Rapid Repeat Birth:

Meaning-Making among Multiparous Adolescent Mothers

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Abstract

This study examined initial interpretations of, and transitions to, motherhood among adolescents who have experienced rapid repeat births. The primary sample was 19 adolescent mothers, enrolled in a universal home visiting program, who gave birth to a second child within 24 months of their initial birth. Findings suggest a strong presence of positive interpretations of motherhood and its effects on the life trajectories of the adolescents. Although significant heterogeneity existed, four modal narratives emerged, nesting the subjective understandings of motherhood within contexts of stability and social support. Additionally, in a comparison between rapid repeat birth mothers and non-rapid repeat birth mothers in a larger adolescent sample, significant differences in rates of maltreatment history, intimate partner relationship status, and receipt of home visitation emerged. Adolescent mothers who had experienced rapid repeat birth had significantly higher rates of maltreatment histories that mothers who did not have rapid repeat births. Rapid repeat birth mothers received significantly fewer home visits, and rapid repeat birth mothers were more likely to be involved with the father of their children.

Chapter One: Introduction

The overall teen birth rate in the United States has been in decline for 20 years, dropping from around 60 births per 1,000 females in 1990 to a historic low of 34.2 births per 1,000 adolescent females in 2010 (Martin et al., 2012). Teen birth rates declined in all age, and racial and ethnic groups; still, state and racial disparities persist within teen birth rates. In 2010, the teen birth rate per 1,000 adolescent females was 23.5 for white, non-Hispanic teenagers, 51.5 for Black, non-Hispanic teens, and 55.7 for adolescents of Hispanic origin (Hamilton & Ventura, 2012). The birth rate varies across states, ranging from the lowest rate of 15.7 births per 1,000 adolescent females in New Hampshire, to 55.0 births per 1,000 adolescent females in Mississippi (Hamilton & Ventura, 2012). The 2010 rate in Massachusetts, 17.2 births per 1,000 adolescent females, was the second lowest in the nation (Martin et al., 2012). This is illustrative of a long-standing trend of lower teen birth rates occurring in Northeast and Midwestern states and higher rates being found in the South and Southwest (Hamilton & Ventura, 2012).

Disparities also exist along educational and economic lines. The teen birth rate among teenagers who live in single parent homes, those who have mothers who did not complete high school, and those living below 200% of the Federal poverty level are higher than among those who do not carry these risk factors (Manlove, 2011). For example, the probability that a teen will have a first birth by age 20 is 12% among those teens whose mother attended some college, while the probability is 37% for teens who have a mother with no high school diploma or GED (Manlove, 2011). As national rates of poverty and single parent households continue to increase, these vulnerabilities present an ongoing concern (Manlove, 2011).

Despite decreasing rates of teen pregnancy overall, *repeat* teen births have remained a high proportion of teen births, decreasing only from 25% of all teen births in 1990 to 20% in 2010 (Manlove, 2011). Within this, 15% of teen births among White adolescents are repeat births, while 20% and 21% of teen births are repeat among Black and Hispanic teens, respectively (Manlove, 2011). Compared to first births, repeat teen births have been shown to result in higher rates of physical, educational, and economic risk, both for the children and the mothers (Manlove, 2011).

While involvement in education is a proven protective factor against repeat teen birth (Klerman, 2004), the rate of diploma attainment among teen mothers is significantly lower than among adolescent females who have not given birth (Manlove, 2011). Disengagement from school is therefore associated with risk of repeat pregnancy, although the causal pathway, or the direction of potential effect, between school failure and birth trajectory cannot be determined.

Teen mothers who have more than one birth during adolescence are more likely to be cohabitating with a partner (Manlove, 2011). Other correlates of repeat birth include having intended the first birth, being married, or having a partner who wanted the first birth to occur (Boardman, Allsworth, Phipps, & Lapane, 2006). Associations between repeat birth and family-building variables, such as cohabitation with a partner, as well as the problematic definitions of constructs such as pregnancy intention, complicate the assumption that all adolescent births are accidents or regretted (Herrman, 2006).

Among programs designed to reduce the teen birth rate, some aim to decrease rates of initial pregnancy while others seek specifically to affect rates of repeat pregnancy or birth. Intervention modalities geared toward delaying first birth range from increasing

use of contraception to promoting life-goals and opportunities incompatible with early childbearing. Programs such as these are delivered in schools, community settings, or more specific localities (such as sexual health clinics) where high-risk populations may be targeted. Of these programs, there have been a number of notable successes, such as decreased rates of vaginal intercourse among adolescents who received comprehensive sex education (Kohler, Manhart, & Lafferty, 2008).

Programs aimed at affecting *repeat birth* have an easier time locating the target population, but overall, effectiveness has proven harder to attain. Evaluations of programs utilizing a comparison group to measure repeat birth outcomes have revealed mixed rates of effectiveness (Klerman, 2004; Corcoran & Pillai, 2007). Programs that promote the use of long-acting contraceptives following the index birth have found that to be the strongest and most consistent correlate to lower rates of repeat birth (Omar et al., 2008). Still, discrepancies between availability and use of contraceptives have led to an emphasis on programming that is comprehensive and multi-disciplinary, addressing the social, emotional, practical, and sexual needs of young mothers.

Home visiting, which is a program model or program component that provides one-on-one support to adolescent mothers, has been demonstrated in some instances to be effective at lowering rates of repeat birth (Milne, & Glasier, 2008). As opposed to clinic-based services, home visiting is seen to be more integrated into the life of the young mother, more intimate and, because of this, better positioned to affect behavior (Olds, 2007). Home visiting programs have reliably demonstrated effectiveness at improving child health and academic achievement, and maternal life outcomes, such as higher rates of work force participation and lower rates of welfare dependence (Olds, 2007).

However, the effects of home visiting on the number and spacing of subsequent births among teenage moms is equivocal at best (Milne & Glasier, 2008; Corcoran & Pillai, 2007).

The data for this thesis come from the Massachusetts Healthy Families Evaluation (MHFE-2) – a second cohort, randomized control trial evaluating a comprehensive home visiting program for first-time adolescent mothers in the state of Massachusetts. Healthy Families Massachusetts (HFM) is a voluntary home visiting program for mothers who are under age 21 at the time of their first birth; the program intends to improve the well-being and parenting skills of the adolescent participants and to optimize the health and life outcomes of their young children.

One of the core, stated goal of HFM is to prevent repeat pregnancies during the period of program involvement. However, the HFM model allows for the creation of an Individualized Family Service Plan (IFSP), with personal goals and priorities co-created by the adolescent mother and her home visitor. During the first phase of the HFM Evaluation (MHFE-1), only 4% of participants included prevention of subsequent pregnancy as an individual goal on the IFSPs (Jacobs, Easterbrooks, Brady, & Mistry, 2005).

Although the design of MHFE-1 precluded making a definitive statement about HFM's effectiveness in preventing repeat birth among HFM participants, in the evaluation's final report Jacobs et al. (2005) suggest that home visiting programs such as HFM may well lack the capacity to broadly influence so personal a decision as the number and spacing of births to adolescents. This is important, considering the documented risks of rapid repeat adolescent birth and the persistence of the repeat teen

birth rate in the U.S.

The current analysis makes use of the detailed life histories in a small sample of adolescent mothers, enrolled in MHFE-2, who experienced rapid repeat births, to investigate the interpretive stories these mothers tell themselves as they make meaning of their decisions about, and responses to, their adolescent births. Through a person-centered analysis, this study will look for the presence of positive effects of a first birth that may be reinforcing of subsequent childbearing. By connecting mothers' interpretations of motherhood within contexts of support, this analysis attempts to push back against common parlance that repeat births among adolescents are always unwanted and deleterious to outcomes, while also presenting a more nuanced picture of risk and potential points of intervention.

Using data from MHFE-2, the research questions that guide this study are:

1. Is there evidence of potentially reinforcing sequelae to early childbearing in the interpretive stories told by the mothers in our sample? Specifically, to what extent, if at all, did our sample experience positive changes as a result of motherhood in the following domains:
    - Motivation
    - Stability
    - Competence in a new identity?
2. What demographic or service utilization characteristics, if any, distinguish mothers who experience rapid repeat births from those who do not?

It is the intent of this thesis to go beyond the often-reported antecedents and consequences of repeat adolescent birth, to present personal interpretations of

motherhood. Analyses of the psychological understandings of motherhood among rapid repeat birth mothers and contexts of support will help further our understanding of influences that may be contributing to this phenomenon. By developing a richer picture of the experience of motherhood among adolescents who have multiple closely-spaced births, researchers, program developers, and policy makers concerned about this issue can better understand how home visiting and other intervention programs do and do not effect change in this goal area.

This thesis presents a review of the literature on the risks of adolescent and repeat adolescent birth, programs designed to affect teen birth rates, and subjective and contextual influences that may be prohibiting programmatic effects. It demonstrates the intractability of repeat adolescent pregnancy, and the need to understand the issue through descriptive research.

This paper then presents the results of an exploratory study of a small group of adolescent mothers who experienced rapid repeat births during enrollment in a home visiting program. This study examines their interpretations of motherhood, identifying potentially reinforcing sequelae to the initial pregnancies and births of these mothers and positioning these understandings within social contexts. Additionally, a larger population of rapid repeat birth mothers is quantitatively compared to a group of uniparous teen mothers according to select variables and, for those mothers enrolled in the home visiting program, number of visits received.

Through a mixed-methods approach, this thesis is able to situate multiparous adolescent mothers in both a contextual and psychological context. It is hoped that a richer understanding of the experience and interpretations of motherhood among this

population will contribute an overlooked dimension to the common assumptions and approaches of research and programs designed to serve them.

Chapter Two: Review of Literature

Three areas of research are addressed in this literature review; they include: 1) the risks associated with adolescent childbirth and repeat birth; 2) intervention modalities that have been applied to address adolescent pregnancy, childbirth, and repeat birth; and 3) the characteristics of repeat adolescent birth that make it a particularly intractable social issue. Assumptions of unwantedness and increased-risk pervade the literature on rapid repeat birth adolescents; however, programs designed to affect this population face significant challenges and success has been equivocal. The need for a rethinking both of the role that motherhood plays in the psychologies of rapid repeat birth mothers and the contextual factors that influence outcomes is evident in literature citing potentially positive effects of early and even repeat childbearing.

Risks Associated with Adolescent Childbirth, and with Repeat Birth

Risks associated with adolescent birth affect both mother and children. Adolescent childbirth and repeat birth have been associated with cycles of poverty, unemployment, lack of educational attainment, and health risks (Jacobs et al., 2005). The causal pathway between young age at childbirth and negative outcomes for mother and child, however, have been questioned in some research, citing the importance of environmental and contextual factors in determining outcomes (Ruedinger & Cox, 2012).

Risks of adolescent childbirth for the mother. Maternal risks associated with adolescent childbirth have been well documented and extend across the domains of physical health, psychosocial wellbeing, educational attainment, and financial stability. Physically, pregnant adolescents experience higher rates of anemia, urinary tract infections, and pregnancy-induced hypertension than do older pregnant women (Koniak-

Griffin, & Turner-Pluta, 2001). Children born to adolescent mothers are more likely to be born preterm or with low birth weight than are children born to older mothers (Klein, 2005). For example, in one California study of over 54,000 births, 20 out of every 1000 births born to teen mothers were preterm, while only 10 per 1000 births were preterm among mothers aged 20-35 (Koniak-Griffin, & Turner-Pluta, 2001).

Although it has been argued that poor physical outcomes for both adolescent mothers and their infants result from biological characteristics, such as the immaturity of the female reproductive system, it is more likely that a combination of sociocultural, biological, and lifestyle factors are at play (Roth, Hendrickson, Schilling, & Stowell, 1998).

A study of over 9,000 adult women in California retrospectively compared scores on an Adverse Childhood Experiences (ACE) index with whether or not a woman experienced an adolescent pregnancy along with a list of poor adult outcomes (Hillis, et al., 2004). Their analysis found that an individual's risk of becoming pregnant as an adolescent increased in relation to her ACE score. They also found that adult consequences, including family, financial, job, and emotional problems, were unrelated to adolescent pregnancy in the absence of at least minimal adverse childhood experiences. Moreover, a woman's ACE score was associated with increased rate of fetal death following her first pregnancy, while maternal age alone was not (Hillis et al., 2004).

Psychosocially, teenage mothers tend to experience emotional and social consequences at rates higher than their non-childbearing peers and than older mothers. Rates of depression are higher among adolescent mothers than older mothers, for instance

(Jacobs et al., 2005). One study of over 1,000 young adolescent females found an association between sexual activity and psychosocial adaptation, such that sexually active adolescent girls had lower average scores on four measures of psychosocial adaptation than did their sexually inactive peers (Martin et al., 2005). Another noted effect of adolescent childbearing is the lower rate of high school diploma attainment among adolescent mothers. A Child Trends report from 2010 calculated a high school diploma achievement rate of close to 90% for adolescent females who were not mothers (Perper, Peterson, & Manlove, 2010). That figure for teenage moms is 51%, with roughly one in two teenage mothers in the study completing high school by age 22 (Perper et al., 2010). There are varying accounts in the literature, however, as to whether childbearing disrupts high school careers, or whether school disengagement precedes and increases the likelihood of adolescent pregnancy (Manlove, 1998; Mahler, 1999).

Studies in the United States that view teenage childbearing as a social problem often cite the added burden of opportunity and social costs through welfare payments and lost potential earnings (Bonell, 2004). A 2008 calculation put the average annual cost of teen childbearing for U.S. taxpayers at $1,445 per teenage mother per year (Maynard & Hoffman, 2008). This estimate included lower tax revenue from the lower-earning teenage parents. When societal costs are calculated, including public healthcare costs, expected incarceration costs, and other social expenditures, the per-teen birth estimate is over $5,000 per year (Maynard, & Hoffman, 2008). These estimates, however, assume that an adolescent birth precipitates a certain economic trajectory that would not be followed were childbearing delayed past adolescence.

One study compared the outcomes of women who had become parents as adolescents with young women whose adolescent pregnancies had ended in miscarriage (Hoffman, 2008). The rationale behind this study design was to compare two groups who were on similar life trajectories, except for the relatively random outcomes of spontaneous abortion versus live birth. Hoffman (2008) found teen birth to be negatively associated with the probability of an adolescent female completing high school, but labor-market earnings were not worse, over 15 years, than among those women who were pregnant as adolescents but did not have a teenage birth. In terms of welfare payments, teenage mothers initially received more welfare payments than non-childbearing teens, but over time, as the teenagers reached their mid-20s, this relationship was reversed, with teen mothers receiving less welfare dollars than the comparison group (Hoffman, 2008).

Risks of adolescent pregnancy for the child. Risks faced by a child of an adolescent mother extend from infant mortality to likelihood of school failure and intergenerational adolescent pregnancy. While the literature does not suggest a causal link between maternal age and rates of child maltreatment, risk factors for child abuse and neglect, such as maternal depression, poverty, and single-parent households, are often present in situations where the mother is an adolescent (Koniak-Griffin and Turner-Pluta, 2001). Rates of neglect, the most common form of child maltreatment, have been associated with maternal age; Dym Bartlett (2012) found younger maternal age to be associated with higher odds of neglect.

George, Harden, and Lee (2008) found that young teen mothers are more than twice as likely to have a reported case of child abuse or neglect than are mothers aged 20-21 at time of first birth. Tamis-Lemonda, Shannon, and Spellman (2002) report that

teenage mothers have less adept parenting skills, such as inappropriate expectations for child development, and more punitive, less responsive styles of parenting than do older mothers.

Even after controlling for background characteristics, Manlove, Terry-Humen, Mincieli, and Moore (2008) found cognitive performance deficits among kindergarteners born to adolescent mothers. The same study looked at children's later outcomes and found that adolescent cognitive performance and high school completion rates were largely equal between children of teenage mothers and children of mothers aged 20-21, when family characteristics were controlled for. Children born to mothers over age 22, however, showed a considerable advantage both on cognitive tests and high school completion rates compared to the adolescents born to teenage mothers and those born to mothers aged 20-21 years (Manlove et al., 2008). Still, Manlove et al. (2008) join other researchers in problematizing a simple association between maternal age and negative child outcomes, without the consideration of environmental and familial characteristics, such as maternal education, socioeconomic status, and stability of family composition (Nord, Moore, Morrison, Brown, & Myers, 1992; Ruedinger & Cox, 2012).

Significantly, children born to mothers who are 18-19 years old at time of first birth are more likely to have an adolescent birth themselves than are children born to mothers who were 20-21 years old at time of first birth, after controlling for background characteristics (Manlove et al., 2008; Pogarsky, Thornberry, & Lizotte, 2006). The research of Hoffman and Scher (2008) corroborate this conclusion, finding that a daughter's risk of having a teenage birth would fall by almost 60% if her mother had delayed childbearing until her early 20s. Intergenerational teenage childbearing could

result from a normative culture of young childbirth in communities where an early transition to adulthood, often through childbirth, is a tacit expectation (Burton, Obeidallah, & Allison, 1996).

Risks associated with repeat pregnancy and birth. The risks of young childbirth are formidable and they are exacerbated when a woman has multiple births during her teen years (Klein, 2007; Jacobs, Easterbrooks, Brady, & Mistry, 2005; Tamis-Lemonda et al., 2002; El-Kamary et al., 2004). While the rate of teen pregnancy in the U.S. has been declining, the rate of repeat teen births remains stubbornly high (Manlove, 2011). Teen births that are of second and later parity have higher rates of low birth weight, particularly if there is less than a year interim between births (Nord, et al., 1992). Rates of infant mortality were found, in cross-sectional analyses, to be higher among repeat adolescent births than among first adolescent births (Klerman, 2006), and Partington, Steber, Blair, and Cisler (2009) found higher rates of preterm birth among second adolescent births than among first.

Adolescent mothers who have multiple children within a short period of time are less likely to complete high school or attain economic stability (Klerman, 2004). They have been found to be less likely to be in school or working, and more likely to be reliant on welfare (Klerman, 2004). Also, teenage mothers have been found to initiate prenatal care later in the term of a second pregnancy than in an initial pregnancy (Klerman, 2004).

Lipman, Georgiades, and Boyle (2011) found deleterious educational effects among children born to prior teen mothers, meaning children of later parities who were born to a mother who initiated childbirth in adolescence, when compared to children born to a woman who had her first birth as an adult. A population-based study in Canada by

Jutte et al. (2010) found that children born to both teen mothers and prior teen mothers were overrepresented in rates of infant and childhood death, school failure, hospitalization, foster care placement, and welfare receipt.

In a national study of children born to adolescent mothers, Levine, Pollack, and Comfort (2001) found negative child outcomes to be largely unassociated with maternal age when background characteristics were taken into account. Negative outcomes were found, however, among multiparous children of adolescent mothers and among children of teenage mothers living in a multi-child household. The heightened rates of negative outcomes observed in subsequent children of teenage mothers highlight the risk of repeat adolescent birth for children. Along with the consistency of repeat birth rates despite decreases in teenage childbirth overall, these risk factors lead to continued policy and program attention to the issue of repeat adolescent birth (Klerman, 2004).

The confounding factors of maternal history, SES, and normative culture problematize a simple association, however, between maternal age at childbirth and negative outcomes. A more nuanced look at varying birth trajectories, external support networks, and outcomes may show that teenage birth, and even repeat birth, are not always predictive of deleterious outcomes.

Programming Approaches and Success Rates

Programs designed to affect teen birth rates in the US range from universal sexual education, to the post-partum administration of long-acting contraceptives for teenagers who have already become parents. Healthy Families Massachusetts (HFM), a voluntary home visiting program for all first time mothers under the age of 21 years – and the data source for the current study – has positioned itself in this field as a potential actor against

rates of repeat teen birth. Rates of efficacy among all programs designed to affect teen birth rates are mixed (see Barnet et al., 2009; Gray, Sheeder, O'Brien, & Stevens-Simon, 2006; Santelli, Lindberg, Finer, & Singh, 2007). Following is a description of some notable program modalities and their documented effects.

Programs directed toward decreasing rates of adolescent pregnancy. Attempts to affect the teenage birth rate, which has fallen substantially in the past 20 years, utilize various entry points of support and intervention, from sex education and the provision of contraceptives, to youth development programs. Kirby (2007) describes three categories of programs geared toward adolescent sexual health: those with a focus on sexual factors (including comprehensive sex education); those that focus on nonsexual, protective factors; and those that include both sexual and nonsexual components.

There is some consensus that declines in the national teen birth rate are due primarily to increased usage of contraceptives and secondarily to reduced rates of teenage sexual activity (Kearney & Levine, 2012; Santelli et al., 2007). Federal policies and federally funded programs aimed at affecting rates of adolescent pregnancy encourage abstinence and contraceptive use, particularly combined method contraception and condoms (Brindis, 2006). Still, heterogeneous political contexts and recognition of the varying circumstances surrounding teenage sexual activity and pregnancy lead to a wide array of intervention modalities.

Among sex education curricula, the two most common forms are abstinence-only programs and comprehensive programs. Comprehensive sex education programs are so-named because they include information about safe sex practices, contraception, and

sexually transmitted diseases, whereas abstinence-only programs focus solely on arguments for delaying sex until marriage and strategies for resisting urges or appeals to engage in sexual activity during adolescence (Kohler, et al., 2008).

Prior to the Obama administration, federal funding was available solely to abstinence-only sex education programs, with 50 million federal dollars allocated toward Title V, Section 510 abstinence education programs every year (Trenholm et al., 2007). A longitudinal, experimental design study of Title V, Section 510 programs at four sites across the U.S. revealed no differences between youth who received the programming and the control group in age of onset of sexual activity, number of sexual partners, or likelihood of unprotected sex (Trenholm, et al., 2007). Comprehensive sex education programs, on the other hand, have been found to be effective, in some instances, at delaying the onset of sexual activity among young people, reducing the frequency of sex among adolescents, reducing adolescents' number of sexual partners, and increasing use of condoms and contraceptives (Kohler et al., 2008).

Increased availability of more effective, modern forms of contraception is seen as the primary contributor to declining teen birth rates (Santelli et al., 2007). Nevertheless, 2008 data show that one-third of teenagers in the United States reported receiving no formal instruction about contraception. One study reported that over 40% of 18-19 year olds knew little or nothing about condoms, and over 70% reported knowing little to nothing about the birth control pill (Gutmacher Institute, 2012). Even when quality sex education is provided, adolescents vary in their responsiveness to the information and their willingness to let it affect their behavior.

A study that measured adolescents' knowledge and intentions before and after a comprehensive sex education curriculum found that family stability, religious affiliation, and academic achievement were linked to increased desires to postpone sexual activity until after high school graduation (Sulak, Herbelin, Fix, & Kuehl, 2006). Similarly, Klein (2005) reports that predictors of early initiation of adolescent sexual intercourse include lack of parental nurturing, absence of school or career goals, and substance use. Conversely, stable family environment, higher family income, and strong parental relationships are correlated with delays in the initiation of sexual activity among adolescents (Klein, 2005). Associated variables and antecedents to adolescent sexual behavior have led some interventions to focus on possibly mediating opportunities, such as school completion and extra-curricular involvement, in an attempt to affect teen pregnancy rates.

Programs that focus on protective factors include youth development programs, which provide structured activities for adolescents and aim to keep adolescents involved in school and community in an effort to delay sexual activity and childbearing. One study found that service learning, which combines classroom instruction with community involvement, was effective in delaying the initiation of sexual activity in middle school students (Kirby, 2007).

Some successful programs aimed at reducing adolescent pregnancies combine sex education and contraception provision with some sort of youth development, including educational assistance, job training, community involvement opportunities, or counseling (Klein, 2005). In a systematic review of more than 150 research studies of programs directed toward improving adolescent reproductive health, Manlove et al. (2001) found

few experimentally evaluated programs that were demonstrated to be effective. The ones that did make a measureable impact combined sex instruction with life-skills and opportunities, and/or invested in quality early childhood programming.

Programs geared toward preventing initial teen birth have the additional challenge of streamlining intervention efforts toward adolescent populations most at risk. By zeroing in on youth who are already facing economic, familial, or social circumstances that have been associated in previous research with high rates of teen pregnancy, interventions can more efficiently mete out resources and target their curricula (Holcombe, Peterson, & Manlove, 2009). Still, vulnerable populations are not always easy to identify or effectively reach (Ruedinger, & Cox, 2012).

Programs directed toward decreasing rates of repeat adolescent birth. When designing an intervention to reduce rates of repeat birth, the target population, namely teenage parents, is much easier to identify. Points of contact with adolescent mothers, such as prenatal health service centers, are often the recruitment and service delivery sites for these interventions. Interventions range from contraceptive administration to intensive counseling and home visiting programs. In this section we will review pregnancy prevention programs geared toward parenting adolescents and some of the results they have achieved.

The continuation of education among adolescent mothers has been shown to moderate the negative associations between maternal age and quality of home environment (Sullivan et al., 2011). Nevertheless, Stevens-Simon, Kelly, and Kulick (2001) found that educational coaching, as well as frequent clinic visits, did not affect rates of repeat pregnancy within two years of an adolescent's first birth. The focus of this

study was an intervention comprised of healthcare, job and education counseling, and contraception provision, that used a centralized, mother-child service delivery method. The adolescent mothers who did not get pregnant again within two years postpartum attended on average as many clinic visits as those who did experience a subsequent pregnancy. School attendance was also not associated with likelihood of rapid repeat birth (subsequent birth within two years of index birth) when preexisting risk factors were controlled for. However, use of contraception, particularly the long-acting Norplant implant, was a strong correlate to no pregnancy two years after initial birth. While 62% of the sample that used no birth control postpartum experienced a rapid repeat pregnancy, only 11% of those who used Norplant conceived again within two years of the initial pregnancy outcome (Stevens-Simon et al., 2001).

Norplant is no longer available in the United States; another subdermal contraceptive was the focus of a study that compared repeat birth rates among women who received a contraceptive implant immediately postpartum with those who used other or no methods of birth control (Tocce, Sheeder, & Teal, 2012). This 12-month study found a repeat pregnancy rate of 18.6% among the control group and 2.6% among those mothers who received the contraceptive implant. This study was innovative in that the prenatal care and delivery center offered the contraceptive implant on the day of index (or initial) delivery. While some proportion of mothers elected to remove the implant within one year of index delivery, over 99% of the implant group maintained consistent use of one of more forms of contraception for the majority of the first postpartum year; only 54.9% of the control group did so (Tocce et al., 2012).

Beyond the provision of contraception, many intervention programs attempt to affect rates of rapid repeat birth behaviorally. The home visiting model, in which a professional or para-professional offers services to an adolescent mother in her home or other safe, non-clinical setting, is one programming model that has shown positive results. Types of services rendered, intensity or frequency of contact, and profile of service provider vary among programs. Outcomes, in terms of repeat birth rates, also vary (Klerman, 2004), although this service model has shown to be effective in some contexts.

One program that demonstrated positive results was a home-visiting mentorship program targeted toward low-income, black adolescent mothers (Black et al., 2006). Services in this intervention, titled the Three Generation Study, were provided by college-educated black women who served as “big sisters” to the adolescent mothers, coaching them on relationships with both their mothers and their infants, offering support for educational and personal goals, and bringing condoms to every visit.

A randomized control trial of this program demonstrated effectiveness in preventing repeat births for up to two years after the onset of services. Repeat births occurred among the control group at a rate 2.5 times higher than that among the mothers in the intervention group (Black et al., 2006). Among mothers in the intervention group, effects on repeat birth rates grew proportionately with the number of home visits a mother received; none of the mothers who completed more than eight visits with their service provider experienced a rapid repeat birth. An interesting finding to emerge from the Three Generation Study was evidence of more positive life events and high reports of self-esteem among mothers who had a rapid second birth (Black et al., 2006). Although these births on the whole were not overtly intended, they seemed to have been viewed

positively by the mothers and, as evidenced by contraceptive non-use, knowingly not prevented.

Another randomized control trial measured the effects of a computer-assisted motivational intervention (CAMI), where one intervention group of adolescent mothers received bi-weekly or monthly home visitation, parent training, and case management; a second intervention group received only quarterly counseling sessions in the home; and a third control group did not receive home-visiting or CAMI services at all (Barnet et al., 2009). Compared to the control group, the intervention group that received both the quarterly CAMI sessions and the more frequent home visiting services experienced repeat births within 24 months at a significantly lower rate (25% versus 13.8%). The group that received only the quarterly motivation groups did not differ significantly from the control group in rate of rapid repeat birth (Barnet et al., 2009). This study highlights the importance of motivation in predicting the effectiveness of any pregnancy prevention program. Teens in this study often reported non-use of contraceptives, even while maintaining that they did not desire a subsequent pregnancy. The CAMI technology, which provided a computer-generated assessment of pregnancy risk, served as a valuable tool in sparking conversations about intentions and actions with the program participants.

Less successful was a federally funded Healthy Start program, administered to an economically disadvantaged population of adolescent mothers in Hillsborough County, Florida (Salihu et al., 2011). A study of the ten-year initiative, which also contained a selective preconception intervention component for all non-parenting girls and boys aged 10-19 years, was found to successfully delay or prevent initial adolescent birth and yet had no effect on rates of repeat birth. Salihu et al. (2011) suggest that the lack of success

around repeat births was a result of the uncategorized etiology of the repeat birth phenomenon. While some researchers link repeat birth in with other sexual risk behaviors, others distinguish repeat births as planned, family-building decisions, not easily affected by intervention programs (Black et al., 2006; Boardman et al., 2006).

A health-promoting home visiting program, which has demonstrated positive outcomes among first-time adolescent mothers and their children, is the Nurse-Family Partnership (NFP) (see Olds 2002; Olds et al., 2004; Eckenrode, 2010; Kitzman, 2010). For over 30 years this program has worked to compile a body of evidence around the effectiveness of the professional home visiting model. The three broad goals of NFP include: optimizing prenatal health-related behaviors; improving child health and development through parent training; and improving early parental life-course development by engaging mothers in goal-setting and achievement, increasing father-involvement, and encouraging prevention of rapid subsequent pregnancies (Olds, 2002).

The NFP model is grounded in social-ecological, self-efficacy, and attachment theoretical frameworks. Although the overarching goal of the nurse-family partnership is to improve the long-term outcomes of the children of adolescent mothers, the spacing of births among this population is targeted because it is seen as affecting both the parenting and economic success of these young families (Olds, 2002). Self-efficacy theory informs the curriculum by explicitly working with young mothers to determine goals for themselves around family planning, and work to achieve or maintain these goals. Nurses are employed as the primary service providers in this program model because of both their expertise around pre- and post-natal issues and also because of their reputation as being approachable, caring, and honest (Olds, 2002).

Multiple randomized trials of NFP have demonstrated positive results of the program in at least two of the target areas, competent parenting skills and maternal life outcomes. Of specific interest to this paper, a study in Memphis (N=1135) showed that women receiving home visits were less likely to experience a subsequent pregnancy (36% versus 47%) and less likely to have a second live birth (22% versus 31%) than mothers in the comparison group (Olds, 2002). However, a later randomized control trial in Denver measured the effects of NFP when compared with both home visiting by paraprofessionals with no advanced degree, and a control group that did not receive home visits. This study found no statistically significant differences in rates of subsequent pregnancies among either intervention group compared to the comparison group (Olds et al., 2004).

In an attempt to explain the lack of success around rates of subsequent childbearing, Gray et al. (2006) looked more closely at the content of the home visits in the Denver NFP experiment. They found that while 88.4% of participants reported using contraception at some point during the two-year study period, only 20% of participants created a prenatal plan for postpartum contraceptive use. None of the participants who experienced a repeat birth within the 24-month study period had created a contraceptive plan prenatally. Assistance with contraception or short-term goal setting occurred at 30% of visits. Assistance around long-term goal setting and strategies was recorded as having been given at an even lower rate (10% of visits). Gray et al. (2006) conclude that the relative lack of long-term goal setting may have contributed to repeat birth rates. Long-term goals, defined here as a 4-5 year contraceptive and work-study plan, may signify a serious desire to avoid subsequent pregnancy and create a meaningful transition to

adulthood outside of childbearing (Gray et al., 2006). Gray et al. (2006) suggest that nurse home visitors should do more to discuss contraceptive options and stress the importance of child spacing in order to achieve long-term goals incompatible with repeat birth. This conclusion importantly suggests an association, supported by extant research, between childbirth and an intended transition to adulthood.

Healthy Families Massachusetts. The data used in this study are drawn from the second phase evaluation (MHFE-2) of Healthy Families Massachusetts (HFM) (Goldberg, Jacobs, Mistry, & Easterbrooks, 2010). HFM is a voluntary newborn home visiting program offered universally to all first-time pregnant youth, ages 20 and younger in the state of Massachusetts. The program model is adapted from that of Healthy Families America (HFA), and includes parenting support, both in group settings and through individual home visits, and information and service referrals prenatally until the child's third birthday. Services are provided by paraprofessionals in the community. Frequency of home visiting is determined according to an individually assigned service level, denoting whether a participant will receive weekly, biweekly, monthly, or quarterly visits. This determination is made according to the participants' needs and preferences (Jocobs et al., 2005).

At the time of the first phase of evaluation, HFM had four program goals, one of which was the prevention of repeat pregnancies in the teen years[1]. The final evaluation report for the first phase of the Massachusetts Healthy Families Evaluation (MHFE-1) was published in 2005 (Jacobs et al., 2005). That evaluation utilized a quasi-experimental design, relying on extant sources for comparison data. Although the majority of

[1] The goal to decrease repeat *pregnancies* is operationalized by MHFE as decreasing repeat *births*, because of the difficulty of validating pregnancy reports.

participants expressed satisfaction with the HFM program, measurable program outcomes were mixed. A large majority of participants (95%) responded positively when asked, 12-months after initiation of program services, about their progress toward individual goals. However, almost as many mothers (92%) reported, 12-months after program initiation, that the Healthy Families program had had no effect on their plans to have more children (Jacobs et al., 2005). Each participant sets individual family goals with their home visitor. Only 4% of participants set goals that were related to the prevention of repeat births (Jacobs et al., 2005).

Two years after the birth of the index child, around 14% of participant mothers in HFM had experienced a repeat birth[2]. This number is not easily contextualized, as this study did not contain a comparison group per se, but rather relied on comparison standards. This rate compares favorably to both national averages of repeat teen births (Martin et al., 2012; Manlove, 2011) and to the NFP study, which documented a 28% repeat birth rate at two years (Gray et al., 2006). Caution must be taken in comparing this rate, however, as the demographics of participants vary across these studies.

Similar to the analysis of the NFP Denver study, the MHFE-1 report acknowledges that the extent to which home visitors encourage child spacing likely varies across programs and within the HFM program. However, program-related moderators, such as duration and intensity of services, were not statistically associated with repeat births (Jacobs, et al., 2005). Educational attainment, either being in school or having graduated, was found to be negatively associated with having a repeat birth within two years of the index birth. Although race and ethnicity were not associated with

[2] After the MHFE-1 final report was published, several other repeat births were identified in DPH records, so the final rate is somewhat higher than reported in the MHFE-1 Final Report.

experiencing a rapid repeat birth (within two years of the index birth), Hispanic origin was associated with having a rapid repeat birth while still a teenager (Jacobs et al., 2005).

MHFE-1 contained a process study, an outcome study, and an ethnographic study. Its ethnography component collected detailed information on clusters of participants, ten families from each of three defined cultural communities. The purpose of the ethnography was to examine potential cultural moderators of program utilization, participation, and effects (Jacobs, et al., 2005). Community A consisted of primarily working class Puerto Rican families; Community B was made up of African American families in an urban setting; and Community C consisted of European-American families in a former mill-town outside of the Greater Boston area.

The analysis exposed a higher rate of repeat births in Community A. Seven out of the ten mothers in the Puerto Rican community had repeat births; five of those were rapid repeat births (within 2 years of the index birth), while the mother was still a teenager. Comparatively, only two out of the ten participants in both Communities B and C had repeat births and the repeat births in Community C (the European-American group) both occurred more than two years after the index birth (Jacobs, et al., 2005).

The ethnographic study compared the case histories of the seven repeat births in Community A to identify common trajectories. Five of the seven participants appeared to be on a family-building trajectory, characterized by an easy acceptance of motherhood and prioritization of family-establishment over educational goals (Jacobs et al., 2005). These five participants cited extensive experience of teen motherhood both in their extended families and social/support networks. All of the mothers in this subgroup of Community A lived with their newly created nuclear family by the end of the study

period. Three of the five mothers had dropped out of high school, signifying an emphasis on family building over educational advancement. The two other mothers who had repeat births in Community A showed a similar commitment to family building, although lack of familial support and unstable relationships with the babies' fathers distinguish this group from the family-building subset. Because of the normative, and at times positive, tenor of these second pregnancies, the MHFE-1 report questions whether home visiting programs like this one can and ought to affect subsequent birth rates among adolescent mothers (Jacobs et al., 2005).

Programs designed to affect repeat birth rates highlight the importance of determining the etiology, or intentionality behind a teenage mother's subsequent births. The associations between a focus on long-term goal setting and repeat birth rates suggest that subsequent births (Gray, 2006) may be reflective of a larger motivation on the part of the teenage mother to pursue life aspirations in line with or building upon her initial birth. That is, the evidence of a family-building trajectory cannot be overlooked. However, the influence of social support, as seen in the MHFE-1 ethnography (Jacobs et al., 2005), can override individual intentions or goals. It is essential to investigate more closely the trajectories of repeat birth, which may be associated with varying levels of risk.

Psychological and Contextual Dimensions of Adolescent Repeat Birth

Despite some notable successes (Omar et al., 2008), interventions geared toward reducing or preventing repeat births have been implemented with mixed results (El-Kamary et al., 2004; Salihu et al., 2011; Barnet et al., 2009). A possible explanation may be that, given the indeterminate intention of many teenage births, mothers who fail to prevent repeat births may experience reinforcing contextual and psychological effects of

initial early childbirth that influence their future lack of pregnancy prevention behavior. The identification of reinforcing effects of childbirth among mothers who experience rapid repeat birth will better elucidate important contributing influences that are overlooked in quantitative investigations of the antecedents and consequences of teenage childbearing.

Intentionality of adolescent birth and rapid repeat birth. Intervention modalities often assume that adolescent pregnancies, both initial and repeat pregnancies, are predominately unintended (Boardman, et al., 2006). This assumption not only simplistically defines the concept of intention among adolescent mothers and potential mothers; it also belies statistics that show signs of desire and even planning among these young mothers (Klerman, 2004; Black et al., 2006). Intention, as a construct, must be deconstructed in order to reveal cognitive limitations of adolescent long-term planning, and contextual influences that shape an adolescent's prevention of or failure to prevent childbirth.

Herrman (2007) makes an important point about sexual decision-making among adolescents by qualifying the notion of volition. Adolescent brain development, particularly the on-going development of areas responsible for measuring risk and long-term considerations, may mitigate even the most surely "intended" pregnancies. Herrman (2007) points out that while the consequences of using protection during sex are immediate and substantial, the potential risks of unprotected sex are abstract and delayed. This lack of immediate risk could hamper a teenager's ability to make a rational decision and leave her more susceptible to emotional or psychological influences.

Villarruel, Jemmott, Jemmott, and Ronis (2004) use the Theory of Planned Behavior to explore adolescent sexual decision-making in a sample of Spanish-speaking adolescents in the U.S. This theory measures the relationship between intention and sexual behavior more exactly by including feelings of efficacy, subjective norms, beliefs, and attitudes as controls in the analysis. Partner approval significantly predicted recent sexual intercourse, and reported feelings of self-efficacy significantly predicted intentions to use condoms (Villarruel et al., 2004). Their findings underscore the interactions between contextual and psychological influences on behavioral outcomes.

Rosengard et al. (2004) distinguishes between whether an adolescent *intended to become pregnant* and whether she *considered it a likely possibility*. A significant disparity between the two categories confirms the problematic nature of intention as a variable and underscores the importance of deconstructing it as a predictor of rapid repeat pregnancy. In a study of pregnant adolescents in California, Frost and Oslak (1999) divide the intention variable among *intended*, *not intended*, and *don't care*. In their sample, 32% of pregnant adolescents retrospectively reported intending their pregnancy, 43% did not intend it, and 25% reported that they did not care. Other studies distinguish between wantedness and happiness (Rocca et al., 2010a; Rocca, Hubbard, Johnson-Hanks, Padian & Minnis 2010b), and between intention and willingness (Herrman, 2007).

While intention is not useful as a dichotomous indicator, the assumption that no adolescent pregnancy is planned or wanted is also erroneous. Using a predominately Latino sample, Rocca et al. (2010b) found that 73% of *first adolescent pregnancies* occurred to women who had reported definitely not wanting to become pregnant.

However, a study using the National Survey of Family Growth found that 34% of *rapid repeat pregnancies* were intended (Boardman et al., 2006). El-Kamary and colleagues (2004) found an association between intention to have subsequent children and rapid repeat pregnancies, while two national studies found a link between intention to have the index child and likelihood of rapid repeat pregnancy (Boardman et al., 2006; Klerman, 2004).

Attitudes toward childbearing at the individual, familial, and community level, and the psychological effects of motherhood, may be mediating factors between intent and behavior. Psychological sequelae to an initial adolescent birth may be reinforcing of subsequent pregnancies. An investigation, not only of mentions of intentionality, but also of surrounding cultural supports, and the subjective meaning-making of the adolescent mother surrounding her initial childbirth and her experience of motherhood could elucidate potential pathways of reinforcement for rapid repeat birth and help distinguish birth trajectories that carry disparate levels of risk.

Adolescent birth and repeat birth in context. Adolescent pregnancy is often seen in policy discourse as a problem of young women. Although it is impossible to extract a young woman's actions from the influence of her sociocultural context and history (Musick, 1993), the onus of responsibility and volition is overwhelmingly located with the young mother (Rosengard, Phipps, Adler, & Ellen, 2004). This view of early childbirth overlooks elemental points of influence within the social and familial contexts of adolescent mothers. A more complete analysis of teenage pregnancy must take into account the attitudes and contributions of the adolescent fathers (Lohan, Cruise,

O'Halloran, Alderdice & Hyde, 2010), the families of the young mothers, and the socio-cultural context as a whole.

Adolescent pregnancy and birth. Sexual agency, as experienced by an adolescent female, may be an example of the intersection between intentionality and external influences, affecting both initial and multiparous teen births. In a low-income adolescent population, women whose primary financial support came from their intimate partners were 50% more likely to report never using condoms than young women who had other means of economic support (Rosenbaum, Zenilman, Wingood & DiClemente, 2012). In a population of young Latinas, a lack of open communication about sex and low perceived power over sexual behaviors increased the likelihood of first-time adolescent pregnancy (Rocca, Doherty, Padian, Hubbard & Minnis, 2010a).

One indicator of sexual agency may be the sequence in which sexual behaviors are first engaged. One research study found that among females who reported having vaginal sex before oral sex, 31.4% reported a teen pregnancy. Among those who engaged in oral sex prior to vaginal sex, 7.9% reported a teen pregnancy (Reese, Haydon, Herring & Halpern, 2013). These results suggest that lower agency and experimentation in an initial sexual experience could affect sexual trajectory, including the use of contraception.

The effects of lacking sexual agency can extend beyond a single experience and affect a young woman's behavior over time. Marchand and Smolkowski (2013) found that a history of forced sexual intercourse eliminated the protective effects of parental monitoring on risky sexual behavior in a sample of 8th grade females.

Among adolescent females with no history of forced sexual intercourse, however, parental monitoring was associated with lower risky sexual behaviors (Marchand &

Smolkowski, 2013). Similar research has shown a positive correlation between low parental monitoring and adolescent pregnancy (Crosby et al., 2002). Another study found a negative relationship between maternal communication about sex and adolescent sexual risk taking. In this study, maternal disapproval of contraceptive use was a moderator variable: when the adolescent perceived disapproval of contraceptive use, there was a corresponding increase in inconsistent condom use and positive STI diagnoses among adolescents who were sexually active at baseline (Khurana & Cooksey, 2012).

Intimate and familial relationships exist within a sociocultural context, which also plays a role in the likelihood of adolescent pregnancy. For example, in some peer contexts, teen parenting is normative behavior (Herrman, 2006). Mollborn, Domingue, and Boardman (2011) investigated the effects of social norms regarding adolescent pregnancy at the school level. They found associations between strong norms, signaled by levels of embarrassment that students felt at the prospect of a teen pregnancy, and lower adolescent pregnancy rates in high schools across the United States. Contextual approval of teenage pregnancy may contribute to psychological sequelae as interpreted by teen mothers, further reinforcing early childbearing in social contexts where the transition to motherhood is not seen as disruptive to life trajectories (Musick, 1993).

Repeat adolescent birth. Variables associated with rapid repeat birth include history of physical or sexual violence (Jacoby, Gorenflo, Wunderlich & Eyler, 1999), the use of long-acting contraceptives (Cox et al., 2012), and poor pregnancy outcomes, such as miscarriage, prior to repeat births (Coard, Nitz & Felice, 2000). This has led to a focus for some interventions on contraceptive use and general physical care (Omar et al., 2008).

However, a contextual ecosystem surrounds and can determine a young mother's experience of rapid repeat birth. A social ecological framework of phenomena that accompany rapid repeat birth include individual-level factors, such as intention and contraceptive use (El-Kamary et al., 2004), dyad-level factors, such as intimate partner violence and age disparity in intimate relationships, and community-level predictors, such as alienation from school and a network of teen parent relations (Raneri & Wiemann, 2007).

All antecedents need not be risk-based, however. Diez and Mistry (2010) located a family-building script common among a sample of teenage Puerto Rican mothers, the majority of whom had had multiple births within a short period of time. Only one-third of the adolescent women in their sample continued their education after becoming pregnant for the first time, but the authors trace this decision to the competing priority to build a family, which culturally may have been viewed at that time in the mother's life as a more promising and important task than educational attainment (Diez & Mistry, 2010). Thus, Diez and Mistry (2010) found a discrepancy between the cultural expectations that young mothers from Puerto Rico may carry and the values and sanctions that exist in mainland United States[3].

Mothers who experience rapid repeat births are more likely to be married or in a committed relationship with the father of the index child (Black et al., 2006; Gray et al., 2006). These markers of family-establishment could stem from an adolescent's attempt to transition into adulthood by way of childbirth (Herrman, 2006; Burton et al., 1996). Multiple early childbirth, however, could also signify sexual exploitation, influence of

[3] Diez and Mistry (2010) explain: "the term "mainland" is used in Puerto Rican communities to denote residence on the continental United States rather than the island" (page 691).

peer group, and/or desires for feelings of increased agency (Musick, 1993). In her book *Young, Poor, and Pregnant*, Musick (1993) makes the important point that "choice" in regards to early childbearing reflects both external, social factors as well as internal, psychological ones.

In fact, the distinction between contextual values and internal meaning-making is difficult to extract. Internal interpretations of a life experience are often informed by social reinforcement or dissuasion. Close investigations of the psychological and emotional repercussions of adolescent childbirth, when situated within a personal history and context, can go far in explaining factors that may be reinforcing or dissuasive of repeat pregnancy and the ultimate trajectory a mother is likely to take.

Psychological sequelae to adolescent birth. Adolescents who fail to prevent initial or subsequent pregnancies understand their experience in the context of both external meaning constructs and psychological understandings (Musick, 1993; Burton et al., 1996; Klein, 2005; Herrman, 2006). Willingness to have multiple closely-spaced children may therefore be rooted in attempts to meet psychological needs or conform to the expectations of one's culture more than in an actual intent to raise more children (Klerman, 2004).

In the Three Generation Study, the intervention was hailed as successful in its ability to reduce rates of repeat births (Black et al., 2006). However, in a participant evaluation two years after intervention initiation, mothers who *did* experience a rapid repeat birth reported higher self-esteem and more positive life events than mothers who did not have a rapid repeat birth (Black et al., 2006).

Herrman (2006) cites research that links the experience of adolescent childbirth to increased perceptions of respect, higher feelings of self-efficacy, and enhanced self-concept. In her own research, Herrman (2006) found that adolescent multiparous mothers cited increased optimism, responsibility, and decision-making skills as sequelae of their multiple childbearing. This study showed three distinct hypothetical propositions regarding repeat birth, namely that it improved an adolescent's life, made a hard life harder, or had little to no impact on the mother's life trajectory (Herrman, 2006).

Possible positive impacts of young childbearing, and repeat childbirth in particular, include feelings of agency and motivation (Herrman, 2006). There may be a motivating sense of purpose associated with the identity shift that can occur when an adolescent female becomes a mother (Musick, 1993). Repeat births may work to solidify this new identity, which may garner positive attention from a young mother's romantic partner and family (Klerman, 2004). Alternately, teenage mothers may react against negative childhood experiences, seeing the role of motherhood as an opportunity to correct traumatic histories (Lesser, Anderson, & Koniak-Griffin, 1998).

Herrman (2007) applies the Theory of Planned Behavior to the experience of repeat adolescent pregnancy, pointing out that personal beliefs interact with feelings of self-efficacy and contextual norms to determine action. This theoretical model is illustrated in a study in which pregnant adolescents were asked about the anticipated rewards of early childbirth (Guttmacher Institute, 1998). Among the respondents who had a peer network that included teen mothers, over half remarked on the motivating and structuring effects of motherhood (Guttmacher Institute, 1998). This interface between

contextual normality and positive psychological perspective can indicate a climate that is supportive, or not dissuasive, of young motherhood.

Musick (1993) identifies multiple motivators of adolescent motherhood. In addition to psychological factors, the desire for family validation and a contextual lack of aspirational alternatives are mentioned (Musick, 1993). Lack of opportunity for educational or professional trajectories that may encourage a postponement of motherhood has been documented as a possible explanation for the convergence of rates of adolescent motherhood and income inequality (Kearney & Levine, 2012). A look into the cultural contexts of young people's expectations and aspirations, however, elucidates a richer relationship between expectations and behavior.

Varying cultural priorities complicate the assumption that adolescent birth is universally problematic and undesirable. Burton et al. (1996) suggest that concepts of adolescence, and therein proscriptions of adolescent childbearing, vary in some economically disadvantaged African American communities, where the luxury to transition slowly from childhood to adulthood is not present.

Burton et al. (1996) go on to itemize distinct adolescent developmental goals in these communities, one of which is the acquisition of adult status. While economic independence is one route to this identity claim, the authors suggest childbirth to be an alternative and equivalent pathway to adulthood for many adolescents in these groups. In this way, lack of opportunity for economic mobility intersects with cultural expectations to lay the groundwork for the acceptance of adolescent childbearing.

The rapid transition to adulthood through childbearing is facilitated further when an adolescent lives, as Burton and colleagues observed, in "age-condensed families,"

where teenage childbearing is a generational commonality. In these communities, often characterized by overlapping social roles of adolescents and adults and a generally accelerated life course, childbirth can be seen positively as a goalpost of maturity, even in adolescence (Herrman, 2007; Burton et al., 1996). From the perspectives of young mothers, this contextual value system can translate into belief that the benefits of early childbearing outweigh the risks enough to discourage contraception use (Edin & Kefalas, 2005).

A racially diverse longitudinal study of young mothers measured attitudes toward childbearing during their index pregnancies and then tracked their pregnancy rates for one year following the outcome of the initial pregnancy (Stevens-Simon, Kelly, & Singer, 1996). Mothers who became pregnant again during their first postpartum year expressed positive attitudes toward childbearing during their index pregnancy at a much higher rate than those who did not become pregnant again (60.9% versus 39.6%) (Stevens-Simon et al., 1996).

Not only can young multiple childbearing carry positive motivational and stabilizing effects for a young mother, it can also work to solidify a secure identity for her within her cultural context. Decisions to become pregnant as an adolescent, and further to have a rapid repeat birth, are not necessarily indicative of rational volition. These decisions are deeply affected by contextual variables and personal understandings of the meaning and benefits of motherhood. Public concern around rapid repeat adolescent pregnancy neglects the presence of positive contextual and psychological effects of an initial birth that may reinforce failures to prevent subsequent pregnancies. Interpretations of early motherhood, positioned within contextual influences, may help to explain

stubborn rapid repeat birth rates, suggest potential points of intervention, and evaluate the utility of programmatic goals discouraging repeat birth.

Chapter Three: Study Design and Methodology

The study described here is an investigation of a small sample of adolescent mothers who experienced rapid repeat births. This sample was drawn from the population of MHFE-2 – a larger randomized controlled trial evaluating a home visiting program for first time adolescent parents. Quantitative and qualitative data, gathered for the larger evaluation study, are used in the current analysis. The following sections describe the rationale for the study design, and the primary data source, research questions, and guiding methodology of the current investigation.

Rationale for Study Design

Rather than focusing solely on the antecedents of and consequences to, early childbearing, this investigation emphasizes the middle of the story: the emotional reactions and interpretations of an early birth among mothers who then go on to have a subsequent birth within a short period of time. The main focus of this study is to describe how these mothers view their childbearing: how they feel it changes them; what role they see childbearing as playing in their lives; how they describe motherhood as serving or inhibiting them. Subsequently, this study positions those subjective interpretations of motherhood within contexts of stability and support to reveal modal narratives, which potentially carry varying levels of risk. To bridge this preliminary study to future research, an analysis of rapid repeat birth mothers as compared to their uniparous counterparts is included.

This analysis will build on literature identifying positive and motivational sequelae to early childbirth. Herrman (2006) investigated, from the perspective of adolescent mothers, the costs, rewards, and neutral consequences of initial and repeat

births on life course and aspirations (Herrman, 2006). This ethnographic study found positive effects of repeat childbearing on adolescent females' feelings of maturity, goal orientation, independence, optimism, and decision-making skills.

Similarly, a British study utilized an interpretative phenomenological approach to investigate the effects of teenage motherhood on young women's expectations of their futures (Seamark & Lings, 2004). This study found that teen mothers expressed positive attitudes toward the role of motherhood and viewed the role shift as motivating in terms of career and educational opportunities (Seamark & Lings, 2004).

In 1995, Smith-Brattle conducted an interpretive-phenomenological study of 16 teenaged mothers 6-8 months after their first child was born. In her analysis, three distinct narrative patterns emerged. Mothers with bleak histories, and with little to no familial or social support during their childhoods, either "inherited a diminished future" or "invented a future from an impoverished past," (p. 26). While the first group reflected ongoing powerlessness over instability and hardship, the second group demonstrated enhanced feelings of confidence, maturity, and agency stemming from their childbirth.

A third group of mothers, characterized by a history of strong familial support, seemed to have been buffered from the full impact of maternal responsibility, and was documented by Smith-Brattle (1995) as "pressing into an open future," (p. 30). The mothers in this group held high educational and vocational goals before their pregnancy; goals that they were able to pursue despite motherhood because of strong networks of support.

Among the group with little historical support that still demonstrated a positive shift catalyzed by early motherhood (Smith-Battle, 1995), three domains were seen to be

positively affected by the onset of the maternal role. Mothers in this sample who exhibited this altered self-narrative structured around an early birth described increased *motivation*, *stability*, and a *sense of accomplishment or competency* as resulting from their transition to the role of mother (Smith-Battle, 1995).

From this research base, the current investigation was designed to locate similar sequalae among a group of adolescent mothers who do not prevent rapid subsequent pregnancies. The interpretive-phenomenological approach offers an enhanced ability to describe the understandings of these mothers: how they interpret their transition to motherhood, and whether positive effects of motherhood appear in their subjective narratives. This study design addresses limitations in research that overlook participants' point of views and meaning-making (Riley, 2005), and extends similar research by investigating a population of political and programmatic concern, namely rapid repeat birth adolescent mothers.

Primary Data Source

This study uses data from the second phase of the Massachusetts Healthy Families Evaluation (MHFE-2). MHFE-2 is a six-year randomized control trial (RCT), in which the program group received home visiting services through Healthy Families Massachusetts (the HVS group), and the control group received information on, and referrals to, community-based services (the RIO group). The first phase of the evaluation (MHFE-1), which utilized a quasi-experimental design, was completed in 2005 (see Jacobs et al., 2005 for the final MHFE-1 report).

Healthy Families Massachusetts (HFM) is a voluntary, newborn home visiting program for all first-time pregnant adolescents, ages 20 and younger in the state. The

program model is adapted from that of Healthy Families America (HFA), and includes the provision of individual parenting support, information, and services for young mothers prenatally until their child's third birthday. Although home visiting is the primary modality for service delivery, HFM also offers group-based activities such as social gatherings and peer support groups.

HFM currently has five stated goals, which its program is designed to address. They are:

- To prevent child abuse and neglect by supporting positive, effective parenting;
- To achieve optimal health, growth, and development in infancy and early childhood;
- To encourage educational attainment, job, and life skills among parents;
- To prevent repeat pregnancies[4] during the teen years; and
- To promote parental health and well-being.

MHFE-2 consists of an Impact Study (N=704), designed to measure the outcomes of the Healthy Families program, and a more comprehensive Integrative Study (N=473)[5]. Participants who signed an administrative data release and completed an Intake Interview are considered to be part of the Impact study. Participants in the Integrative study include all participants in the Impact study who additionally consented to a research visit, during which they completed a semi-structured research interview, written questionnaires, and a videotaped mother-child interaction (Easterbrooks et al., 2012).

The in-depth information gathered through the Integrative Study details the

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[4] The goal to decrease repeat *pregnancies* is operationalized by MHFE as decreasing repeat *births*, because of the difficulty of validating pregnancy reports.

[5] The sample size at T1 for the Integrative Study was 478; by T2 the sample size was 401; at T3, N=408. This is due to participants joining the Integrative Study (by completing research visits), or withdrawing from the Integrative Study at each time point.

ecological and personal contexts, such as community context, mental health challenges, educational experiences, and parenting perceptions, which accompany participants' transition to adulthood and parenthood (Goldberg, Jacobs, Misty, & Easterbrooks, 2010).

Research Questions

The current analysis looks at MHFE participants who have experienced a rapid repeat birth (RRB; for the purposes of this study, RRB refers to a second birth that occurs less than 24 months after the first birth) in order to address two primary research questions:

1. Is there evidence of potentially reinforcing sequelae to early childbearing in the interpretive stories told by the mothers in our sample? Specifically, to what extent, if at all, did our sample experience positive changes as a result of motherhood in the following domains:
    - Motivation
    - Stability
    - Competence in a new identity?
2. What demographic or service utilization characteristics, if any, distinguish mothers who experience rapid repeat births from those who do not?

Samples

To answer the research questions, three distinct samples were drawn from the MFHE-2 study. Regarding the first research question (RQ #1), Integrative Study participants with rapid repeat births who completed at least two research interviews (RI), and who were in the Home Visiting sample (HVS) are included (N=19). Of the mothers who had a repeat birth within 24 months (N=57), over half (N=34) were in the HVS

treatment group. Of those 34 participants, 11 were Impact Study only, meaning they did not participate in the research interviews. Three participants were only interviewed at one time point, and one participant was dropped from the Integrative sample due to a language barrier, bringing our final sample to 19.

Regarding the second question (RQ #2), the full Impact Study population at T2 (N=584) is included in the demographic comparisons. Participants in the Integrative Study who were assigned to the HVS group at T2 (N=268) are used to analyze program utilization.

The participants in the MHFE-2 sample have been anonymized according to the protocol approved by the Internal Review Board at Tufts University. For this analysis, transcripts of previously conducted interviews were used; names, voices, and other identifying information were not at all accessed during the analysis of these data. For the sake of presentation, pseudonyms for the participants in the qualitative portion of this analysis have been assigned.

Instruments

The data necessary for these analyses were collected through the use of the following MHFE-2 instruments:

- For RQ #1, I use the standard *research interview* protocols given to participants of the Integrative Study at all three time points. The first research interview (RI T1) contains a lifespan timeline from each mother, including residences, relationships, and other major life events as well as a more detailed timeline of the year preceding the index pregnancy. The research interviews at the second and third time points (RI T2 & T3) are given roughly 12 and 24 months after RI T1 respectively. They contain

descriptions of major life events during the preceding year, reports of program utilization, and a parenting survey. Our sample includes mothers for whom a T2 interview was not conducted. In these cases, the T3 interview covers major life events for the preceding two years. Likewise, for mothers who joined the Integrative Study at Time 2, a lifespan timeline conducted at T2 will compensate for the missing T1 interview. Information from the parenting sections of the T2 and T3 research interviews, which capture attitudes toward parenting efficacy and enjoyment, has been incorporated to the extent that it contributes to the overall psychological narrative.

- For analyses of data relevant to RQ#2, *intake interview* data, Participant Data System (HFM's web-based Management Information System) data, and state agency data are used. Also, community cluster assignations are used in this analysis.

At each data collection time point (T1, T2, and T3), intake interviews were administered to enrolled participants in MHFE-2. The intake interview is a 30-minute interview, conducted orally, either in person or over the phone by an MHFE researcher. State agency data (such as maltreatment history) are collected for each participant in the Impact Sample, and the number of home visits received are documented and stored in the Participant Data System.

Chosen for this analysis were variables previously correlated with rates of repeat birth: relationship with an intimate partner (Black et al., 2006); and history of maltreatment (Jacoby et al., 1999). Experiment group assignation (HVS or RIO) is also analyzed to supplement our search for program effects.

The MHFE-2 project identified four community clusters through a standard agglomerative hierarchical cluster analysis, using data from the 2000 Census at the block group level (Easterbrooks et al., 2012). Median household income, percent minority, and population density were the demographic indicators used to define the communities in which participants lived at time of enrollment into the study.

- To measure program utilization, I compare the number of visits received before the T2 RI among HVS moms who are part of the Integrative study at either T1 or T2 (or both) between RRB moms and non-RRB moms (N=268). I also compare the same sample according to whether the participants received more than or fewer than three home visits before the second time point.

Coding

This study takes an interpretative, phenomenological approach to the qualitative analyses required for RQ #1. That is, this analysis attempts to describe the experience of early childbirth from the perspective of the teenage rapid repeat birth mothers. Descriptions of the mothers' narratives adopt a lens built from literature highlighting the positive interpretations of early childbirth among single-time teenage mothers (Geronimus, 1991; Smith-Battle, 1995; Spear & Lock, 2003). This investigation extends the scope of that research in describing evidence, or lack thereof, of positive sequelae of their first birth among mothers who then fail to prevent a closely-spaced subsequent birth.

Consistent with the phenomenological approach, the current analysis describes the perspectives and experiences of the mothers in this sample, without an emphasis on generalization or theory. All attempts to interpret patterns or link narratives to existing theories are done in a way that is transparent, directly connected to the data, and with

awareness of potential biases (Lester, 1999).

The first step in a phenomenological analysis is to become well acquainted with the interview transcripts and the life stories they represent (Seamark & Lings, 2004). Through open coding, I have extracted thematic topics both within and across participant cases. These emerging themes align with the subtopics of my first research question, and are soundly rooted in relevant literature (Herrman, 2006; Smith-Battle, 1995; Guttmacher Institute, 1998; Musick, 1993; Lesser, Anderson, & Koniak-Griffin, 1998; Clemmens, 2003; Burton et al., 1996). Definitions of codes used to guide this analysis are presented in Table 1.

From the thematic analysis, exemplars were chosen to characterize experiences or interpretations that were shared across some participants. As is common in an interpretive phenomenological analysis, the naming of these shared meanings was an iterative process (Crist & Tanner, 2003). Paradigm cases, or narratives that exemplified a particular pattern of experience, were selected to compare and contrast groups of participants (Benner, 1994). Four paradigm cases were selected because of the richness of their interviews and the salience of their description of a specific narrative pattern.

This analysis attempts to unravel subjectivity more than to propose objective conclusions. All interpretations and patterned linkages among mothers in this sample are presented speculatively, with an emphasis on a descriptive portrayal of meaning-making, and the maintenance of a close connection to the data. The intention of this analysis is to describe the experience of becoming a mother among this sample of adolescents in a way that disrupts or expands conventional assumptions that may exist around this population in aggregate.

To address RQ #2, I compare RRB mothers to non-RRB mothers in the full Impact Sample along four variables to identify any disparities that may exist. Chi-square analyses compare RRB and non-RRB moms according to their placement in the experimental or control group of the MHF Experiment, history of maltreatment, relationship status, and community cluster assignation. I also compare the duration and frequency of home visits received by RRB mothers by T2 to those received by non-RRB mothers, using both a chi-square analysis and an independent samples t-test analysis.

Chapter Four: Descriptive Results and Discussion

This chapter presents the results from a thematic analysis of the 19 mothers in the RQ #1 sample, followed by an extension and discussion of the findings. In order to better situate the selected topics of investigation, itemized in RQ #1, brief contextual descriptions precede comparisons of the mothers' experiences around the transition to motherhood. Paradigm cases have been chosen to exemplify narrative patterns that emerged in the analysis, and a discussion of the findings is situated around these patterns.

Interpretive Stories of Motherhood

The 19 mothers in our sample transitioned to motherhood at distinct points in their lives, carrying with them individualized and subjective life histories. Before comparing the mothers' reactions to motherhood in terms of positively interpreted sequelae, it is important to locate these mothers within their life courses, to which their perspectives are inextricably linked. Reactions to the initial news of pregnancy situate the first pregnancies along a continuum of intention, further setting the stage for a discussion of the transition to motherhood. This section concludes with detailed descriptions of the mothers' interpretations of their personal experiences of motherhood, along the lines of motivation, stability, and comfort and competence.

Context of pregnancy. The transition to motherhood, for the 19 adolescent women in this sample, was situated in and informed by a rich context of life history and current circumstances. Variables that have been previously associated with rates of repeat pregnancy, such as school engagement, relational support, age at birth, and normative culture of teen parenting are described for the current sample in Table 2. Two primary circumstances, relational support and school engagement, are described in more depth

below because of their potential shaping effects on subjective interpretations of motherhood and life aspirations. Residential history emerged as a variable of interest in the process of open coding; the prevalence of institutionalization in this sample and its potential influence on interpretations of family-building merit its inclusion.

Residential history. Of the 18 mothers for whom a life history was included in the interviews, ten reported spending some portion of their childhood, before their initial pregnancy, outside of their home of origin. Seven of the young mothers spent time in foster care, for periods of time ranging from a few months to 14 years. Interestingly, the three mothers, Yvonne, Kaya, and Diana, who spent the longest periods of time in foster care (at least five years) because of parental maltreatment, had all lost custody of both of their children before the third interview time point.

Six of the mothers were involved at some point in the juvenile justice system. Four participants, Becky, Leah, Yvonne, and Crystal, were involved in both foster care and the Division of Youth Services (DYS). In the cases of Becky, Crystal and Leah, a foster home placement resulted from DYS involvement; Yvonne was in the foster care system prior to becoming involved in the juvenile justice system.

Crystal only spent a few months in a foster home after fighting with her mother; Yvonne had been in foster care since age 10 and spent time in “lockup” for charges including drug possession and possession of a stolen vehicle. While Crystal maintained a close relationship with her mother and also received continued support from the foster mother with whom she lived, both of Yvonne’s parents had been drug-addicted and died when Yvonne was a young adolescent. Yvonne reported spending time in at least 22 foster homes from age 16-19, after spending her childhood in group homes; she could not

recall a single positive experience.

Other than for actions related to Yvonne, all of the DYS charges were for running away from home, and domestic disputes that led to a parent filing a “child in need of services” (CHINS) report. Leah, however, reported being deep into drugs, and resorting to prostitution before going to rehab at age 16. Emily also went to rehab at age 16 and got sober about one year before her initial pregnancy.

Diana, Keisha, Becky, and Keya also spent time in foster care. The most extreme cases were those of Keya and Diana, both of whom were removed from their homes of origin at young ages due to parental drug use, violence, and neglect. Like Yvonne, both Keya and Diana spent significant amounts of their lives in foster care: Diana was in foster care in Puerto Rico from age 7 to age 15, when she came to the States to live with her biological mother; Keya was removed from her home at age 5 and was never adopted. Keya was still in care at age 19, when the T1 interview was conducted.

Outside of the public system, two women, Maria and Jess, lived away from their parents for a significant period. Maria left her mother’s home when she was 11 years old and went to live with the family of her boyfriend. Maria explains her decision: “*my mom’s ex-boyfriend was not a good person so I moved out, I didn’t want to deal with it*.” Jess grew up with her maternal grandparents in Puerto Rico until coming to live with her mother in Massachusetts at age 13. Jess was the victim of domestic violence at the hands of her mother’s husband until she was kicked out of the home when she became pregnant.

School participation. Of the 19 women in our sample, only three completed high school at a traditional school. Six more graduated from an alternative, vocational, or technical school, including two who completed school through specific programs for

pregnant and parenting adolescents. The remaining ten mothers in our sample dropped out of middle or high school, although three received their Graduation Equivalency Degree (GED) before the third time point interview.

Although the majority of our sample dropped out of school (10 of 19), only four did so during their initial pregnancy. The remaining six had dropped out of school prior to becoming pregnant. Maria, the mother who left home at age 11, and Emily both cite financial concerns for their decisions to leave school and begin working. Becky and Michelle left school because they were struggling academically and did not want to have to repeat a grade. They both went on to receive their GEDs. Jenn simply said she hated school, and Gabbi was struggling with panic attacks and a language barrier.

Those who did drop out during their pregnancy cite unsupportive school environments, struggles with peers, and fears of harming their baby. For example, Diana, who came to the mainland US at age 15, left school because she was afraid her baby would get hurt in the jostling of high school hallways. She also mentions that her grades were slipping and she often had a hard time understanding her teachers' English. Denise, who said she left school because it was not accommodating to her pregnancy, had been held back her freshman year and sent to an alternative school. Keya also dropped out during her pregnancy, but she refers to social conflicts within her school rather than pregnancy as the cause. Those who disengaged from school during pregnancy, then, were struggling either academically or socially prior to dropping out.

Relational support. At the time of the initial pregnancy, family members and partners helped the mothers in our sample decide to carry their pregnancies to term. The identification of individuals in their lives who supported them when deciding to keep

their first pregnancy sheds light on the relational context in which these adolescent girls became mothers, as well as elucidating shades of ambiguity among largely unintended pregnancies.

The majority of mothers in our sample said the fathers of their babies, more than their own mothers, were primary supports in their decision to keep their first pregnancy. Eleven of the 17 mothers who described their decision-making process at news of their initial pregnancy mention having a sexual partner who wanted the pregnancy. The mothers describe conversations with the fathers of their babies that range from clear expressions of desire for a child, to ambivalence or aversion.

Emily, who had had broken up with her boyfriend after a miscarriage the year before, rekindled the relationship following her pregnancy. She describes her boyfriend as being homeless and family-less, "*so the only thing he was looking forward to was the baby.*" Keisha and her boyfriend were not using protection during sex because he had expressed a desire to have a child, and Kaya only began dating the father of her baby after she became pregnant.

Some participants, such as Emily and Diana, described support from both the father of the child and their own mother. But in cases where the family was not supportive, some of the pregnant adolescents relied on support from the father of the child to secure their decisions to keep the baby. Jess, who was the victim of maltreatment by her stepfather, moved in with her boyfriend at the news of her pregnancy. Becky, who was only a few months out of foster care when she got pregnant, left her mother's home and moved in with her boyfriend, who later became her husband. Destiny found out about her pregnancy in the fall; she and her boyfriend kept the news from her mother until

months later, when it would be too late to get an abortion. Liz describes a supportive reaction from her boyfriend that helped appease her own uncertainty, "*I was scared. I was crying. He was happy. He was like a weirdo. He was like 'I'm going to be a father!' I was like 'my mother's gonna kick my...' (laughs).*"

Not all of the reactions from partners were positive, however. Crystal describes a fiercely supportive mother, but a father of her child who denied paternity. The father of Sam's child, also, denied it was his baby until a paternity test was taken. Sam broke up with her boyfriend after the news of her first pregnancy, although the same man fathered Sam's second child. Sam's boyfriend already had a child with a different woman, and Sam helped care for this infant prior to her own pregnancy

The families of the mothers in our sample also varied in their reactions to the young women's pregnancies. Maria's own mother was pregnant when Maria became pregnant; Maria said it was a touchy subject for them at first. Jess was given one day to move out after her mother found out about her pregnancy. Destiny's mother took her to get an abortion, but, at four months pregnant, it was too late for the procedure. Leah describes her sister's experience, who got pregnant at age 15, before Leah's first pregnancy. She said that initially her parents were angry, but quickly the baby was the center of attention, and, by the time Leah became pregnant, "*now, they're just used to it*."

Reaction to Initial Pregnancy. The reactions of the sexual partners and families of the women in our sample played a role in how these adolescents viewed their pregnancy and developed expectations for their impending motherhood. Almost all of the pregnancies in our sample were described as unexpected to some degree; only Keisha said she was not using protection because she wanted a baby, "*if it comes it comes.*"

Seven mothers expressed some degree of happiness when describing their reaction to the news of their initial pregnancy. Keisha described her reaction as happy, "*big smile*," yet at times she would get overwhelmed at the thought of having a baby, "*Yeah, sometimes it would put me down though. Like damn, I'm going to take care of this thing, but after, I'm like, whatever, I'll get through it when she comes out*." Other mothers also recalled elements of fear and regret mixed in with joy. Destiny remembers being "*scared and happy at the same time*;" Liz, similarly, reported that "*once I got over being scared I was happy about it, kind of excited about it*." Emily, who had miscarried one year prior, described her pregnancy as accidental, but felt mostly happiness at the news. Gabbi, who had discussed having a child with her boyfriend, noted that the pregnancy was welcome, if mistimed: "*we had said not until we finished school and we were good*." Leah said, "*I cried at first, because I was so young. … I wanted to go to college and get everything on track and then have a baby. I cried for about a week, and then after that I stopped and just looked at it in a good way*."

Although unintended, some of the mothers had spoken with their partners about eventual childbearing prior to becoming pregnant. Jess recalled conversations with her boyfriend about parenting, but she had hoped to go to college before getting pregnant. Shannon said she was on the Depo-Provera birth control shot when she got pregnant, but she said that she had discussed pregnancy with her partner and that they were both happy at the news. Jenn and Maria also knew that their partners wanted children before they became pregnant.

Not all mothers felt happiness predominately. Seven mothers described a reaction of fear and regret. Denise, when she got the news that she was pregnant with twins, asked

herself "*like what am I going to do? I didn't know what I was going to do*." Crystal, who had tried to get pregnant with a previous partner, felt regret at the news of this pregnancy: "*I just sat there and cried. I wasn't as ready as I thought I was, I go, and I know he's not ready. I go, this is not good*." Diana said she was depressed for two weeks after hearing the news of her pregnancy. "*Oh my god, with a baby now, at this age, what am I going to do*?" Diana went to an abortion clinic, but was affected by the ultrasound and hearing her baby's heartbeat. "*And another part of me did want to have an abortion, but I didn't want to have one because it scared me,"* she recalled.

Yvonne said the father of her baby did not want her to get an abortion, although she mistrusted his involvement, and considered it. Shannon was considering adoption, but the father of her baby said he would refuse to sign adoption papers. She ended up giving her second child up for adoption and ending contact with the father. Leah struggled with shock and uncertainty, but used contextual influences to come to peace with the news:

> *I was debating on keeping it and getting an abortion, because I really didn't know what to do, I didn't have anything for the baby. My sister just had one and I figured it would stress out my parents even more, but I don't know, it was stressful for me. I was up and down with thinking about different things. ... Because I seen how happy my sister was and they're like, you know, it's not really expected when you get pregnant, you don't really plan these things, sometimes it just happens, but afterwards you look through it and you look at the baby and you forget everything that you went through.*

Leah's assertion that pregnancy sometimes just happens was apparent in other

responses, which seemed to locate responsibility and agency outside of the mother. Diana concluded, "*God wanted [the baby] to come*." Diana remembers not believing she could get pregnant, because she had had unprotected sex before, in Puerto Rico, and had not gotten pregnant. Crystal, too, had tried unsuccessfully to get pregnant with a previous boyfriend and concluded that she wasn't able to. Yvonne, who expressed predominately regret at the news of her pregnancy, blamed her foster mother. "*She let me have sex, that's why I got pregnant. She didn't care*." Yvonne described her child as both a consequence of her actions and as a gift from God. Jess held her mother partly responsible, saying her mother should have talked to her about sex and condoms, but apparently she thought Jess was too young. Jess warns other teenage mothers not to get pregnant, telling them to use protection, but she concludes by saying, "*I mean I'm not using it, but I'm not doing it as much*."

Response to Motherhood. While pregnant with their first child, or shortly after its birth, the women in this sample were asked to reflect on changes precipitated by their becoming mothers. Building on literature describing uniparous teenage mothers, this analysis identified perceptions of increased motivation within the mother's life course, stabilizing or calming effects of motherhood, and feelings of comfort and competency within the mother identity.

Motivation. Interviews were coded for mention of motivation, for schooling, work, responsibility, and priorities, directly tied to the advent of becoming a mother. Overall, sixteen of the 19 women in our sample spoke about motivation, either an increase or continued lack of motivation, in one of the above areas (see Table 3). Nine mothers cited motivation in terms of educational attainment; eight referred to increased

motivation to find or keep a "good job;" five mothers spoke of a greater need to act responsibly; and four mentioned a general sense of increased ambition to improve themselves now as a mother.

School and work. Of the mothers who spoke about educational and work plans during pregnancy or shortly after their first birth, six mothers described an increased motivation to continue with school as a direct result of their becoming a mother. Before her pregnancy, Destiny struggled with fighting in school and suspensions. Her behavior changed, she said, when she got pregnant, "*Because I used to go to school late every single day. And I started going early. … Because I didn't want to drop out of school. … I didn't want them to look at me like 'Oh, she's going to drop out*." Yvonne also said that once she found out that she was pregnant, she "*did what I needed to do*" to graduate high school.

When Liz first became pregnant, she worried about not being able to go to college. Later in the interview, she refers to her child as incentive to continue her education; "*I go to school so I could give him a better life*." Liz is enrolled in college at all three data collection time points. Jess, who is also enrolled in college at all three time points, offers advice to other teenage mothers: "*Don't give up. Continue your normal life. Don't get out of school*."

Jenn dropped out of high school a year before she became pregnant. During her pregnancy, she spoke of plans to go to an alternative school for parenting teens, graduate, and get a "*good job*." Shannon, who completed high school months before her first child was born, says her child helps her move forward with her life. "*It pushes me a lot. I just look at her and I'm like, you know, I want her to grow up knowing that she has a mother*

that loves her very much, so that's my main thing. Just go back to school and have a much better job so she'll be supported until she's old enough to go on her own."

Not all of the mothers in the sample expressed a positive shift in motivation resulting from their pregnancy or childbirth. Three mothers in particular described the challenges they faced in continuing on with school or professional ambitions. Aisha specifically referred to her child as an impediment to her schooling. She regrets being seen "*like another statistic*," but says her child cannot be left with anyone else, prohibiting her from returning to school. Emily describes her perspective that a good mother not only takes care of her children, but also works to better herself. She expresses a desire to attain her GED and certain professional certificates, but sees old patterns as limiting her aspirations. "*I will probably give up … I don't know. I've attempted school three times and I always give up*." Denise also mentions educational goals, yet describes having to stay home because of a high-risk pregnancy and is therefore unable to take action toward achieving them.

Responsibility and priorities. Nine of the mothers in our sample spoke directly about feelings of increased motivation to be responsible now that they were going to be mothers. Jenn describes her pregnancy as a big change: "*I'm more responsible than I was before. … big change because before I wasn't really responsible at all*." Leah saw her life change after pregnancy in a similar way: "*It's definitely changed a lot. I think I'm more responsible. I have more idea, a better look, on how the future's going to be*." Crystal also changed her perspective of her future after becoming pregnant. She describes her son as changing her life "…*positively. Because of him, there's so much more that you actually realize life has to offer*."

Emily describes how her pregnancy affected her priorities. She describes the various things a good mother must do, "*someone that takes care of their kid, spends time with them, goes to school, learns and takes care of their kid, not living off the government. ... not giving them off to their parents so they can go out even if they are a young parent. … Just being the person that do everything for your kid, not having other people do it*." Destiny, also, reassessed her responsibilities now that she was going to be a mother: "*I know I have to do the right thing now*."

Our participants described motherhood as demanding and dissimilar to typical adolescence. A number of them stressed that their priorities were inverted, now that they had a child to care for. When asked whether her priorities had changed since having her first child, Shannon responds, "*She's first, she's first*." Before, it was "*me. Always me. (laughs)*." Still, there is evidence of motivation toward personal goals and achievements resulting from this life change. Diana sees self-respect and self-care, in addition to caring for the child, as essential to the motherhood role. Michelle agrees: "*you have to love them. You have to love yourself. Be really caring and supportive and strong for yourself, as well as for them. ... 'Cause now it's pretty much your life is over, so you have to start again with their life, you know what I mean?"* As Aisha describes it: "*A good mother is just a person that is responsible that takes care of her wellbeing and her child. ... 'Cause if you can't take care of yourself, then you can't take care of anybody else*."

Three mothers did not refer to changes in their feelings of motivation or responsibility. Although Becky does not refer to her child as an impetus for positive change in her life, she does enroll in higher education during the study period. Maria, who dropped out of school in 8th grade, attains her GED by the third interview time point.

Although she does not connect her progress to her interpretation of motherhood, she does describe a mother as supportive, happy, and doing "*what needs to get done.*" Kaya, who got her GED just before having her first child, also doesn't express a feeling of motivation connected to her role as a mother. She does, however, observe the relationship between childbearing and personal responsibility in her own mother: "*she's a lot better and I think its because she has a new boyfriend, … she had a kid with him. … And I think that's probably what turned it around. She said, 'I don't want to lose this kid too, I lost all four of mine,' so my mom's doing a lot better*."

Stability. Childbirth as transformative of an adolescent lifestyle was apparent in our sample's description of their transitions to motherhood. Stability, as a coding construct, was used to capture mothers' perceptions that pregnancy and motherhood had a calming, structuring, or redemptive impact on their daily lives (see Table 4).

The largest proportion of mothers described a calming of behavior, which resulted from their pregnancy and childbirth. Nine mothers spoke about behavioral changes that they viewed as positive and mature. Most of these reflections were about no longer going out every night with friends. Maria said it describes her new life: "*I'm an old lady. … I sit at home, I don't go out. I work and then come home*." Becky says that not partying all of the time (and leaving her child with other people) is part of what makes her a good mother. Gabbi describes her pregnancy as changing her "*from adolescent to woman*."

These mothers insinuate that staying home with baby is an expectation of good motherhood. Jenn admitted that before she had her baby she doubted whether she could do it: "*before I was pregnant I used to be out with my friends all the time doing stuff. I didn't think that I'd be able to take care of him and it changed me a lot*." Emily also

found the change substantial but positive: "*before I had her, I felt like I had to be out every night, hanging out with my friends. … I don't mind staying home with her, hanging out with her*."

For some mothers, the end of their previous adolescent life and onset of motherhood was interpreted as not only positive, but redemptive. After four years in residential programs and detention centers, Sam ended her delinquent behavior. "*I was always running away, doing what I wanted, I was out of control. I was a teenager, I just did what the hell I wanted, right?*" This changed when she became pregnant, "*when I was pregnant, I went to school, I worked, I did all that*." Yvonne draws a clear distinction her lifestyles before and after pregnancy. "*I had done some crazy things when I was a child. I messed up. I made some serious mistakes. But once I got pregnant with my son, that stopped*." In fact, Yvonne credits motherhood with rescuing her from the life she was headed toward:

> *But if I didn't have two kids, I probably would be partying. I'd probably be an alcoholic. I – you don't know what kind of drugs I'd be doing. I wouldn't be going to school. I wouldn't be working. I'd probably be house-hopping, you know, not settling down. Like, not wanting to be better for myself. Once I had my son, I realized I needed to be better for myself because I needed to be better for him.*

Crystal, similarly, perceives her mother-role as a sort of salvation, "*Without him I'd be lost. He's my everything right now; he's my world*." Jenn described the same feeling:

> *And I don't think that, if I didn't have my kids I wouldn't be where I am right now. I don't know what I'd be doing. … Or if I would even maybe be alive. … I was, out of control teenager. … And my kids changed me a lot. When I got pregnant*

with her, I realized that, well, I need to start doing this and that and I stopped smoking cigarettes and hanging out with people that were doing bad stuff, and everything. To take care of my kids."

Other mothers describe transformative experiences that occurred before their initial pregnancies. Liz describes a stabilizing life change that preceded pregnancy. After spending time in a juvenile detention facility, she

…straightened up quickly after that. ... It was a big impact on my life. But, I kind of, like a lot of girls I was with they didn't really have anything going for them. But I always did good in school and I always made the honor roll and stuff like that. So I wasn't bad kid, I just got involved with the wrong people, so now I want to change. So I went back to school and decided to go to college and stuff." "*I had a rough childhood (laughs). Well not like childhood, I guess like teen years. But, um, now that I calmed down and realized what I was doing everything's good*.

Leah, who said she was previously drug addicted, and "*in and out of group homes, foster homes, hospitals*," describes a transformation precipitated by her sister's childbirth.

[Leah's mother] *was telling me – you know, because my sister had her daughter – she was telling me, you know, what is your niece going to think, you don't want your niece to grow up seeing her aunty being like that and having to do that, you want to be a good role model. My mom's the one who really helped me straighten out*.

Diana, who was removed from her home of origin because of drug use and neglect, said these experiences taught her a lot about the sort of lifestyle she wanted to

offer her child. *"I said that when I had a child, my child would not go through those things."*

Still other mothers did not report a stabilizing transformation in their lives, before or during their pregnancies. Denise, for instance, when asked whether her high risk pregnancy had changed her lifestyle responded, "*not really, I just, I haven't talked to any of my friends. I haven't hung out with them really*." Shannon's relationship with her parents was negatively affected by her pregnancy and caused disruptions at home. Becky, Michelle, Kaya, Yvonne, Aisha, and Keisha experienced unstable living arrangements while pregnant or shortly after having their index child, including homelessness, shelter living, and bouncing among the homes of family members.

Kaya, in foster care since age five, has experienced very little stability in her life. When her first child was only a few weeks old, it was removed from her custody for signs of neglect and domestic violence. Following this, Kaya ran away from the teen living program for a period of a few months and continued to struggle with homelessness throughout the study period. With her second child also in foster care, Kaya is attempting to stabilize her life at the third time point interview in order to regain custody. Still, Kaya does not feel stable enough to take on the demanding role of motherhood: "*I hope to get her back but I also know that I'm in no place to take care of my daughter right now, so my goal is to regain custody of her from DCF, to give temporary custody to my foster mom's sister until I can get my own apartment*."

Comfort in Role of Mother. As the teens in our sample transitioned into their role as mothers, during the pregnancies and births of their first child, they described psychological shifts in mood, self-concept, and opportunity. This analysis identified

descriptions of comfort and happiness during and stemming from their experience as a pregnant or newly parenting teen mom, a sense of competency or confidence in their role as mother, and descriptions of motherhood as an opportunity to repair past mistreatment by their own mothers (see Table 5).

Overall, 15 mothers described positive shifts in mood or comfort that were directly related to their experiences with their children. Twelve mothers expressed some sort of increased confidence, positive self-concept, or sense of competence when describing their identity as a mother. Four mothers specifically explained how they strive to treat their children differently and better than they were treated. Three mothers described continued hesitancy around accepting the role of mother, even when those mothers also had positive reflections on the experience.

After the birth of the first child, mothers described how they saw their children and the emotional effects of mothering. Predominately, these were positive. Five mothers used the word "happy" when describing how they felt in relation or because of their children. Jess says that having her baby improved her life, "*now I'm happier. I used to be depressed and lonely*." Shannon describes mothering as "*good. You have somebody to play with and when you're down they make you feel happy. They make you forget about your worries. Just fun*." Aisha describes an improved feeling of competence as stemming from her enjoyment with her children; "*I love playing with them, having them laugh because it's cool that you could do that. It brightens up your day, just to see your kids laughing and being happy. You know that you're doing a good job*."

Other mothers describe the comfort they get from the constancy of motherhood. Seven mothers referred to positive emotional responses to being needed and having the

company of their children. Maria enjoys motherhood because, "*someone always counts on you, and, you know, you always got someone to talk to. … And someone always loves you*." Keisha says, "*it's nice that there's a little thing, depends on you, she's so helpless*." Becky and Sam describe their children as good company for them, and Yvonne says that her son is her best friend. Michelle describes her role as mother as a solid source of companionship and consistency:

> *It's pretty much one of the best things to experience, being a mom, cause I have them, and it's like I know I'll always have them. It's not like people will just pop up and in and out of my life, you know what I mean? … It's like they're like me, because they're half of me, so it's like not my friends, can't treat my kids like my friends, but it's, you know, they understand me a little bit.*

The perception of motherhood as an identity, full of constructive purpose, was common among our sample. Ten mothers described themselves positively within their role as a mother. Emily cited her healthy child as the main accomplishment of her life. Liz described seeing her children learn new things as a great source of pride and feelings of accomplishment. Aisha says that, although she was scared at first, over time she is learning how to understand her children and she feels proud of her ability to communicate with them. Shannon also expressed feelings of success as she adapted to the mother role: "*It gets more easier as time goes on. I just love it, it's so much fun. … she encourages me a lot*."

Several mothers in our sample spoke directly of their embodiment of the motherhood identity, mostly with expressions of satisfaction and self-confidence. Yvonne describes her child, and her role as a mother, as giving her life purpose: "*My baby –*

that's my femur. That's like – he's the reason why I stand tall. … He was the reason why I woke up every morning." She identifies herself as a mother predominately, even after both of her children were placed in foster care. "*Those are my children. So I want to be a part of their life. I want to raise them. My name is mom. That's it. I am a mother*." Michelle, too, said that her life and perception of herself changed after having her children:

> *But I think it's made me stronger and more, maybe not intelligent – I don't wanna say I'm a genius or nothing – but it gave me more things to … it made me more, kind of, experienced, opened up my mind a lot more*.

Gabbi describes a conversation with her mother that determined her decision to keep her first pregnancy, "*I don't know how to explain it. I told my mom* '*I'm going to raise it. I'm going to study to give it a good life. And I'm going to be a good mom and I'm going to show it the good things that you showed me*.'" This ambition translated, from Gabbi's perspective, into a rewarding experience. She says her enjoyment of motherhood was surprising, "*Because I thought that being a mother was something special. I never thought being a mother was something nice*."

The majority of the mothers in our sample described themselves as good (or great) mothers, citing patience, time spent with their children, and maturity as some of their strengths. Jess explains her perspective of what makes a good mother, concluding that she fills these duties and enjoys doing so:

> *Well, being a mom is a lot of responsibility, but if you're not ready then I don't think you should push it, and prevent it, because if you don't want a child, you're not going to love him, so as a parent thing, I think parenting is having a full-time*

> *job and it's like being a teacher, a doctor, a cooker because you need to cook for your kids. You need to buy things for the kids, and I enjoy it. Every time I go shopping for my kids, it's so exciting. I love buying clothes for them, that I provide for them whatever they need, toys. If they want a toy and I have the money, I'll buy it. I wouldn't say no to my child.*

Three mothers in our sample positively compared themselves to other mothers in their lives. Denise explains that she is better at being a mother than is her drug-addicted cousin because she does not leave her children with other people. Diana says she always knew she'd be a "*super-wow mother*" and better than her sister because she is more mature. Kaya explains that her sister had a child at age 16, like Kaya; also like Kaya, her sister's child was taken into foster care, but Kaya draws a distinction between them, describing her sister as "*really psycho*."

Additionally, four mothers reflect on the parenting styles of their own mothers, vowing to offer their children better love and care than they received. Emily says her strengths lie in her desire to be better than her mother was with her. "*I didn't grow up with the best lifestyle and I wanted to change it when I got pregnant. And when I had her everything changed. … I want my daughter to have a better life*." At the third interview time point, Emily's mother has been arrested for robbery and Emily moved out with her children and their father: "*I just needed to get out after having kids. I didn't want them to grow up the way I grew up*."

Maria, who moved out of her mother's house at age 11, describes her mother negatively and expresses a desire to do a better job with her own children. Sam and Keisha use their own mothers as examples of how not to be. Keisha says, "*I don't want to*

raise my kid the way she raised me. … I would never beat my daughter up just 'cause she did something bad."

A few of the mothers in our sample describe the process of learning how to become a mother. Aisha felt pride as she improved at understanding her child, cutting herself some slack for the learning process: "*everybody was a first time parent. Nobody's perfect*." Jess describes herself as a self-taught parent, "*I just learned. I did actually because nobody helped me. … people tell me that I'm really patent with kids. I don't know how I do it, but I do it*." Michelle forms her ideas of what makes a mother from people around her:

> *Well before I became a mom, like I knew I always wanted to have a kid. I didn't think I would have it when I did, but I kind of like, you know, just took from what my mom showed me, what my mom didn't show me, and I just used that to my advantage and, you know, my grandma and just like any womanly figure that crossed my path. Even if I didn't know them, I just would, you know, observe how they did things or handled it so that way I knew when I did become a mom, I had, you know, different things to weigh out, you know what I mean? How I would do things, how I wouldn't do things.*

These expressions of comparison and learning show a sense of ownership of and identification with the role of motherhood. The positive expressions of joy and competence show that, in our sample, this learning process was perceived as positive and rewarding.

Not all of the mothers, however, saw the transition to motherhood as a purely positive adaptation. Three mothers expressed a mixture of positivity and fear, hesitancy,

or regret. Sam, who describes being diagnosed with bi-polar in adolescence, says that she has been depressed a lot since her first child was born. Jenn regrets not waiting to have her first child: "*I feel like if I was to wait longer, I would've been – I would've had a good job and everything, and my kids could have everything that they need. But – it's better to wait, when you're older – but it's the same. I love them*." Destiny, although she said having the baby made her happy, admits trepidation:

> *I still can't believe he's going to be here forever. It was like, wow. I'm used to babysitting, I used to baby-sit my little cousin, and he goes home at night. It's like, he [her baby] doesn't go home, he just stays here. So it's, I don't know. ... It's happy, but I still can't believe it. It's like, wow.*

The mothers in our sample experience the transition to motherhood in different ways; some mothers, like Michelle, hint at preparing for this revered role and embracing it with pride. Even those mothers who express more reticence to take up their conception of what constitutes a mother, strong evidence of positive interpretations of motherhood were found throughout the sample.

In the research that guided the current analysis (Smith-Battle, 1995), motivation, stability, and competence in a new role characterized only one of three found trajectories. The trajectory that displayed evidence of motherhood playing a catalyst role for positive change displayed elements of those internal, psychological shifts. The other two trajectories revealed lives relatively unchanged by childbirth and those that were made significantly more difficult by childbearing, respectively (Smith-Battle, 1995). The current analysis looked first for evidence of the internal and interpretive reactions to

motherhood, but a larger perspective at the intersection between these interpretations and external circumstances is necessary for a full discussion of risk and reinforcement.

Paradigm Cases and Discussion

The thematic analysis above maps the interpretations and experience of motherhood for the women in our sample. The stabilizing, motivating, and comforting effects of motherhood, as well as a more general embodiment or embrace of the mother identity can be thought of as an internal axis, characterizing the role that childbirth plays in the subjective or emotional lives of these adolescents. Surrounding this interpreted experience, however, are contextual circumstances that interact with internal processes and contribute to outcomes. This section positions the results of the thematic analysis within a secondary axis of external factors, which develop and shape outcomes over the course of the two-year research period.

This section deepens the thematic analysis by selecting participant narratives that capture overtly the lived experience of the phenomena described above, and how they play out in the context of varying levels of external support and stability. Four distinct narratives emerged from a nesting of the interpretive themes within the larger scope of external factors over the course of the research interviews. Shared meanings emerged from close examination of the participants' interviews, grouping the mothers according to four narrative patterns (see Table 2). While not inclusive of all of the heterogeneity of the participants, these cases are illustrative of distinct trajectories evidenced by this sample.

All participant mothers are referenced in this section; however, four were chosen as primary representatives of each trajectory. The selection of each paradigm case was

based on the richness of their interview and the clarity with which they described the experiences referred to by other mothers and indicative of the defined narrative pattern. The use of paradigm cases as a vehicle for pattern analysis facilitates the identification of a meaningful pattern that is present, though less overtly so, in a larger group of participants (Smith-Battle, 1995).

The four trajectories are drawn from previous relevant research (e.g Herrman, 2006; Diez & Mistry, 2010; Smith-Brattle, 1995; Burton et al., 1996) and are strongly rooted in the participant interviews. The patterns of interpretations and outcomes are here suggested as modal trajectories, offering varied pathways of risk as well as possible routes of reinforcement for mothers who do not prevent a repeat pregnancy soon after their initial birth. The four narrative patterns are: 1) family-building; 2) motivated struggle; 3) continuation of adolescence; and 4) inability to find traction in attempted transition.

Family-building. The eight mothers categorized within a family-building trajectory displayed, in the interpretive analysis, evidence of stabilization, responsibility, and the enthusiastic enjoyment of motherhood, and a lack of motivation for increased schooling. This subset of mothers exemplified a strong sense of transformation of self with the advent of motherhood. These transformations occurred within a context of partnership with the father of one or both of their children, residential stability, and independence from their nuclear families.

In our sample, Emily is an example of a mother who was able to transform a tumultuous childhood into a relatively stable and positively interpreted identity as adult and mother. Emily describes being raped at age 15 and then getting heavily involved in

drugs and drinking. After a fight with her mother's boyfriend, Emily left home at age 16, dropped out of high school, and continued her drug use. Emily got sober, she said, because she saw the effects of her using drugs on her younger brother. She met the father of her children around the time of her sobriety. Emily's boyfriend expressed deep desire for a child and, when Emily miscarried her first pregnancy, their relationship was strained. Emily became pregnant again within a year and she remembers being happy at the unexpected news. Emily's child also prompted a reunion between Emily and her father, who was not a part of her life until her baby was born. The strengthening of familial ties, evidenced by Emily's reunion with her father, has been demonstrated in research (Herrman, 2006) as a reinforcing aspect of early childbirth.

Emily began her new nuclear family in her mother's home, but, after the birth of her second child, Emily separates from her home of origin. Emily explains this transition positively; she and her boyfriend and children move out on their own to escape what Emily describes as the chaos of her mother's life. She expresses a desire to become a better mother than hers was, and says she loves everything about being a mother. When asked about accomplishments in her life, Emily cites her healthy babies as her primary source of pride. She describes little ambition to continue schooling, and says that although she used to go out nightly with her friends she is now content to stay in and spend time with her children.

Elements of Emily's context, such as disengagement from school and cohabitation with a partner, were pervasive throughout the eight stories in our sample that aligned somewhat with a family-building narrative. Prioritizing family building over educational attainment has been cited as evidence of a family-building trajectory (Diez &

Mistry, 2010). Cohabitation with a partner has also been correlated with an emphasis on attaining adulthood through the construction of a nuclear family (Black et al., 2006; Gray et al., 2006).

Evidence of what Emily described as stabilizing effects of motherhood suggests a positive adoption of the adult role of mother. Six of the eight mothers who followed roughly this narrative describe the importance of stable behavior in motherhood, demonstrating the acceptance of their transition from adolescence to adult (Smith-Battle, 1995; Clemmens, 2003). Only one of the eight mothers grouped in this trajectory cited a positive motivational effect of initial childbirth that included educational attainment. Three mothers described a negative incentive to go back to school now that they had become mothers, while four of this group described increased motivation to be responsible, mature, and take care of their own.

Finally, Emily conveys an almost universally positive interpretation of motherhood and demonstrates a high level of enjoyment in parenting her children. Expressions of competence, confidence, and enjoyment of motherhood was universal among this subset of mothers. Their positive adoption of the motherhood identity, and efforts to construct an independent nuclear family, suggest possible reinforcing sequelae of early childbearing through the channel of family building.

Still, differences exist within this subgroup that merit note: Diana, although she is cohabitating with her partner and displays an interpretation of motherhood similar to the other mothers in the family-building narrative, has lost custody of both of her children by T3. Liz, unlike the other seven in this group, is enrolled in school at all three time points. Crystal and Aisha are both living with partners of only their second children, their path to

family building having been affected by male infidelity or disinterest.

Participants exemplifying elements of a family-building trajectory described an emerging adult identity that was centered on motherhood. Repeat births among mothers following a similar trajectory may be more difficult to affect because these mothers so strongly identify as mothers and derive feelings of purpose and improved self-concept from the motherhood identity. Both these internal interpretations of motherhood as well as the securing and maintenance of an intimate relationship may have reinforced this group's failure to prevent rapid repeat births.

Motivated Struggle. A second subset of participants also appeared to be working toward an independent adult life through the experience of motherhood, although the emphasis was on self-sufficiency rather than family building. Among this group, expressions of increased responsibility and motivation were common, as were feelings of comfort and improved self-concept drawn from the role of motherhood. Circumstantially, however, this group was predominately unpartnered, living independently, and beset with the challenges inherent to young single parenthood.

Jenn dropped out of high school in 9th grade; she recalls hating school and not feeling successful in an academic setting. After giving birth to her first child, Jenn describes tangible feelings of competence and enjoyment in her role as a mother. She explains that she did not think she'd be able to successfully parent, and is proud of what she sees as personal growth prompted by the birth of her child.

Although the children's father is intermittently involved in Jenn's life (he spends some time in jail and lives apart), Jenn describes a network of supportive peers, including her roommate at T3, who is also a teen mother. Jenn credits her children with causing the

positive, structuring, and motivational changes in her life that rescued her from what she describes as a destructive adolescence.

Jenn's emphasis on increased responsibility and motivation following her initial pregnancy, even in the absence of a stable partner, shows an alternate path to adulthood pursued through the vehicle of parenting. Jenn's boyfriend went to jail during her first pregnancy, which may suggest that Jenn's failure to prevent a repeat birth had more to do with the personal benefits of motherhood, such as increased feelings of competency and self-concept, than with an expectation of building a two-parent family. At the third time point, Jenn is enrolled in a job training program and living with a teen parent roommate and her two children, striving to become and remain the adult that she credits motherhood for helping her to become.

The four mothers grouped in the motivated struggle narrative all completed some additional schooling after their initial pregnancy. Three of them are no longer in a relationship with the father of their children and all four of them live on their own, away from their family of origin. All four mothers report feelings of happiness or improved confidence as a result of motherhood. Two mothers specifically describe wanting to be better mothers than they experienced growing up.

Their residential independence and interpretations of motherhood as a source of feelings of competence and comfort suggest that, in these mothers' attempts to attain adulthood, the role of motherhood may provide a vehicle for independence. That being said, all four mothers in this category express significant challenges, primarily surrounding lack of money, feelings of stress due to work and parenting demands, and the desire for a better or more stable job. Although striving, the mothers in this group do not

seem to interpret their trajectory as entirely successful. This may indicate reinforcing feelings of competence and independence that did not fully materialize by T3.

Interviews of a fifth mother, Michelle, did not contain enough data to definitively place her in one of the narrative subgroups. She was in a relationship with the father of her children, but they experienced homelessness and bounced between the houses of their respective mothers. Michelle, who dropped out of high school before her initial pregnancy, got her GED and additional professional certificates after the birth of her second child. Michelle describes feelings stronger, more intelligent, and more mature since having her children.

Although Michelle admits motherhood can be overwhelming, she differentiates the role from her "*normal life*," and says it has changed her view of "*the world, thinking about things in the world as a mom, rather than just a somebody*." Michelle's interpretation of motherhood as motivating, despite her residential instability and apparent singlehood, suggest that she fits within the motivated struggle subgroup, although her interviews are less robust, making the assignation tentative.

Comfort without transformation. A narrative suggesting a continuation of adolescence, or lack of transformation as a result of motherhood, was located in the cases of three mothers. The mothers in this subgroup all derived pleasure from the fun and company of motherhood, but they did not describe motivation for altered priorities or the adoption of a new identity. While mothers who displayed elements of a family-building or motivated struggle trajectory seemed to identify with motherhood and showed striving toward perceived adulthood, the mothers in this subgroup described less intrapersonal change as resulting from their childbirth.

All three of the mothers in this subgroup continued to live with their families of origin; two lived with their parents, the third with her sisters. Leah, who lived with her parents throughout her pregnancies and births, had a tumultuous adolescence, with time spent on probation, and in foster care, group homes, and drug rehab. She credits her sister's pregnancy, and anticipation of being an aunt, with her sobriety. She also, however, when reflecting upon her period of delinquency, describes it as an effort to get attention following her sister's pregnancy and childbirth. "*Everything that I did was basically for attention. …When my sister had her daughter, because when she got pregnant they were all like, 'Oh, you have to do this, you have to do that.' I used to be my father's baby, and he had his first granddaughter, and went for that*."

Leah graduated from an alternative high school, although she had problems with her peers stemming from her reputation as a drug addict and a "*slut*." Leah became pregnant for the first time a month after meeting the father of her children. She describes their relationship as unstable; by T3, they have no contact and she describes him as a drug addict. Leah expresses happiness at being with her children and, "*seeing them laugh*," but she does not report feeling motivated in the arenas of work, school, or responsibility.

The other two mothers who align with this narrative also describe the happiness and company that they get from their children without mentions of increased feelings of competence or motivation for responsibility. Shannon, who says her child "*makes the time go by*," gave her second child up for adoption after her parents strongly disapproved of her first pregnancy and her child's father. She ends contact with the boyfriend by T3 and remains living in her parents' house.

Keisha diverges somewhat from this narrative: she is in a relationship with the father of her children throughout the interviews, although they never cohabitate. Instead, she bounces between the houses of her two sisters, each of whom have three children. By T3, Keisha, too, is pregnant with her third child. She does not mention feelings of motivation or increased stability resulting from motherhood and when asked whether her first child represented a big change she described her life as, "*about the same. It's a little harder now*."

These mothers' continuation of prior living arrangements and lack of increased motivation reveals a narrative pattern where the motherhood identity is not perceived as something distinct from their previous lifestyle or is not something they consciously adopt or aspire to. Unlike other moms in our sample, all three moms in this subgroup mention significant support in childcare. Shannon describes getting a lot of help from her parents, while the other two moms describe nested care in households full of children born to teen parents.

Although for Shannon early childbirth was not normative and strained relations at home, both Leah and Keisha have sisters who are teen parents, and talk about the normality of teen parenthood in their social context. In all cases, then, the teenage mother trended more toward her context of origin rather than diverging significantly into a new adult life of her own creation. The story of a fourth mother, Destiny, lacked sufficient data to be definitively placed in one of these narrative groupings, although she remains living at home and enrolled in high school throughout the study period.

Inability to find traction in new identity. In the case of two mothers, external circumstances override their subjective interpretations and intended adoption of the

motherhood identity. Both of these mothers have lost custody of both of their children by the third time point. Both mothers experienced homelessness at some point during their pregnancies and births, and both mothers are no longer in relationships with the fathers of their children by T3. Both mothers, also, spent significant amounts of their childhood in foster homes and institutional settings. Although these mothers differ in the thematic profiles drawn from their interpretations of motherhood, they are grouped here to highlight the intersection between psychological sequelae and external situations in determining outcomes. These mothers describe being derailed from their intended trajectories by external instability to an extent that merits their classification in a disparate trajectory group.

Yvonne's parents were both drug addicts and Yvonne describes playing the mother role until age 10, when her and her 9 siblings were split up into various foster homes. Yvonne had a difficult time and didn't stay in any one foster family for longer than a couple of months. She became pregnant at age 17 and, although she had previously been involved in drinking, drugs, fighting, and skipping school, she said the pregnancy motivated her to settle down and graduate from high school.

Yvonne expresses motivation, comfort, and happiness in response to her first child. However, when she became pregnant with child two, her foster home kicked her out and her boyfriend moved away without telling her. She found herself on her own with two children, taking college classes, and striving to fill the role of adult and mother. "*I was still doing what I needed to do. And that I had two kids on top of that. So it was just really stressful. And my anger, my anger started coming out. The stress started catching up to me. … I was running on nothing*."

The lack of support and instability of Yvonne's life appears to have thwarted a strong motivation to transform into the role of mother. Despite her loss of custody, Yvonne strongly identifies with the motherhood identity:

> *But I'm getting them back. These are my kids. And I might be young; I might be 20 years old. But, you know, I might be still a child myself. But I'm not a child, though. I've been a grown adult. And if I can get in trouble like a grown adult, then I can be a grown adult. So I'm 20 years old, I might be a little young, but the issue is that, like I said, they are my priority. They are my children. And I would never give up fighting for them. … And I'm proud. I'm going to be like, "Yeah I had him at 18. And look at him now. Look at him now. He's driving a nice car. Yeah he's doing this, he's doing that for himself. Because he's, you know, he's a good kid. And I would never, my kids were not a mistake. I would never go back on them. Nothing.*

Apparent in this narrative is a strong association with the role of mother, disrupted by external circumstances. For Yvonne, the transformative potential that motherhood offered was interpreted as positive and reinforcing, although the absence of support and stability proscribed a successful transition.

The narrative of Kaya was similar in its final outcome, although Kaya had a less strong identification with her role as mother. Kaya's children were each taken into state custody only weeks after they were born, giving her less time to associate with the motherhood identity. Kaya came from a background with little relational or residential stability, and although she expresses a desire to regain custody, she does not convey the strong motivation to become a mother that Yvonne seems to possess. Reinforcing

components of motherhood are less visible in Kaya's narrative, and a case could be made that Kaya's trajectory is more similar to that of adolescence continued. Still, she is grouped as failing to gain traction because, throughout her narrative, attempts toward independence and stability (e.g. applying for an independent living program, making weekly visits to see her children) convey elements of a motivated struggle, thwarted by external instability.

This category is akin to previously located trajectories in which adolescent pregnancy "made a hard life harder" (Herrman, 2006), or led the mother to "inherit a diminished future" (Smith-Brattle, 1995, p. 26). In previous research, and confirmed by the two narratives above, strong relational support is a vital component to teen mothers' ability to transform negative histories into positive life trajectories at the time of childbirth.

While the thematic analysis emphasizes the strong presence of positivity interpreted by these adolescent mothers as stemming from motherhood, their descriptions of their lives during the study period contained significant mentions of risks and challenges. The internal axis of psychological interpretation speaks to a continuum of intentionality and to some degree determines the trajectories followed by the mothers in our sample over the three-year study period. However, situating subjective interpretations within the context of external circumstances and profiles of support is more informative for identifying repeat birth mothers most at risk for potentially negative outcomes.

Chapter Five: Select Comparisons of Rapid Repeat Birth Mothers

The analysis of meaning-making among a small sample rapid repeat adolescent mothers is the primary concern of this study. In order to translate these findings into meaningful programmatic recommendations, however, comparisons between rapid repeat birth mothers and their uniparous counterparts are included. These comparisons bridge the gap between interpretive phenomenological research and further research investigating antecedents and risk profiles among the repeat birth adolescent population.

This section reports and discusses the findings of statistical analyses comparing uniparous and multiparous teen mothers in the MHFE-2 study. These results contextualize the four trajectories identified above through incidence rates of related factors, such as history of maltreatment and relationship with baby of father. Program utilization, in particular, is important to describe; by aligning program utilization with interpreted trajectories, further research can pick up the task of determining how better to access and affect this population.

RRB mothers were compared to non-RRB mothers according to MHFE-2 group placement (HVS or RIO), history of maltreatment, community cluster assignation, relationship status, and the frequency of home visiting among mothers enrolled in the HVS sample. The results of these tests are described below; program utilization results are contained in Table 6.

Of the 704 evaluation participants, 433 mothers were in the home visiting (HVS) group and 271 were assigned to the control (RIO) group. By T3, 8.5% of the RIO group and 7.9% of the HVS group had experienced rapid repeat births. Given the discrepancy in group size, however, this means that more mothers in the HVS group (34) had rapid

repeat births compared to the RIO group (23). These differences, however, were not statistically significant.

All mothers in the MHFE-2 were assigned a community cluster based on residence at time of enrollment. Using data from the 2000 census, the community clusters were constructed from median family income, population density, and percent minority statistics. RRB moms and non-RRB moms belonged to each of the four community clusters at roughly the same rate.

Rates of maternal report of maltreatment, meaning a mother's reported history of being the victim of a supported allegation of child abuse or neglect, were compared between RRB and non-RRB moms using a chi square analysis. A significantly larger percentage of RRB moms (73%) had a history of maltreatment compared to non-RRB moms (53%) ($p = .011$). A greater proportion of RRB moms were in relationships with the father of their children at time two than non-RRB moms (65% and 51%, respectively, $p = .07$). Although this is not statistically significant at the 95% confidence level, it represents a trend at the 90% confidence level.

MHFE program utilization was evaluated among participants who were active in the Integrative sample of the evaluation at either T1 or T2 and who were assigned to the home visiting group. Within this sample, an independent samples t-test analysis revealed that RRB moms received significantly fewer home visits than did non-RRB moms up until the T2 interview ($t(266) = 2.202$, $p = .029$). A chi squares goodness of fit analysis showed that significantly fewer RRB moms received at least three home visits before the T2 interview (43% versus 71%, $p = .008$) (see Table 6).

Consistent with previous literature, these findings reveal that teen mothers who

experience rapid repeat births are more likely to be involved with the father of their children than are mothers who do not have subsequent children within two years (Black et al., 2006; Gray et al., 2006). The maltreatment finding, too, is consistent with previous literature (Jacoby et al., 1999).

The most noteworthy result is the discrepancy between the two birth trajectory groups in terms of service utilization. The Three-Generation Study, discussed above, found that rates of repeat pregnancy were negatively correlated with intensity and duration of a home visits (Black et al., 2006), suggesting the potential effectiveness of such an approach, if the target population can be engaged. Future research should investigate more carefully the timing and rationale behind disengagement from the home visiting program to determine whether repeat pregnancy results from or contributes to program non-use.

Chapter Six: Conclusions

This chapter locates the current study in the context of similar research, and presents key implications of the findings. Additionally, it summarizes the study's limitations and suggests areas for future research.

Findings in the Context of Previous Research

Given the ongoing policy and programmatic attention to repeat adolescent birth, and its relative intractability in terms of programmatic intervention, it is essential to look beyond antecedents and outcomes in aggregate to the psychological perspectives that may be contributing to or reinforcing family planning decisions among adolescent mothers. Previous research has addressed both the contextual reinforcements and positive sequelae of uniparous teenage childbearing, and this study extended that line of research by mapping those constructs as potential routes of reinforcement for further childbearing.

Strong evidence of the motivational, stabilizing, and identity-forming effects of initial childbirth (Herrman, 2006; Seamark & Lings, 2004) were present in this study's findings, suggesting that positive interpretations of teen pregnancy, among a sample of mothers who do not prevent future births, could be reinforcing of the motherhood role and dissuasive of pregnancy prevention.

The psychological constructs that guided the current thematic analysis were located by Smith-Battle (1995) within a trajectory in which adolescent mothers saw motherhood as a catalyst for positive change in their lives. The other trajectories found in that study included one where motherhood minimally changed the adolescent's life and one where childbirth made life for the mother significantly more difficult. Although the current study looked first at the interpretive stories of the mothers, locating them in the

contexts of their three-year trajectories and identifying modal patterns demonstrates the power of external supports in determining outcomes.

The four narrative patterns that emerged from this analysis roughly align with what has been observed in uniparous adolescent mothers. The family-building trajectory, with which a majority of mothers in this sample were aligned, has been noted in the literature (Diez & Mistry, 2010) as heavily dependent on contextual norms, cohabitation with a partner, and a lack of motivation for education or career goals. These results confirm that finding and extend it by connecting this trajectory to increased feelings of stability and competency within the motherhood role.

The motivated struggle narrative pattern, to which four mothers in this sample aligned, is similar to the trajectory of “inventing a future from a diminished past” (Smith-Battle, 1995, p. 26). These findings support Smith-Battle’s (1995) conclusion that social support must be at least somewhat present in order for adolescent motherhood to serve as a positive catalyst. The two mothers who were categorized as unable to find traction in the motherhood identity toward which they both appeared to be striving both described a lack of external support. This trajectory aligns with Herrman’s “made a hard life harder” (2006), and Smith-Battles “inherited a diminished future” (1995). The fourth trajectory located by this study, a continuation of adolescence, contained mothers who had strong networks of support and little mention of the motivational effects of motherhood. This finding, too, is consistent with previous literature (Herrman, 2006; Smith-Battle, 1995).

The current analysis, therefore, confirmed previously located narrative patterns, enriching the literature through its inclusion of detailed descriptions of the mothers’ interpretations of the transition to motherhood. By using subjective perceptions of

motivation, stability, and feelings of competence, this study linked intrapersonal meaning-making with external cultural norms and sources of support to describe various pathways through repeat adolescent childbearing.

The significant discrepancies between RRB mothers and non-RRB mothers in the MHFE-2 sample in terms of history of maltreatment have been found in other analyses (Jacoby et al., 1999), as has the higher rate of intimate partnerships among repeat adolescent mothers (Black et al., 2006; Gray et al., 2006). The significantly lower rate of home visits received by mothers who experienced rapid repeat childbirth is an important finding for the HFM program and for others with similar objectives.

Implications for Programs

Decreasing rates of rapid repeat teen birth is a goal of many programs and interventions, including MHFE. Primarily, the data used to support the inclusion of these goals consists of outcome measures that highlight risks associated with repeat birth among adolescent mothers. Both current program success rates and research similar to the current study, however, emphasize the importance of taking psychological perspectives and contextual circumstances into account during policy and program design.

Two points from the current analysis carry vital importance for programs: firstly the overwhelmingly positive interpretations of motherhood found in this sample following a first birth suggest a strong presence of reinforcing elements that must be considered when encouraging adolescents to prevent future births. Secondly, the modal narratives reveal a dynamic intersection between interpreted sequelae to childbearing and extant sources of support and stability. These findings offer a way to distinguish between

adolescent mothers, and rapid repeat birth mothers, who may be at heightened or decreased risks of negative outcomes.

To the first point, the meaning-making that accompanies early childbirth may be relevant, not only for rapid repeat birth mothers, or those at risk of rapid repeat birth, but also at a more general level. Considering the other goals of MHFE, interpretations of motherhood and psychological sequelae of childbearing should be considered when devising ways to improve maternal life trajectories and parenting skills. Programs could capitalize on the motivating and stabilizing effects of motherhood to encourage positive change among adolescent mothers in other areas outside of family-planning.

For instance, in a review of the Nurse Family Partnership home visiting program, Gray et al. (2006) conclude that the lack of long-term goal setting among participants may have contributed to repeat birth rates. The current findings support this hypothesis by revealing a pattern of young mothers centering their self-concept and views of their futures on the motherhood identity. Program developers must take into account the role that childbearing plays in some young women's striving toward maturity. An effective point of intervention may lie in conceptions of adulthood and long-term goals for independence that extend beyond and may be motivated by parenting.

It is important to note that the modal narratives found in this sample were not as universally positive as were the mothers' interpretations of their childbearing. A number of important factors, such as the presence and support of an intimate partner or family, residential stability, and financial security bisected the subjective sequelae in important ways. Programs would benefit from looking at a larger trajectory to how external circumstances encourage or counteract positive interpreted effects of motherhood.

As an example, the motivated struggle narrative exposed a potential point of intervention where these mothers, if connected to school and relational supports, could thrive with their parenthood as a catalyst for positive change. Inversely, the mothers who described comfort without transformation may be relatively protected within their families of origin from the full impact of early childbearing. These mothers may need increased support going forward, as they begin a transition to independence and adulthood.

At an even more basic level, the finding that rapid repeat birth mothers received significantly fewer home visits than their uniparous counterparts carries a large implication for the HFM program and others with similar goals. Further research is needed to discover the causal pathway of this finding: to determine whether mothers disengage prior to or because of their repeat birth trajectories. From this, programs such as HFM can devise ways to keep populations at risk of having repeat births engaged in the intervention, either to curb rates of repeat birth or to ameliorate outcomes among repeat birth mothers and their children.

Recommendations for Further Study

This investigation is meant as a small contribution to call attention to the complexity and importance of person-centered research of adolescent mothers. A specific investigation of how sequelae of initial childbearing affects attitudes and behaviors around future pregnancies would fill in the missing link between potentially reinforcing interpretations of motherhood and a subsequent failure to prevent future births.

The association between spending an extended time in foster care and a subsequent loss of custody among mothers in this sample raise questions regarding the

effects of familal histories on adolescent mothers' parenting outcomes. In addition to statistical analyses, a closer examination of the role that familial history plays in parenting motivations and outcomes will help elucidate patterns only hinted at in this analysis. Also, the positive interpretations of motherhood, as reported in these interviews, could be extended longitudinally and connected with outcome data to determine whether there is a lasting effect of motherhood, positive or negative, on adolescents' interpretations of their lives.

The dynamic between subjective interpretations and circumstantial supports established by this study could be investigated as fruitfully among a sample of uniparous mothers. Research identifying similarities and differences in meaning-making among mothers who prevent rapid repeat pregnancies will elucidate causal pathways of repeat birth, better positioning programs with the goal of decreasing rapid repeat births. The location of modal trajectories among uniparous mothers can highlight specific profiles of mothers most at risk and identify needed supports that could ameliorate the outcomes of these mothers and their children.

Limitations of the Current Study

The interpretive phenomenological approach is uniquely adept at describing in-depth the experience and interpretation of an event, such as childbirth, from the participant's perspective. Therefore, it was an ideal method for the current analysis. However, limitations to the data compromised the thoroughness of the analytic approach in its ideal form.

Firstly, the research interviews that comprised the main data source for RQ #1 did not focus specifically on the advent of repeat birth, nor did they consistently gather

participants' perspectives on the motherhood identity. Information about each participant's transition to motherhood, conceptualization and adoption of that identity, had to be extracted from the interviews, which were of varying lengths and detail.

Secondly, only HVS participants who had completed at least two research interviews were included in the present study. This excluded the majority of MHFE-2 participants who experienced rapid repeat births. Although a small sample size lent itself to the in-depth analysis of this project, generalizations cannot be made even to similar populations.

The quantitative data, too, suffered from limitations. The small number of rapid repeat birth mothers (N=57) compared to uniparous mothers (N=647) in the quantitative analyses made that group susceptible to the effects of statistical error. This disparity between the sizes of the two groups affected the power of the statistical analyses and tempers any conclusions about significance.

Final Thoughts

This study set out to identify any occurrences of positive sequelae to motherhood among a small sample of teenage mothers who went on to have a rapid subsequent birth. Grounded in similar research of uniparous mothers, this investigation aimed to determine whether positively interpreted outcomes of early motherhood, and sociocultural contexts that are not dissuasive of teenage childbearing, were present among mothers who failed to prevent additional births.

The findings suggest the complexity of subjective interpretations of motherhood and the heterogeneity of childbearing's effect on maternal life course. By demonstrating a strong presence of positively interpreted sequelae to initial childbirth, this study

challenges simplistic equations of intention and risks for rapid repeat birth. However, positive psychological sequelae were found in this study to not necessarily serve as a protective factor against negative outcomes. The importance of external supports, in combination with an embrace of the motherhood identity, offers direction and nuance to current program goals. Although exploratory in scale, this investigation highlights the need for more in-depth descriptive research from the perspective of teen mothers in efforts to understand or affect repeat teen birth rates and outcomes.

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Table 1: Coding Constructs

Coding Construct / Literature Base	**Definition**	**Example**
Motivation (Herrman, 2006; Smith-Battle, 1995; Guttmacher Institute, 1998; Musick, 1993)	A sense of purpose; a revision of thoughts about the future; a new or increased value placed on school/work because of responsibility of motherhood; mentions of responsibility, ambition, and desires to achieve in order to be able to provide for child.	*"I go to school so I could give him a better life." (Liz)*
Stability (Smith-Battle, 1995; Herrman, 2006; Lesser et al., 1998)	Settling down, either in living arrangement or lifestyle; mentions of social removal or more careful friend selection; expression of being "saved" by child/motherhood from wild or destructive behavior.	*"If I didn't have my kids … I don't know what I'd be doing … or if I would even maybe be alive."(Jenn)*
Comfort or Competency in New Identity (Lesser et al., 1998; Clemmens, 2003; Burton et al., 1996; Musick, 1993)	Signs of adoption of role of motherhood; a sense of accomplishment at mothering role; expressions of being comforted or kept company by child; feelings of competency and pride in role of mother; an expressed desire to parent in a way superior to the parenting they received as children; reparation (Less et al., 1998); positive comparisons of self, compared to other mothers.	*"I didn't grow up with the best lifestyle and I wanted to change it when I got pregnant. And when I had her everything changed. I want my daughter to have a better life." (Emily)*