Uncertain Motherhood:

Family Structure, Socio-Economic Status, and Infertility as Predictors of Uncertainty over the Importance of Motherhood.

With the prevalence of contraception and the increases in educational attainment, women have faced new choices regarding parenting and work. Increasingly, women have delayed childbearing to establish careers. Given declines in fecundity over time, problems of infertility have become more noticeable to researchers and society. Few studies have focused on the uncertainty over parenthood, however, instead focusing on the importance of parenthood. Using two waves of data from the National Survey of Fertility Barriers, a nationally representative survey of women aged 25-44, I will explore this topic by focusing on the uncertainty over motherhood. Using mixed effects regression, I will look at the initial level and change of various predictors that could influence uncertainty over parenting, such as the importance of work, marital status, and having a child. I will also assess separate models according to whether or not a woman is subfecund.

Theory and Literature Review

The decrease in fertility for Western nations has been well-documented by demographic scholars. The meaning of the transition for individuals was articulated by Lesthaege (1995), who noted that the increasing importance of leisure as well as elongated socio-psychological development further into adulthood was a primary driver of both the delay in individuals' child bearing and the overall decrease of total fertility rates in society. Massive social change has prompted researchers to investigate the importance of parenthood, especially in the context of competing demands with career goals, and the possible complications of delayed child-bearing due to age-related decreases for fertility.

Parenthood is still a highly prized role in the United States, however, adults are also questioning the problems of engaging in full-time employment and parenting. Qualitative assessments of women's perceptions of balancing careers and motherhood show that college educated women place a high value on motherhood, and while they perceive conflicting demands from work and parenting roles, they believe they will handle them effectively (Baber and Monaghan, 1988). A similar trend was found amongst Swedish college students, who articulated that postponing parenting would be helpful to deal with work-parenting issues, yet did not perceive issues associated with decreased fertility at later ages for women (Lampic et al, 2005).

While educational attainment is often seen as catalyst for fertility delays, the importance of social-psychological variables should not be understated. Hayford (2009) found that educational attainment was not a significant predictor of the decay of fertility intentions over time, and attitudinal variables should be considered in future research. Other studies highlight the possibility that the importance of parenthood is contingent on multiple factors. For women without children, motherhood may seem like a time consuming task that may be too daunting to tackle (Maher and Saugeres, 2007). Age may also be important, with those in their thirties weighing the costs of parenting and finding the role less attractive when compared to respondents in their 20's, possibly due to the more

idealized views of parenthood for the younger respondents (Gerson, 1991). Using a nationally representative sample of women, McQuillan and colleagues (2008) noted that, inconsistent with stereotypes of childbearing and job commitment, women with children viewed both work and parenting as important, and childless women had no association, and not a negative association, between these two constructs.

While the reasons for delaying childbearing may be numerous, the consequences of infertility have received less attention, though this is beginning to change (Greil et al, 2010). Infertility negatively impacts women, and while psychopathology is not evident amongst this group, these women do tend to experience higher levels of psychological distress and may also have increased incidence in depressive symptoms and lowered life satisfaction (ibid). Another complicating issue is that, while based in biology, infertility is not necessarily understood as problematic unless pregnancy is desired. Using a help-seeking model for infertility, White and colleagues (2005) showed that cognitive appraisal of the infertility, along with symptom salience, co-morbidity, and medical locus of control, were important in predicting help seeking behaviors.

Focus of Proposed Study:

While past research has focused on the importance of parenthood, I will assess the predictors of uncertainty regarding parenthood, as the lack of certainty may be just as important a construct for understanding child bearing decisions. I will look at how various predictors influence both the initial level of uncertainty regarding motherhood, as well as whether changes in these predictors also change uncertainty. Given the implications of salience on infertility, I will also focus on the influences of subfecundity and helpseeking. I hypothesize that infertility will be negatively associated with uncertainty, given the help-seeking model outlined by White and colleagues (2005). I will also test whether changes in family structure and work change uncertainty, with increases in socio-economic indicators, marriage and having children decreasing uncertainty over the importance of parenthood.

Data and Methods

The National Survey of Fertility Barriers (NSFB) is a nationally representative probability sample of 4,700 women, aged 25-44, interviewed by telephone (Johnson and White, 2009). The first wave of recruitment occurred from 2004 to 2007, with a follow-up interview conducted from 2009 to 2011 yielding 2,439 interviews. The study was designed to assess social and health factors that relate to the reproductive choices and infertility of American women. The theoretical model that guided this study built on medical health service utilization and help-seeking models. In wave 2, women who did not meet certain criteria for infertility were under-sampled to save costs in the second wave, so this analysis uses data from the women in both first and second waves.

The dependent variable is a dummy variable that reflected whether or not a participant had said "don't know" to any of 4 questions regarding the importance of parenthood. Respondents were asked how important having kids was to feeling complete as a woman,

if the respondent had always thought she would be a parent, if life was or would be more fulfilling with kids, and if it was important for her to have children. The option to say "don't know" was never given to respondents, but was recorded if the respondent would not give an answer after interviewer prompting. Independent variables include job satisfaction, economic hardship, presence of children, age of children, and changes in marital status.

Analytic Strategy

In order to explore both initial levels of uncertainty regarding parenthood, as well as change over time, I will employ a mixed effects model to predict uncertainty about parenthood (Allison, 2009). Given the use of a planned missing design in the NSFB, I will impute the dataset using the multiple imputation of chained equations package in Stata (Acock, 2005; Royston, 2005). I will use various mediators in the model to explore hypothesized associations between work and family structure and uncertainty over parenting. In addition to demographics such as age and income, I will explore the impact of marital age, the age of children born before the first survey, and job satisfaction and importance of leisure on changes in uncertainty regarding parenthood. I will test for interactions effects with terms for subfecundity and helpseeking for infertility to see if the presence of fertility related issue may be important to a woman's certainty of her own valuation of parenthood.

Preliminary Results

Models without control variables (not shown) have yielded interesting results. Neither higher rates of job satisfaction in the initial wave nor subsequent increases over time have any significant relationship with the uncertainty of parenthood for women who are not classified as subfecund. Women with fertility issues, however, have a significantly higher initial uncertainty, though changes in job satisfaction are insignificant. This may be evidence of a difference with women who are certain about not wanting to parent, who did not have any significant association between importance of parenthood and importance of work in past research from this data (McQuillan et al, 2008). The importance of leisure was not a significant predictor for women regardless of fecundity status. Marriage is a significant predictor of holding less initial uncertainty regarding parenthood, with a possible interaction effect for fecundity leading to even lower rates of uncertainty, and change in marital status is not related to change in this construct. Future work will explore whether the respondent's report of partner's importance of parenthood is a mediating factor here. Finally, as shown in Table 1, having a child prior to the survey was negatively related to uncertainty over parenthood, and having a first child between interviews also alleviated uncertainty for women who are not struggling with subfecundity. While initially having a child yielded similar results for subfecund women, having a child between interviews did not significantly change uncertainty regarding the importance of parenthood. Future work will see if the addition of certain help-seeking variables and scales related to fertility distress and incidence of depression may yield results more consistent with hypotheses regarding infertility and uncertainty about motherhood.

Table 1. Preliminary Findings for the Impact of Having a Child on Initial and Subsequent Uncertainty Over the Importance of Motherhood. (N=2,012)

	Model 1: Not Subfecund		Model 2: Subfecund	
Has a kid in first wave	-0.06***	-0.05***	-0.06***	-0.04***
	(0.01)	(0.01)	(0.01)	(0.01)
Has first child between waves	-0.06*	-0.07*	-0.03	-0.04
	(0.03)	(0.03)	(0.04)	(0.04)
Wave of Survey	0.03**	0.03**	0.01	0.00
	(0.01)	(0.01)	(0.01)	(0.01)
Married		-0.03*		-0.02*
		(0.01)		(0.01)
Family Income		0.00		0.00
		(0.00)		(0.00)
Employment status (Full-time is				
Reference)				
Part-time		0.01		0.00
		(0.01)		(0.01)
Unemployed		0.05^{t}		-0.01
		(0.03)		(0.02)
Keeps house		0.00		0.00
		(0.01)		(0.01)
Other		0.01		-0.02
		(0.02)		(0.01)
Race (white is reference)				
Black		0.00		-0.01
		(0.01)		(0.01)
Hispanic		0.00		0.00
		(0.01)		(0.01)
Other race		0.00		0.03
		(0.02)		(0.02)
Education		0.00		0.00
		(0.00)		(0.00)
Age		0.00		0.00
		(0.00)		(0.00)
Constant	0.04**	0.02	0.07**	0.06*
	(0.01)	(0.03)	(0.01)	(0.03)

Note: Standard errors (SE) in parentheses. $^{t}p < .06. *p < .05. **p < .01. ***p < .001.$

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