

**“THAT’S WHAT I LOOK TO HER FOR:” A QUALITATIVE ANALYSIS OF  
INTERVIEWS FROM THE *YOUNG MOMS: TOGETHER WE CAN MAKE A  
DIFFERENCE* STUDY**

by

**Eva Bugos**

B.Phil. & B.S., University of Pittsburgh, 2014

Submitted to the Faculty of  
The University Honors College in partial fulfillment  
of the requirements for the degree of  
Bachelor of Philosophy

University of Pittsburgh

2014

UNIVERSITY OF PITTSBURGH  
UNIVERSITY HONORS COLLEGE

This thesis was presented

by

Eva Bugos

It was defended on

March 28, 2014

and approved by

Patricia Documet, Assistant Professor, Department of Behavioral and Community Health  
Sciences and Scientific Director, Center for Health Equity, University of Pittsburgh Graduate  
School of Public Health

Rebecca Maynard, University Trustee Professor of Education and Social Policy, Graduate  
School of Education, University of Pennsylvania

Jeannette South-Paul, Andrew W. Mathieson Professor and Chair, Department of Family  
Medicine, University of Pittsburgh Schools of Health Sciences

Thesis Advisor: Kathleen Musante, Professor, Department of Anthropology and Research  
Professor, University Center for International Studies, University of Pittsburgh

**“THAT’S WHAT I LOOK TO HER FOR:” A QUALITATIVE ANALYSIS OF  
INTERVIEWS FROM THE *YOUNG MOMS: TOGETHER WE CAN MAKE A  
DIFFERENCE STUDY***

Eva Bugos, BPhil

University of Pittsburgh, 2014

Copyright © by Eva Bugos

2014

The U.S. teenage birth rate is 31 per 1000 women ages 15 to 19. Eighteen percent of those births are repeat teenage births, meaning the child is the second or higher order child born to a teenage woman. This study uses data from the *Young Moms: Together We Can Make a Difference* study (also called the *Maikuru: Teen Mom Mentoring Program*), which aims to build life skills, establish a social support network and empower teenage women with children to delay second pregnancies. The Young Moms study uses a novel mentoring model, in which each teenage mother pairs with an adult mentor. The mentor-mentee pairs attend six weekly skills-building workshops, communicate via phone or in person at least once a week, and complete follow-up interviews every three months for a period of two years.

This study uses a grounded theory approach to analyze a set of three-month follow-up interviews (n=9) with mentor-mentee pairs. Interviews were coded according to an *a priori* codebook corresponding to the interview guide, which elicited information about young mothers' future plans, the extent of their relationship with their mentor, and their views on the Young Moms study itself. In addition, the interviews were coded for key themes that arose independent of the interview guide.

The study sought to answer the questions: (1) What are the priorities of young women enrolled in the Young Moms study, and (2) From the point of view of young women, how does their relationship with an adult mentor help teenage mothers participating in the Young Moms study set and achieve their goals? Accordingly, interview analysis focused on characterizing the nature and extent of the mentor-mentee relationship and understanding how that relationship benefited mentees. In addition,

analyses presented here will inform program evaluations and yield recommendations for improvement.

All participants described a personal goal relating to education, either at the high school or post-secondary level. Three participants planned to join the military, and two talked about their long-term (non-military) career goals. Participants' descriptions of the mentor-mentee relationship ranged from regular contact to no contact in the weeks prior to their interviews. Adult mentors helped their mentees with the following: Applying to college, identifying future career goals, finding and applying to jobs, and navigating social services. Family planning did not emerge as a priority during any interviews, and no participants spontaneously raised the subject of contraception or family planning.

## TABLE OF CONTENTS

<b>PREFACE.....</b>	<b>XI</b>
<b>1.0 INTRODUCTION.....</b>	<b>XII</b>
<b>1.1 U.S. TEENAGE PREGNANCY AND BIRTH: RATES AND TRENDS XII</b>	
<b>1.2 REPEAT TEENAGE BIRTH.....</b>	<b>1</b>
<b>1.3 FRAMING TEENAGE BIRTH AS A PUBLIC HEALTH ISSUE.....</b>	<b>1</b>
<b>1.3.1 Educational outcomes.....</b>	<b>2</b>
<b>1.3.2 Economic outcomes .....</b>	<b>2</b>
<b>1.3.3 Causation versus correlation .....</b>	<b>3</b>
<b>1.3.4 Conclusion .....</b>	<b>8</b>
<b>2.0 RESEARCH QUESTIONS .....</b>	<b>9</b>
<b>3.0 METHODS .....</b>	<b>10</b>
<b>3.1 PROGRAM OVERVIEW.....</b>	<b>10</b>
<b>3.1.1 Participant characteristics .....</b>	<b>12</b>
<b>3.2 SESSION OBSERVATION.....</b>	<b>13</b>
<b>3.3 INTERVIEW TRANSCRIPTION .....</b>	<b>14</b>
<b>3.4 INTERVIEW CODING .....</b>	<b>14</b>
<b>3.5 METHODOLOGY LIMITATIONS.....</b>	<b>15</b>

<b>4.0</b>	<b>RESULTS .....</b>	<b>17</b>
<b>4.1</b>	<b>MENTOR-MENTEE COMMUNICATION.....</b>	<b>17</b>
<b>4.1.1</b>	<b>Contact frequency.....</b>	<b>17</b>
<b>4.1.2</b>	<b>Method of contact .....</b>	<b>18</b>
<b>4.1.2.1</b>	<b>In-person meetings.....</b>	<b>19</b>
<b>4.1.2.2</b>	<b>Text messaging .....</b>	<b>20</b>
<b>4.1.2.3</b>	<b>Phone calls .....</b>	<b>21</b>
<b>4.1.2.4</b>	<b>Emails.....</b>	<b>21</b>
<b>4.2</b>	<b>BARRIERS TO RELATIONSHIP DEVELOPMENT .....</b>	<b>22</b>
<b>4.2.1</b>	<b>Scheduling difficulties .....</b>	<b>22</b>
<b>4.2.2</b>	<b>Lost phone number.....</b>	<b>24</b>
<b>4.2.3</b>	<b>Transportation.....</b>	<b>24</b>
<b>4.2.4</b>	<b>Trust.....</b>	<b>25</b>
<b>4.3</b>	<b>FACILITATORS TO RELATIONSHIP DEVELOPMENT .....</b>	<b>26</b>
<b>4.3.1</b>	<b>Regular face-to-face meetings.....</b>	<b>26</b>
<b>4.3.2</b>	<b>Discussion feels natural.....</b>	<b>27</b>
<b>4.3.3</b>	<b>Creating a schedule during the follow-up meeting.....</b>	<b>28</b>
<b>4.3.4</b>	<b>Family involvement .....</b>	<b>29</b>
<b>4.4</b>	<b>EDUCATION GOALS.....</b>	<b>29</b>
<b>4.4.1</b>	<b>GED.....</b>	<b>30</b>
<b>4.4.2</b>	<b>High school diploma .....</b>	<b>32</b>
<b>4.4.3</b>	<b>Community college .....</b>	<b>33</b>
<b>4.4.4</b>	<b>Four year university .....</b>	<b>33</b>

<b>4.5</b>	<b>EMPLOYMENT .....</b>	<b>34</b>
<b>4.5.1</b>	<b>Current employment status .....</b>	<b>34</b>
<b>4.5.2</b>	<b>Long-term employment goals.....</b>	<b>35</b>
<b>4.5.3</b>	<b>Intent to join military .....</b>	<b>36</b>
<b>4.6</b>	<b>CONTRACEPTIVE USE .....</b>	<b>38</b>
<b>4.6.1</b>	<b>Participant contraceptive use .....</b>	<b>39</b>
<b>4.7</b>	<b>ACCESS TO SOCIAL SERVICES .....</b>	<b>41</b>
<b>4.7.1</b>	<b>EARN Program.....</b>	<b>41</b>
<b>4.7.2</b>	<b>Child Care Works program.....</b>	<b>42</b>
<b>4.7.3</b>	<b>Housing assistance .....</b>	<b>44</b>
<b>4.8</b>	<b>BENEFITS OF THE MAIKURU PROGRAM .....</b>	<b>44</b>
<b>4.8.1</b>	<b>Applying to college.....</b>	<b>45</b>
<b>4.8.2</b>	<b>Finding and applying to jobs .....</b>	<b>45</b>
<b>4.8.3</b>	<b>Identifying and obtaining resources .....</b>	<b>46</b>
<b>4.8.4</b>	<b>Using skills from weekly training sessions .....</b>	<b>46</b>
<b>5.0</b>	<b>DISCUSSION .....</b>	<b>48</b>
<b>5.1</b>	<b>PARTICIPANT PRIORITIES .....</b>	<b>48</b>
<b>5.2</b>	<b>INFORMATION NEEDS AND SESSION SUGGESTIONS.....</b>	<b>49</b>
<b>5.2.1</b>	<b>GED versus high school diploma .....</b>	<b>50</b>
<b>5.2.2</b>	<b>Establishing a career path .....</b>	<b>50</b>
<b>5.2.3</b>	<b>Deciding on and accessing contraception .....</b>	<b>51</b>
<b>5.3</b>	<b>MENTOR-MENTEE RELATIONSHIP .....</b>	<b>53</b>
<b>6.0</b>	<b>CONCLUSION.....</b>	<b>56</b>



<b>APPENDIX A .....</b>	<b>58</b>
<b>APPENDIX B .....</b>	<b>59</b>
<b>BIBLIOGRAPHY.....</b>	<b>63</b>

## LIST OF TABLES

Table 1: Age and race of program participants who completed 3-month follow-up.....	13
Table 2: Theme names and operational definitions .....	15
Table 3: Method of communication and contact frequency by participant .....	18

## **PREFACE**

I would like to thank Dr. Musante for her tremendous guidance at every step of this project, for thoughtful revisions to multiple drafts of this thesis, and for her mentorship and advising over the past year. Thank you also to Dr. South-Paul, Dr. Documet and Dr. Maynard for serving on my thesis committee, and to the University Honors College for funding work on this project through the Brackenridge Fellowship.

This research was conducted as part of the Maikuru: Teen Mom Mentoring Program, and I am grateful to the entire team for allowing me to work with on this project. Thank you especially to Dr. South-Paul for allowing me to become involved with the program, Collette Ncube and Lannea Adamson for their support and patience throughout the thesis process, and Ebony Hughes for introducing me to the program. Finally, thank you to my family and friends for their support and encouragement.

## **1.0 INTRODUCTION**

### **1.1 U.S. TEENAGE PREGNANCY AND BIRTH: RATES AND TRENDS**

Teenage pregnancy (also called adolescent pregnancy) is any pregnancy that ends before age 20, including births, miscarriages and abortions. The most current reports show that the U.S. teenage pregnancy rate is 68 per 1000 women ages 15 to 19, while the birth rate is 31 per 1000 women ages 15 to 19 (Hamilton, Martin, & Ventura, 2012; Kost & Henshaw, 2013).

The recent statistics confirm a downward trend in teenage pregnancy and birth rates over the last twenty years. In 1990, teenage pregnancy peaked at 117 per 1000 women ages 15 to 19, the highest rate since the early 1970s. Teenage pregnancy steadily declined over the next twenty years, with an exception from 2005 to 2007, when the rate rose slightly for two consecutive years (Kost, Henshaw, & Carlin, 2010). The teenage birth rate has likewise decreased by half, from 62 per 1000 women in 1991 to 31 per 1000 women in 2011 (Hamilton et al., 2012).

In spite of downward trends in teenage pregnancy and birth, these issues remain a policy concern in the U.S. To that end, Healthy People 2020 made teenage pregnancy prevention a priority. In 2010, the Obama administration created the Teen Pregnancy Prevention program, which was funded at \$110 million to support evidence-based

“medically accurate and age-appropriate” teenage pregnancy prevention programs (Solomon-Fears, 2013). The administration also awarded an additional \$75 million per year for five years (2010 to 2014) through the Personal Responsibility Education Program (PREP), funded by the Affordable Care Act. PREP funds evidence-based programs that incorporate lessons on abstinence, contraception, sexually transmitted diseases, and other “adulthood preparation responsibility subjects” like healthy relationships and financial literacy. It also provides competitive grants for research into new approaches to preventing repeat teenage pregnancy (U.S. Department of Health and Human Services, 2010). These financial commitments were continued for 2011 to 2013 at \$105 million annually for the Teen Pregnancy Prevention program and \$75 million for PREP (Solomon-Fears, 2013).

Teenage pregnancy prevention continues to be a policy concern and draw federal funds in part because U.S. rates are significantly higher than those of other developed nations, indicating room for improvement. In 2009, the U.S. teenage birth rate was 31 per 1000, compared to 25 in the UK, 10 in France and Germany, and four in Switzerland (Kearney & Levine, 2012). Furthermore, teenage pregnancy and teenage birth rates show significant racial disparities within the U.S. In 2008, the teenage pregnancy rate for black women was 117, for Hispanic women was 107, and for non-Hispanic white women was 43 per 1000 women ages 15 to 19. The teenage birth rate for black (60) and Hispanic (70) women was more than twice that of non-Hispanic white teenagers (27) in 2008 (Kost & Henshaw, 2013). In addition, teen childbearing is estimated to cost U.S. taxpayers as much as \$7.3 billion annually, a figure which includes direct costs associated with social

services as well as the decreased economic output of teenage mothers and their children (as compared to their counterparts without a teenage birth) (Maynard & Hoffman, 2008).

## **1.2 REPEAT TEENAGE BIRTH**

Repeat teenage birth (also called subsequent teen birth) is defined as the second or higher order pregnancy that ends in a live birth before age 20 (Lorrie et al., 2013). A recent study from the Centers for Disease Control and Prevention showed that 18% of teenage births in 2010 were subsequent births (second or higher order). Most (86%) were second births, but 12% represented the woman's third child, and some 2% were a fourth or higher order birth. Because the literature on the outcomes associated specifically with repeat teenage births is limited, and recognizing that approximately one-fifth of teenage births are repeat births, the following section focuses on the outcomes associated with teenage childbearing in general.

## **1.3 FRAMING TEENAGE BIRTH AS A PUBLIC HEALTH ISSUE**

Most discussions about the adverse outcomes of teenage pregnancy center on social measures like education and lifetime earnings, not physical health outcomes. Teenage motherhood is associated with lower educational and economic attainment, but it is unclear whether this is a causal relationship. Since public health encompasses mental, emotional, social and physical wellbeing, teenage pregnancy is widely acknowledged to be a public health issue.

### **1.3.1 Educational outcomes**

Compared to the general population, women who have children in their teenage years are less likely to get a high school diploma or GED and less likely to attend college. Only 51% of women who had a teenage birth obtain a high school diploma by age 22, compared to 89% of women without a teenage birth (Hoffman, 2006). Some young mothers return to school for their GED later in life. However, women who had a teen birth are still 17% less likely to have a GED than their peers who did not have a teen birth by age 28 (Hotz, McElroy, & Sanders, 2005). Finally, 2 to 3% of women who had a teenage birth complete college by age 30, compared to 9% of women who have their first birth at age 20-21 years and 43% of the general population (Hoffman, 2006; OECD, 2013).

### **1.3.2 Economic outcomes**

Compared to the general population, women who have children in their teenage years are more likely to be poor, more likely to receive public assistance, and appear to have greatly reduced economic prospects. Forty-eight percent of teenage women with children live below the federal poverty level (Ng & Kaye, 2012), and 64% of teenage mothers receive public assistance within the first year of their child's birth. This pattern persists beyond early childhood; a study using data from 1979 to 1992 found that by age 28, women who had a teen childbirth were still 14% more likely to receive food stamps (now SNAP), 11% more likely to receive Aid to Families with Dependent Children (now TANF), and 15% more likely to live below the poverty line when compared to women who did not have a teen birth, even after controlling for basic socio-demographic variables (Hotz et al., 2005).



Information on the long-term employment and earning outcomes for women who had a teen birth are difficult to assess, since they must rely on old data. Hotz, McElroy and Sanders conducted a retrospective study using data from 1979 to 1992. They compared women who had a teenage birth to all women, controlling for basic socio-demographic variables like ethnicity, family income, and family structure. They found that by age 28, women who had a teen birth had significantly lower hourly wages and annual incomes than women who did not have a teen birth. They also worked 170 fewer hours annually and 2,009 fewer hours cumulatively over the course of their lifetimes compared to women without a teen birth (Hotz et al., 2005).

### **1.3.3 Causation versus correlation**

The difference in social outcomes raises the question of causation versus correlation: Does teenage motherhood cause poor socioeconomic outcomes, or does another factor, like poverty, cause *both* teenage motherhood and poor socioeconomic outcomes?

Early studies tried to address this issue by statistically controlling for a range of risk factors. These studies found that race, income, education and parental factors accounted for much of the variation in socioeconomic outcomes for women with and without a teen birth. However, the remaining variation was substantial and negative; teenage women with children still had poorer socioeconomic outcomes than young women who delayed childbirth. However, these results could not definitively prove that age at first birth *caused* different outcomes, since the studies did not measure less-quantifiable confounding factors like parental involvement and attitudes toward childbearing (Hoffman, 1998).

The next wave of researchers sought to create pseudo-control groups by comparing teenage mothers to their peers without children. The idea behind these “natural experiments” was

to compare women who had a teenage birth to other young women who were similar in every way except age at first birth. Geronimus and Korenman used a case-control design; they compared teenage women with children to their older sisters in the same household who did not have a teen birth. This study found that the difference between women who had children in their teens and their sisters who delayed childbearing was insignificant across most measures of economic wellbeing (Geronimus & Korenman, 1993). Their findings imply that teenage pregnancy alone does not cause negative consequences later in life, and they claim that earlier studies overstated the consequences of teenage childbearing (Geronimus & Korenman, 1993). Instead, the study implicates family-level characteristics, particularly poverty, in poor later-life outcomes for women.

Geronimus posed the weathering hypothesis to explain this finding. The weathering hypothesis proposes that the physical health of poor African-American women declines as a result of cumulative stress and social processes related to racism and poverty (Geronimus, 1992). For these women, then, it makes more sense to have children in their teenage years than to delay childbearing until their twenties or later, when they themselves will be less healthy and less likely to have a healthy pregnancy.

Hoffman (1998) discussed some of the limitations of Geronimus and Korenman's sisters study. The study looked only at co-residing sisters, thereby excluding older sisters who had moved out and started their own household. This may have skewed the comparison sample toward less financially-independent siblings and thus underestimated the effects of teenage childbearing. Furthermore, the samples were small and untimely, using data collected from 1968 to 1988. Ultimately, Hoffman interprets the results of the sisters study to say "not that the effects of a teenage birth are small, only that they are smaller than previously thought (Hoffman, 1998)."

Hotz, McElroy, and Sanders (2005) sought to create a pseudo-randomized control group. Using data from 1979 to 1993, they compared short- and long-term outcomes of teenage women who gave birth to teenage women who miscarried. Their study assumes that miscarriages occur randomly (or close to randomly), and that women who miscarry would otherwise carry the pregnancy to term. Hotz et al. found that most differences between teenagers who gave birth and their counterparts who miscarried were much smaller than those found in regression analyses. In addition, the small negative effects of a teenage birth were short-lived. By age 28, there was no statistical difference across most outcome measures between women who had a teenage birth and women who miscarried. Both groups were equally likely to: be single mothers, live in poverty, receive public assistance, and have a high school diploma or GED. In fact, when compared to women who miscarried in their teens, women who had a teenage birth had significantly higher annual incomes (\$4,218 to \$5,075 more per year), worked more hours annually (317 to 420 hours more per year), and had a higher hourly wage (\$2.07 to \$2.72 more per hour) (Hotz et al., 2005).

In his 1998 review, Hoffman points out that this study's most serious limitation is that the control sample of women who miscarried did not exclude women who miscarried but later went on to carry another pregnancy to term before age 20. In addition, other studies have found that miscarriages do not occur randomly, thereby undermining one of the study's key assumptions.

An update on Hotz's study, conducted by Hoffman using more current data (1979-2000), confirmed the positive long-term economic effects associated with teen childbearing. However, the positive effects were less pronounced in Hoffman's reanalysis, potentially revealing generational differences in outcomes associated with teen childbearing. In fact, when Hoffman divided the data into two cohorts (women born from 1957-1960 versus 1961-1965), the older

cohort displayed positive results consistent with Hotz's original findings, while the younger cohort displayed negative effects of teenage birth (Hoffman, 2008). There may be generational differences in terms of which teenage women become mothers (and how teenage motherhood impacts these women). These generational differences mean that the existing literature on teenage pregnancy, which relies so heavily on old data, may not be a good gauge of what life is like for today's teenage mothers. This is especially true in light of the rapid changes to the teenage birth rate over the last two decades.

More recently, Lee (2010) used propensity score matching and sensitivity analysis to measure the consequences of teenage birth. Based on a range of individual-, school- and neighborhood-level characteristics, Lee calculated the predicted probability, or propensity, of teenage motherhood for each woman in the sample. Lee then created two matched cohorts of women with the same propensity scores, differing only in whether they did or did not have a teenage birth. Finally, Lee conducted a sensitivity analysis to measure the strength of an unobserved confounding variable to cause the difference in outcomes estimated by propensity score matching. Teenage birth resulted in modest but significant negative socioeconomic effects (specifically, educational attainment, employment and likelihood of receiving welfare). In order to nullify the difference between women who had a teen birth and those who did not, unobserved covariates (those not used for matching) would have had to be more powerful than known covariates. This is unlikely; thus it seems that some, but not all, of the differences in educational and economic attainment are attributable to teenage childbearing, instead of being an artifact of pre-existing socioeconomic conditions (Lee, 2010).

The life course perspective offers an alternative perspective on the potential causes and consequences of teenage pregnancy and teenage childbearing. The life course perspective, which

places individuals' choices within their socioeconomic context, poses that an individual's early life experiences shape and influence their major decisions much later in life. In public health, the life course approach helps explain how adverse experiences in early childhood can result in poor health later in life. The Adverse Childhood Experiences (ACE) study was a retrospective cohort study that tested whether adverse early childhood experiences could predict adult health problems, including adolescent pregnancy. The study considered the following adverse childhood events: emotional, physical or sexual abuse; exposure to domestic violence; exposure to substance abuse; mentally ill household member; criminal household member; and separated or divorced parents. Adolescent pregnancy exhibited a positive, dose-dependent response to adverse childhood events. The greater the number of adverse childhood experiences, the more likely a woman was to later become pregnant as a teenager (Hillis et al., 2004). Likewise, cumulative adverse childhood experiences also predict the probability of unintended first pregnancy and several sexual risk behaviors, including younger age at first sex and greater perceived risk for sexually transmitted diseases (Dietz et al., 1999; Hillis, Anda, Felitti, & Marchbanks, 2001).

The life course approach may offer one explanation for teenage pregnancy; since the children of teenage parents are at higher risk for a range of adverse life experiences, they may in turn be more likely to become teenage mothers themselves (Goerge, Harden, & Lee, 2008; Manlove, Terry-Humen, Mincieli, & Moore, 2008). In fact, women whose mothers had a teenage birth were themselves more likely to experience teenage pregnancy (East, Reyes, & Horn, 2007; Manlove et al., 2008).

### 1.3.4 Conclusion

Based on the findings of Geronimus' sisters study and Hotz's miscarriage study, some researchers argue that teenage birth is not a public health issue, and that framing it as such only stigmatizes teenage mothers and their children (Lawlor & Shaw, 2002). Others maintain that the high teenage birth rate reflects the bleak economic prospects for many poor young women, which *should* be viewed as a public health issue. Janet Rich-Edwards writes, "poverty *causes* teen pregnancy. Simply put, girls with prospects do not have babies." If poverty, not teenage birth itself, causes poor socioeconomic outcomes for teenage mothers, then interventions to reduce teenage childbearing instead of poverty would seem counterintuitive and unproductive. But Rich-Edwards asks, "What is the alternative? To dismiss the needs of today's and tomorrow's teen mother because their counterfactuals would not have amounted to much?" She argues that the public health imperative with respect to teenage birth is to give young women the means and motivation to both escape poverty and to delay motherhood, thereby raising the opportunity-cost of teen childbearing. The means to delay motherhood and escape poverty include full access to contraception and abortion services as well as personal and job skills training. The motivation to delay childbearing comes from local job opportunities with living wages (Rich-Edwards, 2002).

## **2.0 RESEARCH QUESTIONS**

- 1) What are the priorities of young women enrolled in the Young Moms study?
- 2) From the point of view of young women, how does their relationship with an adult mentor help teenage mothers participating in the Young Moms study set and achieve their goals?

## **3.0 METHODS**

### **3.1 PROGRAM OVERVIEW**

“Young Moms: Together We Can Make a Difference” is an ongoing research study designed to improve the life skills and increase the social support networks of teenage women with children, thereby encouraging them to delay a second pregnancy. Also called the Maikuru Program, the study’s ultimate goal is to develop a low-cost, effective and sustainable intervention to decrease the rate of subsequent teenage pregnancy that may be replicated in other community health centers. The study uses a novel mentorship model in which teenage mothers are paired with adult women from the community who act as their mentors, or maikurus. Maikuru means wise woman in Shona, a language spoken in Zimbabwe. This paper will refer to the Young Moms study and the Maikuru Program interchangeably. The Young Moms study aims to gauge the effect of the Maikuru mentoring model on 1) perceived social support, contraceptive use and academic achievement, 2) the rate of repeat teenage pregnancy, and 3) the prevalence of depression for young women participating in the program.

Dr. Jeannette South-Paul, chair of the University of Pittsburgh Department of Family Medicine, started the Maikuru Program in 2009, after working with teenage women with multiple children. She recognized the unique needs of these women and felt they could benefit from the advice and mentorship of an older woman (Riely, 2012). The Maikuru Program is a



collaborative project with the University of Pittsburgh Department of Family Medicine, Magee Womens Hospital and the Children's Hospital of Pittsburgh. The primary source of funding at the time of this thesis was the Heinz Endowments. The study recruits participants (both adults and teenagers) via flyers posted throughout the community, word of mouth and from participating family health centers associated with the University of Pittsburgh Department of Family Medicine, Magee Womens Hospital, and Children's Hospital. All posters and flyers direct participants to the Maikuru Program's email address, phone number, Facebook and Twitter. Once potential participants contact the research team, the team determines eligibility and obtains informed consent.

Eligible mentors must be more than 15 years older than the young women they work with. An eligible teenage participant must be under 20 at the start of the study, not pregnant and parenting one child that she delivered. Women older than 19, pregnant women, women who have more than one child and women who are not raising their child are not eligible to participate. Each participant cohort is capped at 20 participants (10 teens, 10 adults).

During an orientation session, participants take part in introductory activities and program leaders observe their interactions. Teenage women are matched with mentors based on shared interests and their ease of interaction during orientation. After the orientation session, the entire group meets once a week for five weeks for a presentation from a guest speaker and group discussion. Each meeting lasts 1.5 to 2 hours. Weekly topics from recent sessions included contraception, healthy relationships, career planning and financial management and budgeting. Participants receive transportation to and from each session (parking validation or bus passes), as well as food and childcare during each session. At the end of each session, participants receive \$15.00 for attendance. Early versions of the program included nine weekly sessions at

neighborhood health centers, but the current program runs for six weeks (including orientation) and takes place at the University of Pittsburgh Department of Family Medicine in Oakland. Since one of the study goals is to develop an effective, sustainable and replicable intervention, the Young Moms study team has changed the program over time to improve participant retention and attendance.

Between each weekly meeting, mentors and their mentees are required to contact each other at least once, and ideally more than once, via text message, phone conversation or in person. Participants are also asked to continue meeting regularly with their partners for two years after the weekly meetings end. Research assistants follow up with each mentor-mentee pair every three months, and participants receive \$20 for completion of each follow-up. For this study, the study team used a five-question interview guide (Appendix A) to elicit information about the nature of the mentor-mentee relationship, participant opinions on the program, suggestions for improvement, and participant needs. The three-month follow-up interviews were recorded and provide the data for this analysis.

### **3.1.1 Participant characteristics**

At the time of analysis, 50 young women had completed three-month follow-up interviews. The demographic characteristics of these participants are described in Table 1. The majority of participating young women were over age 18 (64%) and African-American (90%).

**Table 1: Age and race of program participants who completed 3-month follow-up**

<b>Age</b>	<b>Number (n=50)</b>	<b>Percent</b>
15	1	2%
16	4	8%
17	13	26%
18	14	28%
19	18	36%
<b>Race</b>		
American Indian/ Alaskan Native	1	2%
White	12	24%
Black/ African- American	45	90%
No report	2	4%

### **3.2 SESSION OBSERVATION**

I observed the weekly sessions for one participant cohort from October through December, 2012, including the orientation session and five skills-building sessions. Observations during those sessions served as an introduction for the program and provided context for understanding participant responses during the interviews. I observed the sessions during my work as an intern for Ebony Hughes, RN, who is part of the Young Moms study team. Ms. Hughes acts as a facilitator for all group meetings; she coordinates and trouble-shoots discussion between participants and the guest speaker at each session. She also conducts the skills-building session about family planning and contraceptive use. I primarily observed sessions, but also helped set up before and clean up after the meeting.

### **3.3 INTERVIEW TRANSCRIPTION**

I selected a set of nine interviews for transcription. Interviews were selected based on how closely the interviewer followed the interview guide (Appendix A), and interviews were conducted from 2012 through April, 2013. Two separate interviewers conducted the follow-up interviews, and they did not ask every question in every case. Therefore, this analysis focuses on those interviews that adhered most closely to the guide. I transcribed interviews verbatim, but edited for interviewers' and interviewees' verbal tics and filler words such as "um" and "like." I de-identified transcripts in accordance with IRB regulations. Interviews ranged from 20 to 45 minutes.

### **3.4 INTERVIEW CODING**

I uploaded de-identified interview transcripts to NVivo10. I initially coded according an *a priori* codebook corresponding to the five questions in the interview guide (Appendix A). I selected an initial set of seven interviews for line-by-line coding of novel themes. Thematic coding was an iterative process; I refined the codebook after each new interview, and recoded each previously-coded interview according to the new codebook. I selected several content-rich themes for further analysis. These themes and their operational definitions are listed in Table 2.

**Table 2: Theme names and operational definitions**

Theme	Operational Definition
Mentor-Mentee Communication	Any quantitative or qualitative description of communication, including contact frequency and method(s) of contact
Barriers to Relationship Development	Any factors that prevented or impeded regular communication or a closer mentor-mentee relationship
Facilitators to Relationship Development	Anything that helped mentors and mentees communicate or otherwise developed their relationship, or factors that made participants feel more comfortable with each other
Education Goals	Future goals or plans relating to education, at high school or post-secondary level
Intent to Join Military	Future goals or plans to join the military
Employment	Future goals or plans related to employment, and barriers to finding or keeping jobs
Contraceptive Use	Current or past contraceptive use and contraceptive preferences, or any other discussion of family planning
Access to Social Services	Any mention of specific social service or welfare programs e.g., SNAP, Child Care Works, PA EARN
Benefits of Mentoring Model	Any mention of how mentee benefits from program in general or how her mentor helps her specifically

### 3.5 METHODOLOGY LIMITATIONS

The data here have several limitations that should be acknowledged. First, the interviews were conducted by team members from the Young Moms study rather than by independent researchers. The team members have a close personal relationship with participants, and the interviews reflect this relationship. Second, the interview guide was very informal, and interviewers did not consistently follow the guide. In some interviews, questions were omitted, and follow-up questions and prompts were unevenly used. In some cases, the interviewer asked many follow-up questions about a particular subject, and in other cases the interviewer did not

ask any follow-up questions. The interviews selected for this analysis were those that were most faithful to the interview guide and most consistent in administration of follow-up questions and prompts.

## 4.0 RESULTS

Participants discussed nine major themes (Table 2). Five corresponded to *a priori* codes, while four (barriers and facilitators to relationship development, access to social services and benefits of the Maikuru Program) arose independently of the interview guide.

### 4.1 MENTOR-MENTEE COMMUNICATION

#### 4.1.1 Contact frequency

The Young Moms study requires mentor-mentee pairs to communicate at least once per week. There are no requirements about *how* participants must contact each other, but the study team encourages pairs to meet in person as often as possible. Five participant pairs (out of nine) contacted each other less frequently than once per week. One pair said they contacted each other twice a month via text (111A/114B). Two said they texted intermittently (303A/303B; 404A/404B). “Sometimes we’ll text a lot, then weeks or a month will go by and no text (303B).” Two pairs (082A/082B; 114A/114B) said they fell out of contact. One mentor said she had not communicated with her mentee in a month.

Yeah, I think about, she texted me maybe about, last month? Right before the holidays I think, she sent me a text. We were supposed to get together and I

think we got our days crossed. So I think that's the last contact we had. She sent me a text (082B).

The remaining participant pairs said they maintained weekly contact as required by the Young Moms Program. The methods they used to maintain contact are described below.

#### 4.1.2 Method of contact

Participants communicated in a range of ways, including in-person meetings, emails, text messages and phone calls. The primary means of communication for most participants was face-to-face meetings or texting. Secondary communication (not used by all participants) included emails, phone calls and planned outings. Table 3 delineates the communication method (or combination of methods) used by each participant pair.

**Table 3: Method of communication and contact frequency by participant**

Mentee ID	Mentor ID	Method of communication				Meet weekly contact requirement	Primary mode of communication
		In-person meeting	Text message	Phone call	Email		
069A	072B		✓			Yes	Text
082A	082B		✓			No	Text
086A	086B	✓		✓		Yes	In-person
095A	092B	✓			✓	Yes	In-person
097A	093B	✓	✓			Yes	Text
111A	114B		✓			No	Text
114A	114B		✓			No	Text
303A	303B		✓			No	Text
404A	404B		✓			No	Text



**4.1.2.1 In-person meetings** Two pairs used face-to-face meetings as their primary means of contact each week. One mentor worked in the same school that her mentee attended, which made regular, face-to-face meetings easier to coordinate.

095A: Yeah. Well, I try to go over to her office just to say hi every day.

092B: Yeah, because she is, like I said, in a different area. Yeah, so it may not be every day, but at least once a week.

095A: Yeah, once a week, definitely.

However, even this pair had to work out a schedule to maintain regular contact. They described the trial and error process they went through to find a meeting time that worked for both of them.

092B: We were doing after school, but once the time changed, I didn't want her being out late, especially with her son and everything, so we've...

095A: Usually it was like around five that we met, after school, but since it was getting dark...

092B: I preferred, because she had the scheduled free time, as long as she didn't have a study group or something like that, we scheduled to meet during the school day.

Another mentor-mentee pair described how they fit meetings into their weekly schedule. They combined their weekly meeting with something the mentee had to do anyway—attend therapy—and used the time in the car to catch up with each other.

Well, because one thing that I got to do with [086A] was drive her to [neighborhood 1] to her therapy, and so that meant we had a regular sort of weekly appointment, which was good (086B).

Instead of using in-person meetings as a primary method of contact, other participants said it was more convenient to text, and use face-to-face meetings as their secondary mode of communication. One pair went out to dinner once and also visited Washington, D.C. together.

We've been texting a little bit. I've taken them to dinner a couple of times. And, you know, with my schedule it has been a little bit harder. But I've definitely been intentional about texting... to see how they're doing (093B).

Pairs who had fallen out of contact said this model—using face-to-face meetings to supplement weekly texting—was an appealing option. In fact, one mentor posed this idea spontaneously. When asked how often the pair spoke, this mentor answered:

No more than once a week. So I would still like for you and I to get together... a time where we can plan to have the time to just leisurely talk to each other, maybe over a meal again. So we have a mutual, or a central location, or I'll pick you up, we'll jump on the [bus], we'll run downtown, run back, that kind of thing, I'm perfectly willing to do that (072B).

This pair had, until that point in the program, only communicated via text message.

**4.1.2.2 Text messaging** Participants frequently said that texting was an integral part of maintaining contact with each other, often because participants viewed it as the easiest way to stay in touch. Some participants successfully maintained weekly contact via text, supplemented by occasional in-person meetings. However, all five participants who failed to meet the minimum weekly contact said that texting was their sole means of communication outside of program-mandated meetings. One participant said that, though she liked the idea of using text message as a primary method and meeting as a secondary method of communication, she and her mentee had not been able to enact that model.

When we use technology, I think we could use it better. Because we have it at our disposal, I mean, me and her, we do talk on text. We just have to be better about it, I think, both of us. I think that that needs to be something we put in place, that says 'I'm going to check.' Because when we talk, we talk by text when we haven't met, just talk by text to check on her, see how she's doing (404B).

Only one mentor complained that she disliked texting. She said, “I’m great in person, I’m just not good on texting!” and “It may take me about a half hour to make ten text messages.” In spite of these complaints, she had only communicated with her mentee via “sporadic” text messages (303B).

**4.1.2.3 Phone calls** Participants generally expressed a preference for texting over phone calls. One mentee said “I’m not much of a talker on the phone,” and complained about someone, “I don’t talk on the phone, she should have been texting me in the first place (097A).” One pair used phone calls as a secondary means of communication to supplement their weekly drives together. “If we can’t see each other, it’s either when she goes on vacation, yeah, we talk on the phone (086A).”

**4.1.2.4 Emails** The majority of participants did not mention emailing each other, though they communicated with the Young Moms study team via email. Two participants expressed an opinion about using email to communicate with their partners. One young woman said, “I do have email but I don’t like to check it (303A).” Another participant pair said they used email as a secondary method to supplement their weekly meeting at school. The mentor sent her mentee follow-up emails about things they talked about during their meeting, which the mentee said she appreciated.

Yes, she emails me every day...But I like getting her emails. They’re not bad emails, they’re just like checking up on me, like ‘how are you doing, did you do this, did you turn in this?’ Like she keeps me on top... she pushes me. So that’s another thing that I like about her, she pushes me. Like, I’m not going to lie, this last time I did not want to (095A).

## 4.2 BARRIERS TO RELATIONSHIP DEVELOPMENT

Participants identified a range of barriers to further development of the mentor-mentee relationship. Often, these were offered in the form of excuses when the interviewer asked why the pairs had not communicated more often, or why they had not met up with each other in person.

### 4.2.1 Scheduling difficulties

The most commonly cited barriers were related to scheduling. Most participants were vague, saying, “you know, with my schedule it has been a little bit harder (093B)” or “I think that we both... allowed our schedules to be in the way (404B).”

Many participants readily and independently recognized the need to establish a schedule in order to keep communication on track.

But it [communication] is not as frequent as it should be. It's not as often as it should be, and I think I have to work at doing a better job reaching out, saying 'okay we're going to do that at this time or that time.' I think it just kind of got away from us. It was much easier when the sessions were going on because you see each other every week and so we had set that time up and that was easier, we had a chance to talk. But since the sessions have been over it's been harder. And I own that, I own my part in that (404B).

Another mentor hoped to take advantage of her mentee's relatively relaxed summer schedule to arrange some in-person meetings.

I feel that we need to get back on more, like a weekly schedule. I think that would be better. And then also we need to have another outing... Because she's not in school. I think we really need to try to make the opportunity to do something during this time period, when she's not busy, busy, busy (114B).

Even the participant pair that met in school every week said scheduling was occasionally difficult, and the mentor felt like they didn't have enough time together.

I think for me, sometimes it's challenging because of my schedule, so I try to, if we schedule an appointment, to keep it, or if I need to change anything, make sure we meet outside the thing. And I feel like we always run out of time, I wish we had more time. That's the only thing... I just wish I could spend even more time (092B).

Some participants said that their irregular schedules made meeting in person a challenge. One young woman said that her work schedule changed from week to week, making it difficult to create and maintain a weekly appointment to see her mentor. This problem became apparent when the interviewer tried to help the pair decide on a mutually convenient meeting time.

303B: I was thinking... but you aren't working on Monday and Tuesday, so that's not going to work. I was thinking that we could meet. But you don't work on Monday or Tuesday ever, right?

303A: Um, sometimes I do, and sometimes I'll have like Tuesday and Wednesday, or Tuesday and Thursday.

303B: But you don't know your schedule.

303A: For the most part it's always Monday and Tuesday. Unless like they needed for me to be another day...I get like three weeks of schedule [ahead of time].

A mentor from another pair said that, because she worked at a university, her schedule changed according to the semester schedule.

I know for me, now that I've kind of settled in my semester, like I understand it. My summers are very difficult, I don't know my schedule. I can be in one place one minute, you know, another place. But once the semester has started, I think it'll be easier to figure out a specific time (404B).

### 4.2.2 Lost phone number

Three young women (one-third) said they lost contact with their mentors because they lost their phones or changed phone numbers.

We haven't really been able to get in contact, well I've gotten a new number, and I didn't have [082B]'s number, so it was hard to keep in contact with anybody. Because I didn't have any numbers (082A).

My relationship with [114A], it's not bad, it's just that I don't think we've had the opportunity to really connect...It's just, at the end, she had the problem with her phone and then she lost all her numbers, and then I didn't know how to get in touch with her (114B).

069B: And then last one, you lost your phone, so I couldn't, I didn't know, that weekend that she wasn't coming. So we missed a contact. So we're, I'm not yet, still hopeful, that we're going to have a kind of bonding.

69A: Something always happens. I had lost my phone.

Lost phone numbers or new phones should not have prevented participants from making contact. Mentors or mentee could have contacted the program via email or Facebook to get their partners' alternate contact information. However, given the commonness of this occurrence (one third of participants), the program should establish alternative methods of contact (home phone numbers, email) during the weekly meetings.

### 4.2.3 Transportation

Only one participant specified that transportation was a barrier to meeting her mentor in person.

082A: It just depends on if I have the money [to take the bus]. I can use a bus pass, but that wouldn't be until after three.

INTERVIEWER: Oh, okay, because you're using your mom's?

082A: Right.

Other mentors said that they could drive to pick their mentee up, or suggested meeting in a central location that both participants could access easily.

#### **4.2.4 Trust**

Several participants talked about the difficulty of developing the trust needed for a strong mentor-mentee relationship. Some mentors felt that it was hard to converse with their mentees. One woman said “You don’t talk a lot, so that’s why I have to be like, really drag it out of you to find out what you feel (114B).” Another mentor echoed that sentiment, but expressed hope that their relationship would grow in the future.

She’s like a gold mine, you gotta dig deep. Get the pick out, kinda get it out of there, but she... I think she’s got some great insight, and...I think she’s got a lot to offer. It’s just a matter of the process of kind of getting to that. As time goes on, I think it’ll be an even better relationship (093B).

In another interview, the lack of open communication between the young woman and her mentor was even more evident. This young woman revealed during the interview that she was pregnant with her second child. This was new information to her mentor, who expressed surprise.

114B: I didn’t know, she didn’t tell me.

INTERVIEWER 1: She hadn’t told you?

111A: I didn’t tell anybody.

114B: I could kinda tell. She hasn’t talked to anybody about this. I’m like, ‘I didn’t know nothing about that.’ Not that that’s something that I would have asked her, because I wouldn’t think to ask her anything like that.

This young woman had not told her mentor or the program about her pregnancy until that point.

Another young woman explicitly stated that she did not yet feel comfortable confiding in her mentor.

I think when our relationship grows we'll talk about things more, but basically everything else is more like... I wouldn't say private, but more... I wouldn't tell it to someone I didn't really know (303A).

This mentor-mentee pair had not communicated regularly, and therefore it makes sense that the young woman did not yet fully trust her mentor.

### **4.3 FACILITATORS TO RELATIONSHIP DEVELOPMENT**

Participants mentioned several factors that they thought strengthened their relationship. Some facilitators (e.g. regular meetings or easy communication) are in direct contrast to the barriers mentioned above (e.g. scheduling difficulties or lack of trust). Issues that were discussed as both barriers and facilitators may reflect participants' priorities. When they say that scheduling difficulties are a barrier, but regular meetings are facilitators, participants reveal the importance they assign to these issues.

#### **4.3.1 Regular face-to-face meetings**

Two participant pairs met face-to-face every week. One mentor said that regular meetings jump-started the relationship with her mentee.



086B: Well, I think we probably had a faster start than some of the other people did, I guess.

INTERVIEWER 1: Why do you say that?

086B: Well, because one thing that I got to do with [086A] was drive her to [neighborhood 1] to her therapy, and so that meant we had a regular sort of weekly appointment, which was good. And I mean, especially because once school starts, I mean, kids are busy.

INTERVIEWER 1: Right, yeah.

086B: So that actually turned out to be helpful.

Another mentor worked at the same school that her mentee attended. She said that being in the same place helped her check in with her mentee.

I think it's worked in our favor because of accessibility and, you know, if I see or hear something, I can go, I know where to go, find her...So that's worked out, in regard to, I think, development of the relationship. And her knowing where I am, if she needs anything, how to reach me (092B).

#### **4.3.2 Discussion feels natural**

Though some participant pairs said they felt like conversation was difficult and their relationship lacked trust, others said that communication was open and easy. "It hasn't really been hard to communicate with her. And she's been very open to doing a lot of different things, and I think that's really good (093B)." Even participants who contacted each other less than once a week sometimes felt that easy conversation facilitated their relationship.

The good thing about it is when we see each other we just pick up where we left off. But we just don't...maybe once in a while we'll text each other and say 'everything okay?' I don't feel resentment there. Like I said, we saw each other today, it was like, 'okay, last time we talked, we talked about this, and so what happened?' We just kind of picked up where we were last time we chatted (404B).

### 4.3.3 Creating a schedule during the follow-up meeting

In the interviews where participants said they struggled to stay in touch, the interviewer worked with them to establish a day and time that they were both free, and suggested potential activities that they could do together. Participants were open to scheduling during the interview, and said that they wanted to meet up with each other in person.

I feel like I could see her more and talk to her more, so I'm glad we're getting scheduling. I'm feeling more hopeful about it. Instead of feeling like 'ugh, are they going to kick me out of here'... Or 'I bet she wishes she got her or her or her or her.' But you know, I feel more hopeful with a plan. And I'm great in person, I'm just not good on texting!... As far as communication goes. I expect us to do more, and to do more you need a plan, so I'm glad we have a plan, not just saying we're going to do this, we're going to do better. It's good to have a plan and be able to execute it and know that we're both getting involved (303B).

Another mentor also said that she felt more confident after working through her and her mentee's schedules in the interview.

And I liked the suggestion of just picking a date when we settle down, the next couple days, like every third Wednesday or this time on Tuesdays work once a month at 2:00, you know? I'll just put into our schedule, just make it, say this is what we're doing, and then figure out a place. Because I didn't think about it like that. So that was a good suggestion (404B).

That same participant pair also said that knowing they had a follow-up every three months, and the process of scheduling that follow-up with the study team, reminded them to get in touch with each other.

404B: I will say, this helps me, knowing the check-up is coming up. I think for me, because it keeps me accountable.

404A: Yeah. I was going to say the meetings helped too, and also like your suggestions about helping us keep in contact, that also helps, so that way we can be better planning about it.

#### 4.3.4 Family involvement

One mentor said that she met her mentee's family and the father of her baby, which improved her relationship with her mentee.

086B: One good thing has been that [086A]'s mom is involved. I mean, she's obviously very involved with [086A], but I've gotten to know her too. And that's nice for me and it means that, you know, everybody's kind of at least somewhat on the same page and you don't feel like— Well, and I've also gotten to know [086A]'s sisters...So that's nice, because it's not just like there's [086A], or [Baby] and [086A] in this little bubble all by themselves.

086A: She also met [Baby]'s dad too.

INTERVIEWER 1: Oh, really? Is he still around, in Pittsburgh?

086A: Yes, he's still around.

INTERVIEWER 1: That's cool. Well you've met a lot of the family.

086B: So that makes it easier, I think. I don't know, probably there are some moms who either aren't living with their families or don't have good relationships with their families. So that's been helpful, to know that [086A]'s got a real good base, at home.

Other participants talked about their family members during the interview. One mentor suggested introducing her mentee to her granddaughter; another mentioned that the mentee had met her husband.

#### 4.4 EDUCATION GOALS

The most common theme was young women's acknowledgement of the importance of formal education and a desire to continue education at the high school or post-secondary level. All

young women described a personal goal relating to education, often in connection to a career goal. However, participants planned to take different paths to achieve these goals.

#### **4.4.1 GED**

In Pennsylvania, students are permitted to remain in public high school until age 21. Students over age 17 who dropped out of their graduating class are eligible to take the GED test instead of completing high school. However, the GED is not necessarily an equal alternative to a high school diploma. GED recipients have lower rates of job placement, post-secondary school enrollment, and lifetime earnings than their counterparts with high school diplomas, and most four-year colleges and universities do not accept the GED for admission. In her participatory research study *Gateways and Get-aways*, Eve Tuck found that New York GED students readily acknowledged the differences between the GED and a high school diploma. GED students viewed the GED as an inferior alternative that they pursued because of personal reasons (the need for flexibility, desire to escape school environment) or because of misinformation. Several students said that their school advisors downplayed the difficulty of the GED test and the bureaucratic barriers to enrolling in classes. Participants emphasized the difficulty of the GED test, particularly with respect to technical material. One woman said that it would have been less taxing to stay in high school and receive low scores (Tuck, 2012). Though Maikuru Program participants did not extensively discuss their views on the GED, some said they wished to take the test instead of returning to high school for a diploma.

Two young women described their plans to take the GED test. However, they had different experiences signing up for preparatory classes and registering for the test. One woman

planned to take GED classes through community college, and had already set a date to take the test. She voiced excitement about being able to finally finish high school.

Right now I'm about to start my GED classes, I start on Monday. I'm really excited because I haven't been able to go back to school since I had him. So it's going to be exciting because I'm ready to just get it over and done with (082A).

This young woman understood the timeline and cost of prep classes and the GED test, had a plan to pay the registration fee, and wanted to enroll in community college after completing the GED.

Another young woman was also planning to start GED classes soon after the interview. She was enrolled in the Employment, Advancement, and Retention Network (EARN) Program, which provides employment and job training to recipients of SNAP and/or TANF in Allegheny County. EARN offers GED prep classes, but this young woman wanted to take the test without first taking classes. She said that when she tried to explain this to an employee at EARN, she faced a personal conflict.

They are just the worst people to ever try to communicate with, ever. The lady, I don't know what to call her. She's just real rude, like real bitter. She was just like, 'Well, you need help with something, because you don't have a high school diploma or a GED.' From what I heard, the GED test is just reading, writing and math, and I don't need help with reading, writing or math... I told her I dropped out of school because I was pregnant, not because I was dumb. And they just won't let me try to take the test (097A).

Much like the subjects in Gateways and Get-aways, this young woman lacked comprehensive information about the GED test and may have underestimated its difficulty (Tuck, 2012). Though she does not specify where she heard that the GED test is "just reading, writing and math," participants in Tuck's study heard such simplistic characterizations of the GED from their guidance counselors and other school officials (2012).

The same young woman's mentor (093B) asked how her mentee could find more information about GED classes at EARN. Her mentee responded that conflicts with staff at the EARN Program had already prevented her from seeking more information.

I told the man that runs the class that I don't need help, and he said 'you need help with something, tell me what you need help with because I could be doing other stuff right now.' And I told him 'Go do it,' and I walked away. So everybody has an attitude... He got smart with me, and I got smart back (097A).

This young woman's difficulty navigating public assistance programs is further discussed in section 4.7.1.

#### **4.4.2 High school diploma**

One young woman had plans to re-enroll in high school. She emphasized that she wanted a high school diploma, not a GED. "I want the high school diploma, don't want the GED. So I got to hurry up (069A)."

Another young woman voiced a desire to continue her education, but was undecided about whether to pursue a GED or diploma. She did not have strong information about the time frames or costs for either route, and her information came from informal sources.

Interviewer: Are you thinking of getting your GED, or do they have the track where you can get your diploma?"

303A: Yeah, they do, which I found that out recently... I found that out from one of the workers [at my job] that I can actually do my diploma there. So I'm just probably going to do that. Whichever one is easier, shorter amount of time.

This participant was concerned about the relative difficulty and time needed to complete a GED compared to a high school diploma. However, she notably does not discuss the benefits and drawbacks of each option in relation to her future career or education goals.

#### **4.4.3 Community college**

One young woman had completed her first day at community college on the day of the interview. She said, “It was easy today. I mean, I guess it’s the first day, but I felt like I was still in high school. Like I didn’t feel like there was much of a change (404A).”

Another young woman planned to enroll at community college after completing her GED, but was undecided about which major to pursue. A third woman (who was not yet enrolled in either high school or GED classes) said she was considering community college as a stepping-stone to another degree. “I’m probably going to go to [Community College] to take the basic classes, and then either go to [Private 4-year University] or [Online University]. If I do forensics I’m going to go to [Private 4-year University], and if physical therapy [then Online University] (303A).”

#### **4.4.4 Four year university**

Two young women mentioned that they want to attend four-year universities, but only one had concrete plans to attend. At the time of the interview, she was enrolled in high school and had been accepted to three different colleges, one of which had awarded her a scholarship.

I’m looking at what would be best beneficial for me. In fact, I want to go to [Private 4-year University], that’s my dream school. But my whole thing is, will I be able to focus, and stay home, and be in the city, and have all my

attention on school. Or will I get side-tracked by family and working and wanting to work and stuff like that. So that's what I'm looking at now, I'm looking at the pros and cons of what if I stayed here, what if I go there?" So, we'll see (095A).

## 4.5 EMPLOYMENT

### 4.5.1 Current employment status

Four participants talked about their current employment status. Two participants said they were in the process applying for jobs.

082A: Other than that, I've gone on a couple jobs, and I think I might be able to get one. I think I'm about to get it, so that's good too.

INTERVIEWER 1: That's nice, that's great. What kind of job did you apply for?

082A: It's stocking of vending machines and stock coffee in these offices that are located downtown.

Another participant said she was applying to a new job because her current employer did not give her enough hours.

111A: I been applying to places. Cause the bar that I'm hired with doesn't give me hours and stuff so I'm just like, whatever. Trying to find stuff closer.

114B: What do you think is going on there, that they're just. Because it wasn't like that before, was it?

111A: I don't know. It wasn't. I said, 'I haven't been getting hours,' and they're like, 'well we called you.' I'm like 'when did you call me?' I'm like 'Nobody called me.' The manager was out of town, so who called me? You know, when they said they did, I'm like 'nobody called me. Like, nobody.' They're like, 'I'll look into it.' Never did. So I'm like, 'cool thanks.'



Another participant also talked about her difficulties getting enough hours at work, and said that irregular hours made it more difficult to find reliable childcare.

INTERVIEWER: Do you get enough hours?

303A: Not really. I have, I'm supposed to be full time, but sometimes I get part-time shifts. But the part-time shifts are needed because I don't have day care. I don't want them, it's just like I need them. So basically I'm just done with it and I can take care of him [her son].

While this participant struggled to balance childcare and work, another contemplated her need to balance work and school. She was newly enrolled at community college, and said she may have to work fewer hours in order to focus on school.

404A: I try to keep it between 12 to 20 hours. I was doing like 40 before.

INTERVIEWER: Gotcha. Still a lot.

404A: Yeah, I might have to cut down a little bit more, after I see how the classes go. I have class Saturday, I have one night class.

#### **4.5.2 Long-term employment goals**

Two participants talked about their long-term goals for employment. One young woman said she wanted to become a Certified Nursing Assistant (CNA). Once certified, she said she wanted to work at Children's Hospital (097A). She knew which certification program she wanted to attend for her CNA, and she knew how long certification would take (18 months).

Another young woman said she was interested in either forensics or physical therapy. Like the participant above, she knew where she would do each program (forensics at a 4-year university, physical therapy assistant certificate at an online university) (303A).

### 4.5.3 Intent to join military

Three young women said they had plans to join the military. Officially, single parents are not permitted to enlist for active duty in any branch of the military. One woman said she would give up custody of her child to the child's father temporarily, then regain custody after enlisting and completing basic training.

I need a notary to sign my rights over, of my son to somebody else... So he [his father] is going to take him for the nine weeks I do basic training (114A).

The Air Force position on this practice is that new enlistees will be "advised and required to acknowledge by certification that his/her intent at the time of enlistment was not to enter the Air Force with the express intention of regaining custody after enlistment (U.S. Air Force, 2013)." However, the young woman seemed to understand this process as a viable way to work around this policy.

They have like a station where they always have people come in from colleges, they always have people come in. So one time an Army man came, and I talked to him, and then I talked to my cousin because she was in the Army, and she told me how to do it. And I qualified, so that's what I chose to do (114A).

Another young woman planned to join the military but was derailed by a second pregnancy. "I started to sign up with the army, and I got pretty far, but we found out we have another baby on the way, so I have to wait (111A)." This young woman was not specific about how far along in the enlistment process she was before finding out about the second pregnancy, but she said "I'm trying to be happy about it [the pregnancy] but it's hard. Cause the army was so close (111A)."

Finally, a third young woman in high school said she wanted to join the Air Force, where her brother was also employed. Her plans seemed less specific.

I don't know how the Air Force is with the years and how you sign up. I'm not so sure. I got to get the plan. I got to do some research, I got to get the people to come out here. But they can't come out here until I'm starting my 12<sup>th</sup> grade year, so. That's a whole 'nother year (069A).

In spite of policies prohibiting single parents joining the armed forces, there are a substantial number of single parents in the military. Five percent of active duty military members and 9% of reserve members are single parents. Women are more likely to be single parents in the military than men; 8% of women in active duty and 16% in reserves are single mothers (2010). There is no literature available specifically on women who enlist in the military as single mothers. However, literature on single parenthood (generally) in the US military finds significant role conflict for parents, or issues relating to how a parent divides time between work and family (Britt, Adler, & Castro, 2006).

In a model evaluating family adaptation of single mothers and single fathers in the U.S. Army, Bowen et al. found that single women with children were more likely than their male counterparts to be younger, in a lower rank and pay grade, be African American and had younger children and fewer children. Bowen evaluated the relative predictive value for positive family adaptation (the extent to which a family adjusted to military life) of resources and stressors. For both women and men, resources were a more powerful explanatory variable than stressors, indicating that the strains of military life may be overcome with social support resources for single military parents. For women, both informal and formal adaptive resources were significant. Informal resources included family or community resources, like a nearby family member or neighbor who helps with childcare. Formal resources included Army support resources, such as supervisor support and on-base childcare services (Bowen & Orthner, 1989).

Bowen and Orthner argue that the military may benefit by allowing single parents to enlist if they can meet childcare contingency policies (Bowen & Orthner, 1989). They found that single parents in the Air Force report levels of life satisfaction similar to their married coworkers, and a greater proportion report high levels of job satisfaction. In addition, similar proportions of single and married parents in the Air Force said they were committed to a career in the military (Bowen & Orthner, 1986).

#### **4.6 CONTRACEPTIVE USE**

Though interviewers did not ask about contraceptive use in every interview, two interviews discussed the topic. Young women in this study mentioned three specific contraceptives: Implanon (implant), Mirena (hormonal IUD) and Depo-Provera (three-month injectable). Implanon and Mirena are part of a class of contraceptives called long-acting reversible contraceptives (LARCs).

There are two general types of LARCs: Implants and intra-uterine devices. Implants (Implanon and Nexplanon) are small rods containing hormonal contraceptive that are inserted under the skin on the inner arm. Implants are approved for three years, after which the rod must be removed and replaced. Intra-uterine devices (IUDs) are small T-shaped devices that a doctor must place in the uterus. The Mirena IUD is a hormonal contraceptive that is approved for five years, after which it must be removed and replaced. The Paraguard IUD is non-hormonal, made of copper, and approved for ten years.

LARCs are highly effective; a recent study found the failure rate for LARCs was under one percent in the first three years of use (Winner et al., 2012). LARCs are notable for the fact

that their effectiveness does not depend on user compliance in the same way that other contraceptive methods do. Once inserted, implants and IUDs remain effective for years, and the user does not need to remember to follow up on a regular basis. LARCs have a high rate of user satisfaction and continued use. In a St. Louis study on women's contraceptive preferences and use, only 17% of women using an implant and 14% of women using an IUD stopped use within a year of receiving the IUD. That same study found that 84% of LARC users felt satisfied with their method of contraception after one year (Peipert et al., 2011). In 2007 and again in 2012, the American Congress of Obstetricians and Gynecologists endorsed LARCs for adolescents (ACOG, 2012).

The other type of contraceptive mentioned during interviews was Depo-Provera. Depo-Provera is the brand name for a hormonal contraceptive called depot medroxyprogesterone acetate (DMPA). A doctor prescribes and a nurse injects DMPA, and each injection is effective for three months. After three months, the user must return to her doctor for another injection. When used properly (i.e. injections delivered on-time every three months), DMPA is as effective as LARCs (Winner et al., 2012). However, 43% of women using DMPA discontinue use within the first year (Peipert et al., 2011). Seventy-six percent of women cite negative side effects as a reason for discontinued use, and 26% said changes to their menstrual cycle contributed to their decision to stop using Depo (Mosher & Jones, 2010).

#### **4.6.1 Participant contraceptive use**

One young woman said that she was using the Mirena IUD and seemed satisfied with her decision.

I'm on Mirena. The five-year...So after that, I think I'm going to get it again.  
Just keep it going (114A).

Another young woman became pregnant between the six-week intervention and the three-month follow-up interview. She said that she was not using contraception at the time she became pregnant, but was currently debating her contraceptive options for after the birth.

111A: I'm debating between Depo and Implanon. Because Implanon is longer but Depo is easier.

INTERVIEWER 1: Easier in what way?

111A: Cause it's just quick, I don't have to sit there and even...

INTERVIEWER 1: Yeah, but Depo you have to get a shot every how many months.

111A: But it's quick.

The young woman above says that DMPA is “easier” than the implant. Though she does not elaborate on *why* she believes it is easier, she may believe that DMPA is easier to access than the implant. Two factors could contribute to this mindset. First, Depo may be more common among members of her peer group. Teenage women are the most likely age group to use Depo. Among women ages 15 to 19 using contraception, 9% use Depo. In addition, black women are more likely than women of other races to use Depo (Mosher & Jones, 2010). Second, this participant may have had concerns about the implant specifically. Previous qualitative research on young women's contraceptive preferences found that women felt LARCs (both IUDs and implants) were foreign objects that did not really belong in their body. For these women, an injection may feel more natural. Women in this study also expressed concern that the LARC insertion would be painful, or that other people would be able to feel the implant through their arm (Kavanaugh, Frohwirth, Jerman, Popkin, & Ethier, 2013).

## 4.7 ACCESS TO SOCIAL SERVICES

No specific questions asked about participant's access to or use of social services. However, several participants brought this issue up independently and spontaneously, indicating its importance to them.

### 4.7.1 EARN Program

Two participants mentioned the EARN Program. The Employment, Advancement and Retention (EARN) Program is a Pennsylvania welfare-to-work program intended to help recipients of TANF and SNAP prepare for and find employment. Services include GED prep, job training and community service. A caseworker helps coordinate services. The young woman below voiced frustration with the community service and job training components of the EARN Program, and struggled to navigate the system to take the GED test.

097A: It's called the EARN Program...Right now, I'm in community service. Like, the CD-ROMS on computers, they have us take them apart. It's never going to be my occupation, I don't know why I'm doing that. It just like, it frustrates me, just like, so bad. And when I ask them about the GED test, they all just like blew it off, nobody never says nothing about it. So she said I'd meet the teacher on the 14<sup>th</sup>, but I don't start his class until the 17<sup>th</sup>. So I don't know. But me and the teacher cannot win at it, because he called me dumb. I'm not dumb.

093B: What did he say?

097A: That I need help, with reading, writing, and math. How you going to tell me I need help with reading, writing and math and you never looked at nothing I ever did? Except for watching me take apart some computer roms.

INTERVIEWER 1: Oh, they didn't make you take a test prior to?

093B: So for the computer roms, taking them apart, were there instructions they wanted you to read, or how did they make you do it?

097A: No. Take the screws out, put the metal with the metal, the plastic with the plastic, and the green, I guess just like, a green square inside the rom, put that with that. And keep taking them apart until the program is over. I'm there from 8:30 to 12:30, taking apart computer roms.

093B: So that's a community service job.

097A: I have to, I have to go there because of welfare.

093B: Okay, so when you just ran that down, did someone tell you that the first time?

097A: No.

093B: You did that on your own?

097A: Yeah. When I went there, I was in orientation, and I was just sitting in the room, just looking at this lady look at me, like everything she said, was just focused on me. They're like, 'work on your resume.' I don't have nothing to put on a resume, so they were just like forcing me to do a resume. Nothing I can put on there. Like, nothing at all.

093B: And, were you talking to her about that when you were doing it?

097A: Yeah, but they're like 'you're here for job-seeking, most jobs don't hire you without your GED.' So I said, 'let me take the GED test.' And everybody just blows it off. They've been blowing it off for like two weeks now.

This young woman had a specific goal—to take the GED test—and she felt the EARN Program staff were unresponsive to her goals and needs.

#### **4.7.2 Child Care Works program**

Two participants mentioned Childcare Partnership (officially Child Care Works), a program in which the state subsidizes childcare. In Child Care Works, relatives, neighbors or friends (as well as daycare centers) may be approved to receive childcare subsidy payments, allowing women to



use informal childcare providers. One young woman thought that EARN enrollment was a prerequisite for Child Care Works.

111A: Cause childcare partnership, they do that in welfare, but you have to wait and do the EARN Program before you can get that.

INTERVIEWER 1: The EARN? You have to do the EARN Program? What's the EARN?

111A: The EARN Program, you go in and look for job and stuff. So if you already have one, you just wait.

However, this participant seems to have misunderstood the enrollment requirements for Child Care Works, because EARN enrollment is not a formal requirement. According to the Pennsylvania Department of Public Welfare, approved participants must either work 20 hours per week *or* work 10 hours and participate in an approved training program (such as EARN) for 10 hours each week. This participant and another also talked about the difficulties of enrolling in Child Care Works. In both cases, mentors said they were involved in the discussion about childcare.

114B: Yeah, but I thought... So I don't know if Childcare Partnership has gotten like that now, where you have to, like there's a list? A waiting list?

111A: That's what they told me. For everybody who has a job or wants a job.

114B: Did they put you on the waiting list?

111A: I'm looking into it, I don't know.

There is, in fact, a waiting list for Child Care Works; in 2013, there were 6,500 children on the waiting list, with a six- to nine-month average wait time in 2009 for Allegheny County. This explains why another participant was also struggling to enroll her child in Child Care Works.

INTERVIEWER: What's your day care?

303A: I'm trying to do, uh...

303B: Childcare partnership. One of the things we talked about.

303A: My mom just got [inaudible]. So my mom just watches him for free.

In both cases, the mentors knew about Child Care Works and were involved in the childcare discussion.

### **4.7.3 Housing assistance**

One young woman wanted to move out of her mother's house, and had applied for subsidized housing.

Yeah, I actually applied to the subsidized housing, but the waiting list is really long. And I went out on myself and looked at a couple houses by myself, but they weren't up to par. And like the landlord, he didn't want to fix the stuff that was wrong, so...still looking (404A).

Like the young women who applied for Child Care Works, the waiting list for subsidized housing in Pittsburgh was prohibitively long, forcing this participant to look to less-satisfactory (and potentially unsafe) options.

## **4.8 BENEFITS OF THE MAIKURU PROGRAM**

Interviewees identified a number of concrete benefits that they gained from the mentor-mentee relationship, often with regard to setting and working toward short- and long-term goals. In

addition, participants talked about how they used information from the life skills training sessions.

#### **4.8.1 Applying to college**

As discussed previously, one prominent goal was continuing education. Several young women said that their mentors helped them navigate the college application process.

082A: Oh, man. I'm not going to school right now, it's probably the most upsetting aspect of my life right now. I'm just busy, and lost, confused. I need help getting into school, and I don't know what to do. I missed the deadlines for college.

INTERVIEWER 1: Well do you think [your mentor] can help you get back on track for school?

082A: Yeah, I do. That's what I look to her for.

Another participant said her mentor helped her apply for financial aid for college. This young woman had already been accepted to several colleges, but was struggling to decide where to attend. Her mentor reminded her that she would have to wait until she had all of the financial information to make a decision. "Well, the financial aid season hasn't happened yet, that'll be in January... We have to wait on that (095A)."

#### **4.8.2 Finding and applying to jobs**

Another prominent theme centered on employment. Young women wanted to find a job and identify a sustainable career path. One young woman said her mentor "helped me out on my resume," and her mentor followed up with her about her job search during the interview (082A).

Another young woman had already decided on a career path. “I plan on going to the Air Force. And work on nursing, cause they say that’s the best one...(069A)” Her mentor suggested getting more information on military life to prepare. “Do they offer ROTC on the high school level, that you can do? That’ll give you a taste of what real military life is like (072B).” The young woman replied she would ask about ROTC at school, demonstrating that she valued her mentor’s advice and opinion. Since mentors have already gone through the process of applying for and getting a job, they can give their mentees advice about job-seeking and resume-building based on their own experiences.

#### **4.8.3 Identifying and obtaining resources**

Participants sometimes said that their mentors helped them get information or resources. One mentee said that she used her relationship with her mentee almost exclusively for that purpose.

They’re [text conversations are] helpful for me, mainly to ask for resources. Then after that we won’t talk for a good while. It’s usually like a month or so (303A).

Another mentor said that she helped her mentee navigate the GED application process.

I started out helping [097A] get GED information. She’s kind of taken the ball from there, so that’s good. She’s in a good position, I think now, to get it going. She knows what she’s got to do (093B).

#### **4.8.4 Using skills from weekly training sessions**

In four interviews, interviewers specifically asked if participants liked the program, and what aspects they particularly enjoyed. All four young women said that they liked the program, and that they specifically liked the group meetings. A few women said that the material they learned

during the presentations from guest speakers was helpful. One woman said she passed on information from the session on intimate partner violence to her sister.

I've used some of the stuff from here. Like the lady from the domestic violence shelter, my sister was going through domestic violence, and she ended up entering the shelter (114A).

Another participant said she realized she was passive after a training session on assertiveness.

I really like the last one that we did, on assertiveness. That one caught my eye the most because I never really noticed that I was a passive person until she pointed it out. And then I was like, 'she's so right! I need to work on that.' So that's what I've been trying to do, work on that. It teaches you things about yourself. Like it taught me things about myself (095A).

These young women demonstrate that the skills building sessions are helpful to participants, and that they have translated the information provided to their daily lives.

## **5.0 DISCUSSION**

### **5.1 PARTICIPANT PRIORITIES**

The frequency and specificity with which participants talk about particular issues reflects those issues' relative salience. Education emerged as the most important theme in these interviews. Every participant talked about their current educational status and future goals for educational attainment, and they were specific about what barriers they faced and which decisions they needed to make. No single path emerged as most favored; some participants wanted to get a GED and go on to community college or professional training certificates, others wanted to use community college as a stepping-stone to a four-year university, and one young woman planned to go directly to a four-year university. Participants had a clear vision and were able to articulate how one step would lead to another (e.g. participant 093B knew she had to complete a GED in order to enroll in a CNA training program).

Participants also revealed the importance they placed on establishing a career path. Three participants wanted to enroll in the military, and two participants described their long-term civilian employment goals. The high proportion (one-third) of participants planning to enroll in the military may indicate a desire for a clearly defined and streamlined career path.

Participants spontaneously brought up their experiences accessing social services. Several participants talked about long wait lists. The fact that participants raised these issues independently of the interview guide indicates that it is an important concern for them.

Notably, contraception and family planning did not emerge as priorities during interviews. No participants spontaneously raised the subject of family planning. In both cases when the interviewer asked about participant contraceptive use and preferences, the conversation was brief, undetailed, and for one participant, revealed indecision.

## **5.2 INFORMATION NEEDS AND SESSION SUGGESTIONS**

Across themes, participants exhibited discrepancies in their understanding of how to navigate certain processes. Establishing a career path, proceeding through the education system, accessing social services and getting contraception all involve a series of decisions made within the framework of a bureaucratic institution (education, welfare, healthcare). Understanding these institutions well enough to gather adequate information and navigate the decision-making process is complicated. Interviewees revealed large gaps in their knowledge of these processes. Sometimes, participants specified that they did not know about something. Often, however, participants did not discuss a particular issue at all, thereby suggesting that the issue was not salient.

The five life skills training sessions at UPMC are intended to provide information to young women in the program and act as jumping-off points for conversations between young women and their mentors. The information gaps described below could be addressed in the training sessions, thereby making those sessions more responsive to participant needs.

### **5.2.1 GED versus high school diploma**

Participants did not discuss the relative benefits and drawbacks of the GED during their follow-up interviews. However, Eve Tuck's research shows that GED recipients often have strong opinions on this topic, and they often regret getting a GED simply because they thought it was the easiest or only option available to them. For some young mothers, the increased flexibility and personal attention of GED prep classes may make the GED the best option for them. However, young women should understand the functional differences between the GED and a high school diploma and make a decision that matches their career goals and fits their current situation.

The Maikuru Program should discuss the GED as an option during its career-planning workshop. Instructors should emphasize that the test is difficult, and participants will need to enroll in preparatory classes if they have not yet completed the requisite high school level coursework. Instructors should explain the relative strengths and weaknesses of GED versus high school diploma attainment, including the fact that many four-year universities do not accept the GED for admission. In addition, the program should offer a flyer listing local GED class providers, cost and options for financing. Mentors should be instructed to ensure that their mentees' career goals align with their education goals and help them enroll in GED classes as necessary.

### **5.2.2 Establishing a career path**

A number of participants said they wanted to join the military. It was unclear from the interviews whether or not participants understood that this is technically not allowed, and that their



proposed procedure (to temporarily give up custody) is in fact a workaround of the rules. Regardless, the fact that three participants (one-third) said they wanted to join the military may indicate that participants are searching for a clear career path. The military offers job security, steady income, a support system and opportunities for future career and educational attainment. In fact, one participant explicitly said she wanted to join the military because of the opportunity for educational benefits. “I’m going for school. I just want to, really, pay for school.”

In the future, mentors and the study team should work with participants to identify which aspects of joining the military appeals to them. If participants say they want steady income, or job security, or career training, then mentors should help them identify alternative career paths that may offer similar options.

### **5.2.3 Deciding on and accessing contraception**

Few participants discussed contraception, and the conversation was brief and did little to reveal their decision-making process or understanding of the benefits or drawbacks of different types of contraception. In fact, the only person who compared two contraceptive options revealed that she thought Depo-Provera was an easier option than an IUD, despite the fact that IUDs are effective for a longer time and require less follow-up than regular Depo-Provera injections.

The Maikuru Program devotes one of its weekly training sessions to contraception. I observed that discussion for the cohort meeting in October/November 2012. That discussion did an excellent job of reviewing the different forms of contraceptives and how they work, but it reviewed contraceptives in order of how commonly they are used. Thus, it started by discussing contraceptive pills, then Depo and emergency contraception, and finally implants and IUDs. This order relegated the most effective forms of contraception (LARCs) to the end of the discussion

period, at which point participants seemed tired and the facilitator was pressed for time. In addition, the discussion of emergency contraception was rather heated because one mentor was opposed to its use on religious grounds. As a result of the debate about emergency contraception, participants may have felt uncomfortable continuing the discussion in an open and frank manner.

Future iterations of the program might consider re-ordering the discussion and opening with a discussion about LARCs. This would give participants time to think and ask questions about these forms of contraception. This is particularly important for LARCs, since they are not commonly used in the U.S.

Several features of LARCs make them especially suitable for young women. First, they are the most effective form of reversible contraception. Second, LARCs require minimal follow-up. Once inserted, they continue to be effective for years. The insert-it-and-forget-it nature of LARCs makes them particularly well suited to the busy schedules of young women. Third, LARCs are easily removed. Reversibility is an important factor, given participants' young age and the potential (and sometimes voiced) desire to have future children. These features of LARCs make them highly consonant with the goals of the Maikuru Program, which aims to help young mothers delay a second pregnancy until they are out of their teenage years and feel prepared for another child.

The session should also provide information about how to access contraceptives. A qualitative study conducted in 2011 found that providers, but not clients, perceived cost as a barrier to LARC uptake (Kavanaugh et al., 2013). Under the Affordable Care Act, all forms of FDA-approved contraceptives, including implants and IUDs, must be fully covered by insurance plans not sponsored by religious entities. Temporary exceptions exist for insurance programs that were "grandfathered in," but most such plans will have lost this status by 2014 (Sonfield, 2013).

The program facilitator should therefore emphasize the fact that these contraceptives are accessible for participants in any insurance program.

Finally, the interview guide did not specifically ask about participants' contraceptive use. Though participants answered questions about their contraceptive use in a survey at their three-month follow-up, it may make sense to have a question in the interview as well. This will let the Maikuru team gauge participants' satisfaction with their current contraceptive choices, and offer an opportunity to further probe why participants choose one method over another. The revised interview guide (Appendix B) explicitly asks about participant contraceptive use.

### **5.3 MENTOR-MENTEE RELATIONSHIP**

A number of other programs to prevent repeat teenage pregnancy have undergone experimental and quasi-experimental evaluations. Comparisons between programs is difficult because of methodological limitations; many studies use a quasi-experimental design in which there are significant differences between participants in the experimental group and the "controls." A recent review of programs to reduce teenage pregnancy found that one of the greatest research gaps is how to prevent teen pregnancy for currently-parenting teenagers (Goesling, Colman, Trenholm, Terzian, & Moore, 2014).

In spite of these research limitations, the most successful programs for teenage mothers appear to be programs with strong mentorship components. In fact, a 2004 review of programs found that "the most important factor in preventing subsequent pregnancies may be the strength of the relationship built between the teenage mother and the individual working with her (Klerman, 2004)."

The mentorship model of the Maikuru Program is unique compared to the studies in Klerman's review, and among studies published since then. Most mentoring studies use trained health professionals (i.e. nurses) or paraprofessionals trained in home visiting. These programs, which necessitate a more labor-intensive training process for mentors, assign one mentor or home visitor to multiple young women. The Maikuru Program assigns one mentor to one mentee.

The Maikuru model's use of community members as mentors allows the program to improve the mentor-to-mentee ratio compared to programs that use professionals or paraprofessionals. However, it raises concerns about whether community members are able to meet the needs of their mentees, particularly if the mentors do not have recent experience with the needs and questions identified by young women in the program, e.g., applying to college, applying for financial aid, and navigating social service agencies.

Results from previous research seems to indicate that highly trained healthcare professionals are more effective than lay community members in interventions to reduce repeat teenage pregnancy. A study of nurse home visitors in Elmira, NY and Memphis, TN found that participants in the intervention were significantly less likely to become pregnant within 24 months (Klerman, Baker, & Howard, 2003). In comparison, the Teenage Parent Home Visitors Demonstration, which used paraprofessionals who received one week of pre-service training and on-the-job experience, found no significant difference in the rate of repeat teenage pregnancy compared to its control group. Researchers observed that paraprofessional mentors were less likely to be comfortable engaging in frank discussions about reproductive health and risk behaviors (Kelsey, Johnson, & Maynard, 2001). Since the Maikuru mentors likewise are lay

community members, they may experience the same problems observed for paraprofessional mentors in the Home Visitors Demonstration.

The problems associated with lay community members as mentors may be mitigated by the Maikuru Program's one-to-one mentor-to-mentee ratio. The one-to-one ratio allows for personality-matching between mentors and mentees. In models with one mentor assigned to multiple mentees, there is less opportunity to match similar personalities. Not everyone's personality clicks with everyone else's. Therefore, the Maikuru Program allows research assistants to observe mentors' and mentees' interactions during a series of ice-breakers on the first day, and assign mentor-mentee pairs based on ease of interaction and rapport. In addition, the larger pool of mentors allows research assistants to reassign mentees if their mentor drops out of the program or if the pair has significant personality differences. This happened with one participant pair. During the follow-up interview, the mentee mentioned that she far preferred her current mentor to the previous one.

She is so much better than the old lady...Cause, the old lady was just like, 'uuh let's go to the zoo, don't worry about your GED, just take you to the zoo.' Uh, excuse me, I need a GED. And she was just like 'okay, lemme call you back.' I don't talk on the phone, she should have been texting me in the first place (097A).

The Maikuru Program matches young women with mentors who have compatible personalities and who are willing and able to address their specific needs. This, in turn, may maximize the ability of each mentor to positively influence or help her mentee. In addition, since each mentor only has one mentee, mentors may have more time to devote to that specific mentee, thereby increasing the potential program impact.

## 6.0 CONCLUSION

This qualitative analysis serves as a program assessment for the Maikuru Program from the point of view of young women. The analysis identified nine key themes corresponding to participants' priorities, needs, and their lived experience of the Maikuru mentoring model.

Programs like the Young Moms study aim not only to prevent repeat teenage pregnancy, but also to mitigate some of the negative educational and economic outcomes associated with teenage childbearing. Education and employment arose as two major themes in this analysis, indicating that these issues are highly salient and are priorities for young women participating in the Young Moms study. Mentees said that their involvement with the program helped them set and follow through on education and employment-related goals.

Notably, family planning did not emerge as a salient theme, indicating that it was not a priority during these interviews. Participants spoke about contraception in vague terms and only when prompted by the interviewer. Future follow-up interviews may use a revised interview guide (Appendix B) that inquires specifically about young women's contraceptive use and preferences. Analysis of these interviews may offer more insight on why participants choose particular contraceptive options, how they gather information about contraception, and the impact of the information provided during the Maikuru Program's contraceptive training session.

Participants voiced a need for better access to social services such as GED prep classes, subsidized housing, and childcare. Though some participants looked to their mentors for help in

navigating social service agencies, many mentors were not familiar enough with these institutions to offer straightforward and helpful advice. Future iterations of the program may be better equipped to help young women and their mentors understand how to access and navigate social service agencies. At the time of these interviews, the study team was working to gather information about these agencies and make that information accessible to participants.

Three themes related to the nature and extent of the mentor/mentee relationship, offering insight into how the unique Maikuru mentoring model plays out in real life for program participants. Participants' descriptions of their mentor-mentee relationships ranged from strong relationships facilitated by weekly in-person meetings to weaker relationships resulting from infrequent and impersonal communication. Participants who used two modes of communication (e.g., texting plus occasional in-person meetings) were more likely to maintain the required minimum weekly contact.

The problems commonly associated with paraprofessional mentoring (e.g. lack of access to and understanding of social services and educational institutions, discomfort discussing contraception) are present in the Maikuru model as well. However, the drawbacks seen in other studies may be tempered by the one-to-one mentor-to-mentee ratio, giving mentors more mental and emotional energy to devote to their mentees. Both mentors and mentees overwhelmingly said that they liked and benefitted from the program. Overall, the interviews reveal that, when mentors and mentees develop strong relationships, the mentees benefit. As one young woman said, "I love having a mentor, especially the one that I have now (095A)."

## **APPENDIX A**

### **3-MONTH FOLLOW-UP INTERVIEW GUIDE**

Research assistants used the interview guide below in their three-month follow-up interviews.

1. How are you? What is new in your life since we last spoke? [to both subjects]
2. How often have you been contacting each other?
  - a. How have you been contacting each other (talk on phone, text, in-person)?
  - b. If not more than once a week, why?
  - c. How is that working for you? Are you satisfied with this level of communication?
3. What do you like best about the program so far?
4. What do you like least?
5. Is there any way we can help you or help facilitate your relationship?



## APPENDIX B

### REVISED 3-MONTH FOLLOW-UP INTERVIEW GUIDE

I would like to talk with you about your experiences with your Maikuru mentorship.

1. Can you tell me about what your experiences together have been and what you think about them? Please tell me about what your interactions have been like: [allow respondent to offer any comments they care to provide spontaneously, then prompt]. Prompts:
  - a. Communication for example:
    - i. How often do you communicate?
    - ii. How do you communicate? E.g.
      1. Phone?
      2. Text?
      3. In person?
      4. Email?
  - b. Can you describe the last time you two got in touch before this meeting?
    - i. How did you get in touch
    - ii. What did you talk about?

- iii. What did you think of the conversation?
2. To the mentee: Can you tell me about your goals right now? [allow respondent to offer any comments they care to provide spontaneously, then prompt]. Prompts:
- a. What about school?
    - i. Get GED- Are you enrolled in prep classes? Which one?
    - ii. Plan to graduate high school- what are your plans for after graduation?
      - 1. Are you applying to college?
      - 2. Where are you in the application or financial aid process?
    - iii. Go to college- Where are you on applications?

\*Ask action oriented follow-up questions/prompts to gauge how well participants understand the process or their knowledge of how to navigate the system.

3. Can you tell me a about your plans for kids in the future? What do you think about kids in the future? Prompts:
- a. Do you plan to have more kids? Can you tell me more about that?
  - b. Are you using birth control right now?
    - i. What kind?
    - ii. Can you tell me about why you chose that method?
  - c. How can your mentor help you with this?

\*I think this is an important question to ask, but participants might not feel comfortable talking about it in front of mentors- if this is the case, ask it separately.

4. Can you tell me a little more about what you would like to do in your life? Prompts:

- a. What kind of job or career would you like?
- b. What do you see yourself doing in the future?
- c. How can your mentor help you with that?

5. Now, could you tell me about what you think about this program so far? Prompts:

- a. What do you think is most helpful about this program for you?
- b. What has been less helpful to you?
- c. What are your suggestions for improving this program?

6. How have you used the information you got in our weekly sessions in your normal life? Prompts:

- a. We talked about [financial management and budgeting, healthy relationships, contraception, resume writing]

7. Is there anything else you would like to add about the program, or any questions you'd like to ask?

Use time after interview to talk about scheduling and to provide more information on contraception and/or social services.



## BIBLIOGRAPHY

- ACOG. (2012). Adolescents and long-acting reversible contraception: implants and intrauterine devices. . *American Congress of Obstetricians and Gynecologists*, 120 (Committee Opinion No. 539), 938-939.
- Bowen, Gary L., & Orthner, Dennis K. (1986). Single Parents in the U.S. Air Force. *Family Relations*, 35(1), 45-52.
- Bowen, Gary L., & Orthner, Dennis K. (1989). *The Organization family: work and family linkages in the U.S. military*. New York: Praeger.
- Britt, Thomas W., Adler, Amy B., & Castro, Carl Andrew. (2006). *Military life: the psychology of serving in peace and combat*. Westport, Conn.: Praeger Security International.
- Dietz, P. M., Spitz, A. M., Anda, R. F., Williamson, D. F., McMahon, P. M., Santelli, J. S., . . . Kendrick, J. S. (1999). Unintended pregnancy among adult women exposed to abuse or household dysfunction during their childhood. *JAMA*, 282(14), 1359-1364.
- East, P. L., Reyes, B. T., & Horn, E. J. (2007). Association between adolescent pregnancy and a family history of teenage births. *Perspect Sex Reprod Health*, 39(2), 108-115. doi: 10.1363/3910807
- Geronimus, A. T. (1992). The weathering hypothesis and the health of African-American women and infants: evidence and speculations. *Ethnicity and Disease*, 2(3), 207-221.
- Geronimus, A. T., & Korenman, S. (1993). The socioeconomic costs of teenage childbearing: evidence and interpretation. *Demography*, 30(2), 281-290; discussion 291-286.
- Goerge, Robert M., Harden, Allen, & Lee, Bong Joo. (2008). Consequences of Teen Childbearing for Child Abuse, Neglect, and Foster Care Placement. In S. D. Hoffman & R. A. Maynard (Eds.), *Kids having kids : economic costs & social consequences of teen pregnancy* (2nd ed., pp. 257-288). Washington, D.C.: Urban Institute Press.
- Goesling, B., Colman, S., Trenholm, C., Terzian, M., & Moore, K. (2014). Programs to Reduce Teen Pregnancy, Sexually Transmitted Infections, and Associated Sexual Risk Behaviors: A Systematic Review. *Journal of Adolescent Health*. doi: 10.1016/j.jadohealth.2013.12.004
- Hamilton, Brady E., Martin, Joyce A., & Ventura, Stephanie J. (2012). Births: Preliminary Data for 2011 *National Vital Statistics Report* (Vol. 61). Hyattsville, MD: National Center for Health Statistics.
- Hillis, S. D., Anda, R. F., Dube, S. R., Felitti, V. J., Marchbanks, P. A., & Marks, J. S. (2004). The association between adverse childhood experiences and adolescent pregnancy, long-term psychosocial consequences, and fetal death. *Pediatrics*, 113(2), 320-327.
- Hillis, S. D., Anda, R. F., Felitti, V. J., & Marchbanks, P. A. (2001). Adverse childhood experiences and sexual risk behaviors in women: A retrospective cohort study. *Family Planning Perspectives*, 33(5), 206-211.

- Hoffman, Saul. (1998). Teenage Childbearing Is Not So Bad After All...Or Is It? A Review of the New Literature. *Family Planning Perspectives*, 30(5).
- Hoffman, Saul. (2006). *By the Numbers: The Public Costs of Teen Childbearing*. Washington, DC: The National Campaign to Prevent Teen Pregnancy.
- Hoffman, Saul. (2008). Updated Estimates of the Consequences of Teen Childbearing for Mothers. In S. D. Hoffman & R. A. Maynard (Eds.), *Kids having kids : economic costs & social consequences of teen pregnancy* (2nd ed., pp. 74-92). Washington, D.C.: Urban Institute Press.
- Hotz, V. Joseph, McElroy, Susan Williams, & Sanders, Seth G. (2005). Teenage Childbearing and Its Life Cycle Consequences: Exploiting a Natural Experiment. *The Journal of Human Resources*, 40(3), 683-715.
- Kavanaugh, M. L., Frohwirth, L., Jerman, J., Popkin, R., & Ethier, K. (2013). Long-acting reversible contraception for adolescents and young adults: patient and provider perspectives. *Journal of Pediatric and Adolescent Gynecology*, 26(2), 86-95. doi: 10.1016/j.jpag.2012.10.006
- Kearney, Melissa S., & Levine, Phillip B. (2012). Why is the teen birth rate in the United States so high and why does it matter? *The journal of economic perspectives : a journal of the American Economic Association*, 26(2), 141-166. doi: 10.1257/jep.26.2.141
- Kelsey, Meredith, Johnson, Amy, & Maynard, Rebecca. (2001). The Potential of Home Visitor Services to Strengthen Welfare-to-Work Programs for Teenage Parents on Cash Assistance.
- Klerman, Lorraine V. (2004). Another Chance: Preventing Additional Births to Teen Mothers. In T. N. C. t. P. T. Pregnancy (Ed.). Washington, D.C.
- Klerman, Lorraine V., Baker, Beth A., & Howard, George. (2003). Second births among teenage mothers: program results and statistical methods. *Journal of Adolescent Health*, 32(6), 452-455.
- Kost, K., & Henshaw, S. (2013). *U.S. Teenage Pregnancies, Births and Abortions, 2008: State Trends by Age, Race and Ethnicity*. New York: Guttmacher Institute.
- Kost, K., Henshaw, S., & Carlin, L. (2010). *U.S. Teenage Pregnancies, Births and Abortions: National and State Trends and Trends by Race and Ethnicity* New York: Guttmacher Institute.
- Lawlor, D. A., & Shaw, M. (2002). Too much too young? Teenage pregnancy is not a public health problem. *International Journal of Epidemiology*, 31(3), 552-554.
- Lee, Dohoon. (2010). The early socioeconomic effects of teenage childbearing: A propensity score matching approach. *Demographic Research*, 23, 687-736.
- Lorrie, Gavin, Lee, Warner, Mary Elizabeth, O'Neil, Linh, M. Duong, Cassandra, Marshall, Philip, A. Hastings, . . . Centers for Disease Control and, Prevention. (2013). Vital signs: Repeat births among teens - United States, 2007-2010. *MMWR. Morbidity and mortality weekly report*, 62(13), 249.
- Manlove, Jenniver S., Terry-Humen, Elizabeth, Mincieli, Lisa A., & Moore, Krisin A. (2008). Outcomes for Children of Teen Mothers from Kindergarten through Adolescence. In S. D. Hoffman & R. A. Maynard (Eds.), *Kids having kids : economic costs & social consequences of teen pregnancy* (2nd ed., pp. 161-196). Washington, D.C.: Urban Institute Press.
- Maynard, Rebecca A., & Hoffman, Saul D. (2008). The Costs of Adolescent Childbearing. In S. D. Hoffman & R. A. Maynard (Eds.), *Kids having kids : economic costs & social*

- consequences of teen pregnancy* (2nd ed., pp. xii, 448 p.). Washington, D.C.: Urban Institute Press.
- Mosher, W. D., & Jones, J. (2010). Use of contraception in the United States: 1982-2008. *Vital and Health Statistics. Series 23: Data from the National Survey of Family Growth*(29), 1-44.
- Ng, A. S., & Kaye, K. (2012). *Why It Matters: Teen Childbearing, Education, and Economic Wellbeing*. Washington, D.C.: The National Campaign to Prevent Teen and Unplanned Pregnancy.
- OECD. (2013). *Education at a Glance 2013: OECD Indicators*.
- Peipert, J. F., Zhao, Q., Allsworth, J. E., Petrosky, E., Madden, T., Eisenberg, D., & Secura, G. (2011). Continuation and satisfaction of reversible contraception. *Obstetrics and Gynecology, 117*(5), 1105-1113. doi: 10.1097/AOG.0b013e31821188ad
- Rich-Edwards, J. (2002). Teen pregnancy is not a public health crisis in the United States. It is time we made it one. *International Journal of Epidemiology, 31*(3), 555-556.
- Riely, Kaitlynn. (2012). Mentoring teen moms: UPMC's Maikuru Program provides direct help, *Pittsburgh Post-Gazette*.
- Solomon-Fears, Carmen. (2013). *Teenage Pregnancy Prevention: Statistics and Programs* (Vol. RS20301): U.S. Congressional Research Service.
- Sonfield, Adam. (2013). Implementing the Federal Contraceptive Coverage Guarantee: Progress and Prospects. *Guttmacher Policy Review, 16*(4).
- U.S. Air Force. (2013). Eligibility. *Contact Us: FAQ*. Retrieved Mar 22, 2014, 2014, from <http://www.airforce.com/contact-us/faq/eligibility/>
- U.S. Department of Health and Human Services. (2010). HHS awards evidence-based teen pregnancy prevention grants.
- Winner, B., Peipert, J. F., Zhao, Q., Buckel, C., Madden, T., Allsworth, J. E., & Secura, G. M. (2012). Effectiveness of long-acting reversible contraception. *New England Journal of Medicine, 366*(21), 1998-2007. doi: 10.1056/NEJMoa1110855