satisfaction than mothers with higher importance of motherhood. Mothers with lower importance of motherhood scores experience incongruence between their ideal and their status that mirrors the involuntarily childless. Future research in this area could benefit

from separating mothers into two categories by their intentions: those who planned to get pregnant and those who unintentionally got pregnant. The pattern of results for the interactions of motherhood situation by importance of motherhood support Hypothesis 4a and partially support Hypothesis 4b—importance of motherhood does modify the association between motherhood situation and life satisfaction. This study shows that when comparing women based on their motherhood situations, it is important to ask women how much they value motherhood. Voluntarily childfree women were shown to have lower life satisfaction compared to mothers until importance of motherhood was included in the model and the opposite was revealed.

Guided by life course theory, my fifth hypothesis presumed that age should modify the relationship between motherhood situation and life satisfaction for involuntarily childless women. I expected that older women would perceived fewer options for eventually having and raising children. Age did not modify the relationship between life satisfaction and motherhood situation for women without children. The association between motherhood situation and life satisfaction was also not modified by the other life course variable—marital status. Because for many women marriage is a life course cue for having children, I presumed that married women who desire children but do not have them should have lower life satisfaction than married women with children. Instead, involuntarily childless women who are married have higher life satisfaction compared to non-married women who are involuntarily childless. The difference in life satisfaction between married and nonmarried women is only significant for childless women with biomedical barriers when importance of motherhood interactions are not

included in the model. It could be that marriage is a source for higher life satisfaction, even if the couples do not have children. Greil (1991) found that for many couples, seeking medical help for infertility brings couples closer together. Future research should explore if medical help-seeking helps to explain the effect of marital status on life satisfaction for women with biomedical barriers.

This research is not without its limitations. The data used for this study are cross-sectional. Therefore I cannot determine if life satisfaction contributes to motherhood situation or if the causal ordering that I present here – that motherhood situation influences life satisfaction – is correct. It is also possible that with a larger sample of women delaying motherhood and voluntarily childfree women some of the non-significant findings in this analysis would become statistically significant.

Despite these limitations, the present study advances research on how women experience life relative to motherhood – being mothers, delaying motherhood, being free of children, or blocked from having children. Exploring the reasons for not having children helps to clarify why life satisfaction might differ by motherhood situation. Previous research has distinguished between women who chose to be childfree and women with infertility (Callan 1987; Jeffries and Konnert 2002; Koropeckyj-Cox 2002), or women with and without infertility (McQuillan et al. 2008), but I know of no studies that include situational barriers to fertility in studies of life satisfaction. The present study reveals that women who are delaying motherhood and childless women with situational barriers are different from women who choose to be childfree or childless women who have biomedical barriers. Therefore it is important not only to compare mothers to

women without children, but also to explore the reasons why women do not have children.

Having established the value of exploring variation among women without children, I can see the value of exploring variation among women with children. Recognizing the inadequacy of the simple cultural narratives that suggest that motherhood is mandatory for a satisfying life and childlessness is unsatisfying for adult women should help to open up additional avenues of research to guide policies and decision making. For example, is some of the dissatisfaction among mothers due to the demands of intensive mothering (Hayes 1996) or the price of motherhood (Crittendon 2001)? Would more women be okay without having children if there were highly valued statuses for adult women other than motherhood? Should there be more emphasis on ways to be involved with children other than parenting to make not bearing and rearing one's own children the primary route to satisfying engagement with children? Additionally, should women with biomedical barriers have more information about other women who do not consider motherhood an important identity and therefore may not pursue medical options? Are there ways to help women with barriers to motherhood either overcome those barriers and have children, or find alternate routes to a satisfying adult life? Clearly the variation in experiences among the women in this study suggests that motherhood is important, but it is just one part of adult women's lives. For example marital status seems to have at least if not more of an association with life satisfaction than motherhood situation.

As women continue to postpone childbearing, estimates of women without children in the United States will continue to rise. Therefore the reasons for having no children will continue to be increasingly important. By acknowledging the reasons that women do not have children, this research has drawn comparisons that are useful in clarifying the relationship between motherhood situation and life satisfaction.

Table 1: Descriptive Statistics

	Mean or %	Std. Dev.	Range
Global Life Satisfaction	3.08	.60	1-4
Identity Salience Variable			
Importance of Motherhood	3.25	.67	1-4
Life Course Variables			
Age	35.46	6.01	25-45
Married (%)	63.44		0-1
Control Variables			
Non-white (%)	39.40		0-1
Employed Full-Time (%)	53.84		0-1
Education (years)	13.63	3.02	0-22
No Religion (%)	9.13		0-1
Religiosity	-.03	.85	-2.62-1.32
Faith in Medical Science	3.36	.49	1-4
Importance of Career	3.29	.82	1-4
Importance of Leisure	3.20	.84	1-4

Table 2. Descriptive Statistics by Motherhood Situation

	Mothers (*n*=3817) A		**Voluntary Childfree (*n*=116) B**		**Delayers (*n*=140) C**		**Situational Barriers (*n*=281) D**		**Biomedical Barriers (*n*=357) E**		**Signficance**
	Mean /%	**SD**	**Mean /%**	**SD**	**Mean /%**	**SD**	**Mean/ %**	**SD**	**Mean/ %**	**SD**	
Life Satisfaction	3.11	*.61*	2.98	*.59*	3.08	*.54*	2.97	*.56*	2.85	*.57*	[A>D, E ***] [C >E ***]
Identity Salience Variable											
Importance of Motherhood	3.37	*.57*	1.68	*.47*	2.84	*.77*	2.92	*.74*	2.92	*.71*	[A>B,C D E***] [B<C,D,E***]
Life Course Variables											
Age	35.85	*5.84*	38.42	*5.33*	31.76	*5.97*	31.83	*5.89*	34.58	*6.38*	[A>C,D,E***] [B>A,C,D,E***] [E>C,D***]
Married (%)	69.43		44.48		38.53		26.86		44.31		***
Control Variables											
Non-white (%)	40.61		17.57		31.70		33.61		41.26		***
Employed Full-Time (%)	49.27		76.97		79.03		77.51		66.54		***
Education (years)	13.28	*2.98*	14.85	*2.84*	15.52	*2.69*	15.97	*2.26*	14.41	*2.88*	[A<B,C,D,E***] [C>E**] [D>B**,E***]
Income	7.94	*3.10*	8.95	*2.97*	8.70	*2.82*	8.52	*2.61*	7.95	*2.96*	[A<B,C,D*] [B>E*]
No Religion (%)	8.01		18.55		13.57		12.47		13.92		***
Religiosity	.04	*.81*	-.52	*.93*	-0.43	*1.02*	-0.36	*.98*	-0.25	*.91*	[A>B,C,D,E ***] [B>E**]
Faith in Medical Science	3.35	*.50*	3.39	*.48*	3.39	*.44*	3.38	*.47*	3.33	*.49*	
Importance of Career	3.27	*.84*	3.21	*.82*	3.38	*.67*	3.35	*.72*	3.39	*.79*	
Importance of Leisure	3.14	*.86*	3.61	*.64*	3.50	*.67*	3.50	*.72*	3.39	*.74*	[A<B,C,D,E***]

*p<.05, **p<.01, ***p<.001, $^{\tau}p$<.10

Data based on NSFB Wave 1; sample is representative of women age 25-45 in the U.S.

One-way ANOVA with Tukey's Post Hoc Test for continuous variables.

Chi-Square Test for categorical variables.

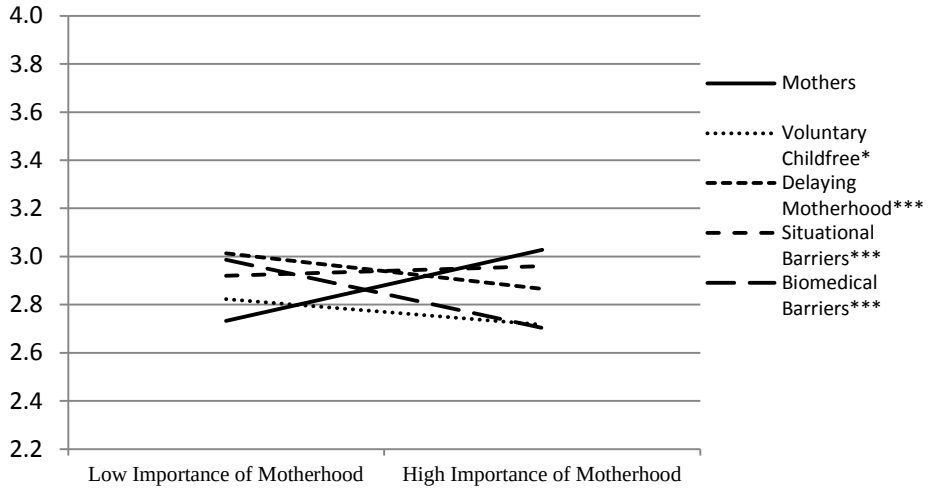
Table 3: Multiple Regression Results of Life Satisfaction

	Model 1	Model 2	Model 3	Model 4
	b [se]	b [se]	b [se]	b [se]
Motherhood Situation				
Voluntary Childfree	-.14*	-.64	.19**	-.15
	[.06]	[.06]	[.06]	[.22]
Delayers	-.03	.03	.12*	.01
	[.05]	[.05]	[.05]	[.06]
Involuntary Childless-Situational Barriers	-.12***	-.03	.03	-.01
	[.04]	[.04]	[.04]	[.04]
Involuntary Childless-Biomedical Barriers	-.23***	-.18***	-.12***	-.19**
	[.03]	[.03]	[.03]	[.04]
Life Course Variables				
Age		-.004**	-.003	-.004*
		[.001]	[.001]	[.001]
Married		.29***	.28***	.29***
		[.02]	[.02]	[.02]
Identity Salience Variable				
Importance of Motherhood			.15***	.22***
			[.02]	[.02]
Importance of Motherhood x Voluntary Childfree				-.30*
				[.13]
Importance of Motherhood x Delayers				-.33***
				[.06]
Importance of Motherhood x Situational Barriers				-.19***
				[.05]
Importance of Motherhood x Biomedical Barriers				-.29***
				[.05]
Control Variables				
Income	.05***	.03***	.03***	.03***
	[.003]	[.004]	[.004]	[.004]
Employed Full-Time	-.04*	.01	.01	.02
	[.02]	[.02]	[.02]	[.02]
No Religion	-.01	-.01	.02	.01
	[.03]	[.03]	[.03]	[.03]
Non-White	-.11***	-.08***	-.06***	-.05**
	[.02]	[.02]	[.02]	[.02]

Education	-.002	.002	.00	.00
	[.003]	[.003]	[.003]	[.003]
Faith in Medical Science	.14***	.14***	.11***	.10***
	[.02]	[.02]	[.02]	[.02]
Religiosity	.09***	.07***	.06***	.06***
	[.01]	[.01]	[.01]	[.01]
Leisure is Important	-.01	.004	.01	.01
	[.02]	[.02]	[.02]	[.02]
Career Success is Important	.03	.05**	.04*	.04*
	[.02]	[.02]	[.02]	[.02]
Constant	3.17***	2.92***	2.90***	2.88***
	[.02]	[.03]	[.02]	[.03]
Adjusted *R*-Square	.13	.17	.19	.20

Note: N=4,280 *p<.05; **p<.01; ***p<.001.
Data based on NSFB Wave 1; sample is representative of women age 25-45 in the U.S.
All continuous variables are mean-centered.

Figure 1. Modifying Effect of Importance of Motherhood on Life Satisfaction by Motherhood Situation



References

Abma, Joyce C. and Gladys M. Martinez. 2006. "Childlessness Among Older Women in the United States: Trends and Profiles." *Journal of Marriage and Family* 68(4): 1045-56.

Angeles, Luis. 2009. "Children and Life Satisfaction." *Journal of Happiness Studies* 11(4):523-38.

Astone, Nan Marie, Constance A. Nathanson, Robert Schoen, and Young J. Kim. 1999. "Family Demography, Social Theory, and Investment in Social Capital." *Population Development and Review* 25(1):1-31.

Benokraitis, Nijole V. 2005. *Marriages and Families: Changes, Choices, and Constraints.* 5th ed. New Jersey: Pearson Education, Inc.

Bianchi, Suzanne M., Melissa A. Milkie, Liana C. Sayer and John P. Robinson. 2000. "Is Anyone Doing the Housework? Trends in the Gender Division of Household Labor." *Social Forces* 79(1):191-228.

Brook, Amara T., Julie Garcia and Monique A. Fleming. 2008. "The Effects of Multiple Identities on Psychological Well-Being." *Personality and Social Psychology Bulletin* 34(12):1588-1600.

Bulcroft, Richard and Jay Teachman. 2004. "Ambiguous Constructions: Development of a Childless or Childfree Life Course". Pp. 116-35 in *Handbook of Contemporary Families,* edited by M. Coleman and L. Ganong. Thousand Oaks, CA: Sage.

Callan, Victor J. 1987. "The Personal and Marital Adjustment of Mothers and Voluntarily and Involuntarily Childless Wives." *Journal of Marriage and Family* 49(4):847-56.

Cherlin, Andrew. 2009. *The Marriage-Go-Round: The State of Marriage and the Family in America Today*. New York: Vintage Books.

Chrouser Ahrens, Christina J. and Carol D. Ryff. 2006. "Multiple Roles and Well-Being: Sociodemographic and Psychological Moderators." *Sex Roles* 55(11-12):801-15.

Crittendon, Ann. 2001. *The Price of Motherhood: Why the Most Important Job in the World is Still the Least Valued.* New York, NY: Henry Holt and Company, LLC.

Connidis, Ingrid Arnet and Julie Ann McMullin. 1993. "To Have or Have Not: Parent Status and the Subjective Well-Being of Older Men and Women." *The Gerontologist* 33(5):630-6.

Diener, E. and M. Diener. 1995. "Factors Predicting the Subjective Well-Being of Nations." *Journal of Personality and Social Psychology 69*: 851-64.

Dye, Jane Lawler. 2008. "Fertility of American Women: 2006." *Current Population Reports, P20-558*. U.S. Bureau of the Census. Washington, DC: U.S. Government Printing Office.

Edin, Kathryn and Maria Kefalas. 2005. *Promises I Can Keep: Why Poor Women Put Motherhood Before Marriage.* Los Angeles, CA: University of California Press.

Elder, Glenn H. 1998. "The Life Course as Developmental Theory." *Child Development* 69(1):1-12.

Evenson, Ranae J. and Robin W. Simon. 2005. “Clarifying the Relationship between Parenthood and Depression.” *Journal of Health and Social Behavior* 46(4):341-58.

Fox, Bonnie, ed. 2009. *Family Patterns, Gender Relations, Third Edition.* Ontario: Oxford University Press.

Gillespie, Rosemary. 1999. “Voluntarily Childlessness in the United Kingdom.” *Reproductive Health Matters* 7(13): 43-53.

------. 2003. “Childfree and Feminine: Understanding the gender Identity of Voluntarily Childless Women.” *Gender and Society* 17(1):122-36.

Greil, Arthur L. 1991. "Not Yet Pregnant: Infertile Couples in Contemporary America." New Brunswick: Rutgers University Press.

Greil, Arthur L. and Julia McQuillan. 2004. “Help-seeking Patterns among Infertile Women.” *Journal of Reproductive and Infant Psychology* 22(4):305-19.

Grundy, Emily and John C Henretta. 2006. “Between Elderly Parents and Adult Children: A New Look at Intergenerational Care Provided by the “Sandwich Generation””. *Ageing and Society* 26(5):707-22.

Hagewen Kellie J. and S. Philip Morgan. 2005. “Intended and Ideal Family Size in the United States: 1970-2002.” *Population Development and Review* 31(3):507-27.

Hansen, Thomas, Britt Slagsvold, Torbjorn Moum. 2009. “Childlessness and Psychological Well-Being in Midlife and Old Age: An Examination of Parental Status Effects Across a Range of Outcomes. *Social Indicators Research* 94(2): 343-62.

Hays, Sharon. 1996. *The Cultural Contradictions of Motherhood.* Yale University Press.

Heaton, Tim B., Cardell K. Jacobson, and Kimberlee Holland. 1999. "Persistence and Change in Decisions to Remain Childless." *Journal of Marriage and Family* 61(2):531-39.

Hewlett, Sylvia Ann. 2007. *Off-Ramps and On-Ramps: Keeping Talented Women on the Road to Success.* Cambridge, MA: Harvard Business Press.

Holmbeck, Grayson N. 2002. "Post-Hoc Probing of Significant Moderational and Mediational Effects in Studies of Pediatric Populations." *Journal of Pediatric Psychology* 27(1):87-96.

Holton, Sara, Jane Fisher and Heather Rowe. 2010. "Motherhood: Is it Good for Women's Mental Health?" *Journal of Reproductive and Infant Psychology* 28(3): 223-39.

Jeffries, Sherryl M. and Candace Konnert. 2002. "Regret and Psychological Well-Being Among Voluntarily and Involuntarily Childless Women and Mothers." *International Journal of Aging and Human Development* 54(2): 89-106.

Johnson, David R. and Lynn K. White. National Survey of Fertility Barriers [Data file]. Retrieved from the Pennsylvania State University Population Research Institute Web site http:// pennstate\sodapop\nsfb. n.d.

29. McCarty, C., House, M., Harman, J., & Richards, S. (2006).

Jordan, Caren B. and Robert J. Ferguson. 2006. "Infertility-Related Concerns in Two Family Practice Sites." *Families, Systems & Health* 24(1):28-32.

Koropeckyj-Cox, Tanya. 2002. "Beyond Parent Status: Psychological Well-Being in Middle and Old Age." *Journal of Marriage and Family* 64(4):957-71.

Koropeckyj-Cox, Tanya, Amy Mehraban Pienta and Tyson H. Brown. 2007. "Women of the 1950s and the "Normative" Life Course: The Implications of Childlessness, Fertility Timing, and Martial Status on Psychological Well-Being in Late Midlife." *Journal of Aging and Human Development* 64(4):299-330.

Koropeckyj-Cox, Tanya, Victor Romano and Amanda Moras. 2007. "Through the Lenses of Gender, Race, and Class: Students' Perceptions of Childless/Childfree Individuals and Couples." *Sex Roles* 56(7-8):415-28.

LaMastro, Valerie. 2001. "Childless by Choice? Attributions and Attitudes Concerning Family Size." *Social Behavior and Personality* 29(3):231-44.

Lampman, Claudia and Seana Dowling-Guyer. 1995. "Attitudes Toward Voluntarily and Involuntarily Childlessness." *Basic and Applied Social Psychology* 17(1)*:* 13-22.

Leiblum, S.R., A. Aviv, and R. Hamer. 1998. "Life after Infertility Treatment: a Long-Term Investigation of Marital and Sexual Function." *Human Reproduction* 13(12):3569-74.

Letherby, Gayle. 2002. "Childless and Bereft?: Stereotypes and Realities in Relation to 'Voluntary' and 'Involuntary' Childlessness and Womanhood." *Sociological Inquiry* 72(1): 7-20.

Letherby, Gayle and Catherine Williams. 1999. "Non-Motherhood: Ambivalent Autobiographies." *Feminist Studies* 25(3):719-28.

Lucas, Richard E. 2007. "Adaptation and the Set-Point Model of Subjective Well-Being: Does Happiness Change after Major Life Events?" *Current Directions in Psychological Science* 20(1):75-79.

Lucas, Richard E., Andrew E. Clark, Yannis Georgellis, and Ed Diener. 2004. "Unemployment Alters the Set Point for Life Satisfaction." *Psychological Science* 51(1): 8-13.

McCall, George J. and Jerry L. Simmons. 1966. *Identities and Interactions.* New York: Free Press.

McLanahan, Sara and Julia Adams. 1987. "Parenthood and Psychological Well-Being." *Annual Review of Sociology* 13(1987):237-57.

McMahon, Martha. 1995. *"Engendering Motherhood: Identity and Self-Transformation in Women's Lives."* New York, NY: The Guilford Press.

McQuillan, Julia, Arthur L. Greil, Karina M. Scheffler, and Veronica Tichenor. 2008. "The Importance of Motherhood among Women in the Contemporary United States." *Gender and Society* 22(4):477-96.

McQuillan, Julia, Rosalie A. Torres Stone, and Arthur L. Greil. 2007. "Infertility and Life Satisfaction Among Women." *Journal of Family Issues* 28(7):955-81.

Morgan, S. Philip and Rosalind Berkowitz King. 2001. "Why Have Children in the 21st Century? Biological Predisposition, Social Coercion, Rational Choice." *European Journal of Population* 17(1):3-20.

Morgan, S. Philip and Heather Rackin. 2010. "The Correspondence of U.S. Fertility Intentions and Behavior." *Population and Development Review* 36(1):91-118.

Nomaguchi, Kei N. and Melissa A. Milkie. 2003. "Costs and Rewards of Children: The Effects of Becoming a Parent on Adults' Lives." *Journal of Marriage and Family* 65(2):356-74.

Oppenheimer, Valerie Kincade. 1994. "Women's Rising Employment and the Future of the Family in Industrial Societies." *Population and Development Review* 20(2): 293-342.

Park, Kristin. 2005. "Choosing Childlessness: Weber's Typology of Action and Motives of the Voluntarily Childless." *Sociological Inquiry* 75(3):372-402.

Pavot, William and Ed Diener. 2009. "Review of the Satisfaction With Life Scale." Pp. 101-17 in *Assessing Well-Being: The Collected Works of Ed Diener*, edited by Ed Diener. New York: Spinger.

------. 2008. "The Satisfaction With Life Scale and the Emerging Construct of Life Satisfaction." *The Journal of Positive Psychology* 3(2):137-52.

Rogers, Stacy J. and Lynn K. White. 1998. "Satisfaction with Parenting: The Role of Marital Happiness, Family Structure, and Parents' Gender." *Journal of Marriage and Family* 60(2):293-308.

Ross, Catherine and Joan Huber. 1985. "Hardship and Depression." *Journal of Health and Social Behavior* 26 (4): 312-27.

Schoen, Robert, Young J. Kim, Constance A. Nathanson, Jason Fields, and Marie Nan Astone. 1997. "Why Do Americans Want Children?" *Population Development and Review* 23(2):333-58.

Sharma, Sagar and Monica Sharma. 2010. "Self, Social Identity and Psychological Well-Being." *Psychological Studies* 55(2):118-36.

Somers, Marsha D. 1993. "A Comparison of Voluntarily Childfree Adults and Parents." *Journal of Marriage and the Family* 55(3): 643-50.

Stephens, Elizabeth Harvey and Anjani Chandra. 2006. "Declining Estimates of Infertility in the United States: 1982-2002." *Fertility and Sterility* 86(3):516-23.

Stets, Jan E. and Peter J. Burke. 2000. "Identity Theory and Social Identity Theory." *Social Psychology Quarterly 62*(3): 224-37.

Stryker, Sheldon. 1980. *Symbolic Interactionism: A Social Structural Version.* Menlo Park, CA: Benjamin Cummings.

Thoits, Peggy A. 1983. "Multiple Identities and Psychological Well-Being: A Reformulation and Test of the Social Isolation Hypothesis." *American Sociological Review* 48(2):174-87.

------. 1991. "On Merging Identity Theory and Stress Research." *Social Psychology Quarterly* 54(2):101-12.

------. 1999. "Self, Identity, Stress, and Mental Health." Pp. 345-68 in *Handbook of the Sociology of Mental Health*, edited by Carol S. Aneshensel and Jo C. Phelan. New York, NY: Springer.

Twenge, Jean M., W. Keith Campbell, and Craig A. Foster. 2003. "Parenthood and Marital Satisfaction: A Meta-Analytic Review." *Journal of Marriage and Family* 65(3):574-83.

Umberson, Debra, Tetyana Pudrovska, and Corrine Reczek. 2010. “Parenthood, Childlessness, and Well-Being: A Life Course Perspective.” Journal of Marriage and Family 72(3):612-29.

Appendix A: Hypothesis Summary Table

Hypotheses	**Results**
1: Voluntarily childfree women will not differ from mothers on life satisfaction	Supported
2: Mothers, voluntarily childfree women and women delaying motherhood should have higher life satisfaction than both categories of involuntarily childless women.	Partially Supported
3: Involuntarily childless women with situational barriers should have higher life satisfaction than involuntarily childless women with biomedical barriers.	Partially Supported
4: Importance of motherhood should modify the association between motherhood situation and life satisfaction.	Supported
4a: Among mothers, women with lower importance of motherhood should have lower life satisfaction compared to women with higher importance of motherhood.	Supported
4b: Among all women without children, those with higher importance of motherhood should have lower life satisfaction compared to women with lower importance of motherhood.	Partially Supported
5: Among involuntarily childless women, higher age should be associated with lower life satisfaction compared to lower age.	Not Supported
6: Among involuntarily childless women, those who are married should have lower life satisfaction compared to women who are not married.	Not Supported