

# Summary Report: A Randomized Controlled Trial to Examine the Impact of Cell Phone Technology on Engagement and Retention of Fathers in a Fatherhood Program



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## Background

The Department of Health and Human Services, Administration for Children and Families (ACF) **Healthy Marriage and Responsible Fatherhood (HMRP)** grants have resulted in the development of a number of programs serving low-income fathers. Ongoing research and evaluation suggests that these programs may have a positive impact on fathers' relationship with children (Dion, Zaveri, & Holcomb, 2015; Holmes, Hawkins, Egginton, Robbins, Shafer, 2018) and seem to have the most significant impacts on increasing activities and nurturing behavior between father and child (Avellar, Covington, Moor, Patnaik, & Wu, 2019). Questions remain, however, about how best to recruit, engage, and retain fathers in these services.

The **Suffolk County Fatherhood Initiative (SCFI)** is an HMRP-funded program (funded by the Office of Family Assistance through the 2015 cohort of grants) that serves low-income fathers and addresses responsible fatherhood, healthy relationships, and economic stability services. Historically, SCFI achieved only 36% retention at the 12-week "closing" interview and faced challenges keeping fathers engaged in services and the evaluation protocol. The current FRPN-funded study focused on a texting intervention to increase participation, engagement, and retention in the program.

### Strategies to Recruit, Engage, and Retain Fathers

Recent studies suggest that factors associated with better engagement and retention at the program level include front-loading more intensive services (including group or individual contact, activities to foster engagement, etc.) to create a "hook" that engages fathers in services (Fagan & Pearson, 2018; Pruett, Cowan, Cowan, & Pruett, 2009), using fathers' preferences for services (sequencing services that align with father's needs and interests to occur first), tailoring services to father's individualized needs, and being flexible with services including offering services at times convenient for fathers (Fagan & Pearson, 2018; Frank, Keown, & Sanders, 2015). Other studies of retention and engagement specifically with fathers point to individual participant characteristics that may negatively impact retention, including symptoms of depression and anxiety (Pruett et al., 2009). Further, monetary incentives may increase retention in programs and research protocols, especially with hard-to-reach populations (e.g., Icard et al., 1996; Jones et al., 2000). SCFI has integrated many of these findings in its work, including offering tailored and flexible services (such as transportation, clothing, case management to identify needs, groups offered at different times and days including evenings), requiring participation in fatherhood groups prior to economic stability services, offering cash incentives for completion of services, and identifying and addressing other issues that may impact retention, such as substance abuse and depressive symptoms. This study added a specific cell phone-based intervention to these ongoing efforts.

### Cell Phone Technology in Research and Practice

Cell phones have been used in research to collect information directly from research participants (Raento, Oulasvirta, & Eagle, 2009) to collect logs of health behaviors (Boulos, Wheeler, Tavares, & Jones, 2011) and to track program participants' geographical location and social networks (Sugie, 2016). Cell phones have also been used in allied health disciplines (Klasnja, 2012). Use of these "patient-centered technologies" has been found to increase engagement in health services and has potential for use in research with other hard-to-reach populations. To date, very few cell phone studies have involved fathers. An exception is Sugie's (2016) work with prisoner re-entry. Working with a population similar to that of this study (low-income, mostly unemployed, male), cell phones were used to monitor social networks and to capture information about employment (Sugie, 2016).

### Setting—Suffolk County Fatherhood Program

The Suffolk County Fatherhood Initiative (SCFI) is a partnership among a traditional domestic violence agency (Retreat, Inc.), university researchers (Stony Brook University School of Social Welfare), and community partners (e.g.,



Department of Probation; various housing, substance abuse, and mental health service providers; local jails; and the Department of Labor). The SCFI program serves a racially diverse, low-income population. The majority (60%) of the program's participants were never-married fathers who were biological parents to a child under age 18 (25% were married, 18% previously married).

The mission of SCFI program aims to help fathers improve their parenting abilities, confidence, and relationships so they may more meaningfully connect with their partners and children. SCFI uses three curricula: "On My Shoulders" (fatherhood focus), "Within My Reach," and "Within Our Reach (healthy relationship focus) (Prep, Inc., n.d.). Each client receives tailored case management services; domestic violence and child abuse prevention education; and referrals to mental health, substance abuse treatment, primary care, legal assistance, housing, food, clothing, transportation, and additional needed services on a case-by-case basis. SCFI's economic stability specialist conducts one-on-one coaching with participants to build their financial and career skills, draft résumés, and assist with job searches. Finally, the SCFI Peer Mentoring Program works to establish a sense of community and support between fathers.

## Research Questions

For this study, we were primarily interested in understanding if the provision of cell phones and ongoing text-messaging contact was associated with increased participation, engagement, and program completion rates for fathers and if providing an increased monetary incentive would impact program and evaluation protocol retention. Secondly, we were interested in whether these retention interventions would influence changes in primary program outcomes (responsible fatherhood, healthy relationships, economic stability). We also explored the impact on father's self-reported challenges and number of program referrals. Finally, a qualitative component sought to explore father's impressions of participating in the intervention.

## Method

### Research Design

This study employed an experimental design using random assignment to three groups (two treatment, one control). Participants who completed intake and baseline measures were notified of their random selection into one of three groups.

**Group 1—Engagement and retention as usual (control group).** These participants received all SCFI services plus financial incentives for completing 6- and 12-week interviews (total compensation package of \$75).

**Group 2—Cell phone intervention.** These participants received SCFI services as usual and were also given the option of receiving a cell phone and/or phone minutes to be replenished upon request. The intervention consisted of a minimum of twice-weekly text messages and phone call reminders at data collection time points (6 and 12 weeks). This group also received regular financial incentives for completing 6- and 12-week interviews (total compensation package of \$75).

**Group 3—Cash incentive group.** These participants received SCFI services as usual, as well as an additional \$25 gift card at the 6-week interview (total of \$75) and at the 12-week interview (total of \$50). In other words, this group received \$50 more for completing both interviews (\$125, compared to \$75).



## Procedures

Participants (N = 212) were recruited during the period October 2016 to September 2018 (24 months) from men who enrolled in the Suffolk County Fatherhood Initiative (SCFI) program and completed an intake assessment. Following the baseline assessment, fathers were invited to participate in the study and undergo informed consent procedures. The Stony Brook University (SBU) Internal Review Board reviewed and approved all study procedures.

## Measurement

**Participation** was calculated as number of client contacts and minutes of contacts and program completion.

**Client engagement** was measured by a continuous variable that was developed collaboratively by researchers, program staff, and current and former program clients who participated in a Research Advisory Board (RAB). Using a previously validated measure of engagement for parents receiving child welfare services (Yatchmenoff, 2005), the RAB developed questions that were appropriate for men in a voluntary fathering program. **Retention** in the program was measured by completion of at least one of the three program components and in the research protocol by completion of the 6- and 12-week research interview.

In addition, the research team explored change over time for core program outcomes of (1) responsible fatherhood, (2) healthy relationships, and (3) economic stability. **Responsible fatherhood** was measured by the Fatherhood Research and Practice Network (FRPN) Father Engagement Scale (Dyer, Kaufman, Cabrera, Fagan, & Pearson, 2015). The FRPN scale measures fathers' day-to-day engagement with their children across a number of activities. In the SCFI protocol, participants were asked to identify their youngest child and complete the assessment using that specific child. **Healthy relationship** was measured only for participants who reported being in a current relationship. To assess healthy relationship, a single item measure of relationship satisfaction from the Relationship Assessment Scale (RAS) (Hendrick, 1988) was used; mean scores were used for this self-report measure. Finally, **economic stability** was measured by whether clients achieved a new skill/training, a new job, or new educational achievement during their time in the program.

## Data Analyses

Longitudinal analyses of 6-week and 12-week outcome measures were performed to characterize change over time. Generalized linear mixed models (the GENMOD procedure in SAS) were used for binary or ordinal outcomes (e.g., retention: binary; participation: count), and linear mixed models (the MIXED procedure in SAS) were used for continuous outcomes (engagement, other program outcomes). Potential confounding effects of baseline characteristics were adjusted in the mixed models and within-subject correlation over time were also considered.

## Results

### Sample Demographics

The average age of sample participants was 40.5 years old, with a range of 18 to 75. The average number of children under the age of 24 years (range 0 to 24; mean age 7.5) per client was 1.84, with a range of 1 to 4 children. African-American participants made up 43.2% of sample, while 37.8% identified as White and 79.9% as Not Hispanic. Only 10% of the sample reported working full time, and 77% reported no current employment. A little more than half (52%) reported having a high school diploma or higher education, while 48% had a GED or no diploma (28%).

### Participation, Engagement, and Retention

Across 6 and 12 weeks, the measure of engagement showed similar mean scores with no between group differences and no differences over time. Measuring both number of and minutes of contact at 6 and 12 weeks, no differences



were found between the three groups. Average contact minutes for clients in the SCFI program Group 1 (control group) was 308.46 minutes at 6 weeks, versus 399.05 minutes for the texting group and 367.54 minutes for the increased incentive group. This indicated slightly fewer minutes of contact (roughly one hour) for control group participants, but the difference did not rise to the level of statistical significance. Mean number of contacts were similar across the three groups. Retention in the research protocol at 6 weeks was 66% (control group), 70% (texting group), and 70% (increased incentive group). Once again, these differences were not statistically significant.

### **Responsible Fatherhood, Healthy Relationships, and Economic Stability**

To explore the impact of the intervention on the broader programmatic outcomes of (self-reported) responsible fatherhood, healthy relationships, and economic stability, a mixed-effect model was used to compare Father Involvement and Healthy Relationship scores between three randomized groups at each time point and a Chi-square test was used to examine the differences in the percentage achieving an Economic Stability outcome among three groups. No significant differences were noted across groups.

### **Changes in Self-Reported Fatherhood Challenges and Program Referrals**

At baseline, 6, and 12 weeks of service, fathers self-reported their current challenges and were asked to choose as many as applied from 19 challenges (see Appendix 3). While we noted some differences across groups at baseline (with the texting intervention group reporting lower average challenges overall) and changes over time for all three groups, there were no between-group differences over time. Our final effort to explore whether fathers in the treatment groups had experienced deeper engagement in the program was to examine whether they had received a greater number of referrals for additional services. We did not find any between-group differences across the treatment and control groups in terms of number of referrals made to outside providers.

### **Qualitative Findings—Fathers' Impressions of the Texting Intervention**

The 27 fathers that provided feedback on the text messaging intervention in the open-ended section of our 6-week interview, they were overwhelmingly positive. Most said simple things like "great" or "I liked it." Other comments included "good communication," "great questions to possibly help others," and "good to hear from the program and tips about what to do."

We conducted in-depth interviews with 40 program fathers, and 10 of them identified as being part of the texting group. One of the fathers encapsulated the benefit of the texting program as a source of additional support:

*"I found it pretty helpful because every time I would be like stressed out because I would talk to my daughter's grandmother, which is the mother's mom, and she would tell me about what her mom is saying about me, I'll get like discouraged and stuff. Then I'll see a text message from here saying like 'don't give up' or---I forgot what else, but it was just like [all] right; it just reminded me that I'm doing a good job."*

This idea was reinforced by another father, who stated, "It made me feel like I was a part of something. People you know, genuinely was concerned, you know? Just reaching out. That was good. That's a good feeling." Another father noted how the content of the text messages encouraged reflection: "It's knowledge for the day . . . you could be down and out and then there's certain quotes that get sent to you . . . certain quotes that they send is love—it's real words, it's real meanings, it's quotes that you gotta acknowledge and keep in your head."



## Discussion & Implications for Research and Practice

This study does not provide sufficient empirical evidence that provision of cell phone and ongoing text-messaging contact was associated with increased engagement, participation, or program retention for fathers. In addition, we did not see any difference between groups on key program outcomes. Despite the lack of positive findings in these analyses, in qualitative interviews, clients reported satisfaction with the texting intervention and credited texting with encouraging them, providing useful reminders about services, and building connections with their caseworkers.

### Implications for Research and Practice

The research team was not able to locate any studies that used cell phone technology specifically for engaging and retaining fathers in services and believes this is the first study that (a) specifically focused on fathers as a population, (b) included cell phone technology as an intervention, and (c) included engagement and retention as outcomes. This study was novel in being the first such study to examine these outcomes with fathers. We note that the texting intervention was relatively easy to administer and could easily be replicated with other father-serving programs. Despite the lack of quantitative findings in terms of key outcomes, fathers expressed positive views about texting and reported during in-depth qualitative interviews their satisfaction and interest in receiving text messages. Thus, text messaging may have potential as an add-on to existing interventions, reinforcing fathering curriculum, and/or maintaining connections with fathers who are already connected to a program. More research is needed to examine the ways in which fathers utilize cell phones and other technologies to engage with their children and with relevant social services. While the purpose of this study was to increase engagement in the program, additional research could include the provision of cell phones to father-child dyads to explore the rates of communication and parental engagement. In addition, while this intervention was conducted primarily by research staff with the text messages coming from the research team, it would be worth evaluating the incorporation of text messaging in regular program services with case managers and class facilitators. Some of the fathers in the qualitative interviews had not received the texting intervention but thought it would be a good idea to receive text messages from their case manager and other program staff in order to stay in better touch. Text messaging may provide a useful connection between clients and their caseworkers and may supplement, diminish, or replace the need for in-person contacts.



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**Appendix 1: Engagement Measure**

	<b>Factor<sup>1</sup></b>	<b>Item<sup>2</sup></b>
1	Receptivity	My SCFI worker was attentive to me and my family's needs.
2	Working Relationship	My caseworker and I usually agree about what I should be doing.
3	Receptivity	I could benefit from assistance in meeting some of my children's needs.
4	Mistrust	I can trust SCFI staff to be fair and open minded.
5	Working Relationship	I can talk to my SCFI worker about what is important to me.
6	Buy-in	My SCFI worker is assisting me with some of my needs.
7	Buy-in	SCFI's goals are the same as mine.
8	Mistrust	SCFI wants to help families.
9	Receptivity	SCFI is invested in my family's success.
10	Buy-in	I believe things will be better for my family now that I'm involved with SCFI.
11	Working Relationship	My SCFI worker and I respect each other.
12	Buy-in	I am making changes in my life to make my family stronger.
13	Buy-in	SCFI is helping to strengthen my family.
14	Working Relationship	When I need to talk to my SCFI worker, I can just call and we talk.

1 For the purposes of this study, a one-factor mean score was used in analyses.

2 These items were developed by former SCFI clients based on the four-factor model of client engagement developed measure of client engagement in non-voluntary services (Yatchmenoff, 2005).





## Appendix 2: Texting Protocol

Time Point	Text Type
<b>Week 1</b>	<b><i>[Welcome text, information about the program and services]</i></b>
1.	Hi. This is the Suffolk County Fatherhood Initiative (SCFI). Welcome to the program! You can expect to receive text messages from us for the next 12 weeks. Please respond by texting yes to confirm that you received this message.
2.	Hi this is SCFI. We are looking forward to working together with you for the next several weeks. You can reach our program office at 631-761-8518.
<b>Week 2</b>	<b><i>[Information about the services, content related to fatherhood and relationship curriculum]</i></b>
1.	Hi this is SCFI. Congratulations on completing your first week. Keep up the good work.
2.	Hi! this is SCFI. If you need any assistance or have any questions please contact your Case Manager at 631-761-8518.
<b>Week 3</b>	
1.	Hi! This is SCFI! Communication is about talking and listening. Good communication happens when there is respect between you and your partner or child.
2.	Hi! This is SCFI! How are things going? Have you gotten in touch with your Case Manager this week? You can reach them at 631-761-8518
<b>Week 4</b>	
1.	Hi! This is SCFI! Remember to support your child and their unique personality. Celebrate the small victories.
2.	Did you know that SCFI has a mentoring program? You can find out more by talking to Howard at the SCFI office 631-761-8518.
<b>Week 5</b>	
1.	Hi! This is SCFI. Remember to use coping techniques to decrease stress. A change in your behavior can inspire a change in someone else.
2.	Hi This is SCFI. Your 6-week interview is coming up next week. Please call Ekta at 631-747-1265 to schedule the date. You will receive \$50 for your time.
<b>Week 6</b>	
1.	This is SCFI! The Blocks of Happiness is a guide to assist you in achieving happiness. It is a tool to create a fulfilling life for you and your family.
2.	Hi! This is SCFI. Don't forget we have an interview this week! Call Ekta at 631-747-1265 to set a date. You will receive a \$50 Visa gift card for your time.
<b>Week 7</b>	
1.	Hi! This is SCFI! Did you know that SCFI has an Employment Specialist? Contact Rony at 631-761-8518.
2.	Hi! This is SCFI. If you need assistance or have any questions, please contact your Case Manager at 631-761-8518. Your conversation will be kept confidential.
<b>Week 8</b>	
1.	Hi! This is SCFI. Today is a good day to go out with your kids!
2.	Hi! This is SCFI. You can learn about Domestic Violence and Child Abuse Prevention from your caseworker. For more information, Contact SCFI at 631-761-8518.
<b>Week 9</b>	
1.	Hi! This is SCFI. Please ask your Case Manager for child care options for when you come in to meetings.
2.	Hi. This is SCFI. Hope is free // Do not lose hope!
<b>Week 10</b>	
1.	Hi! Are you looking for a job? Do you need help with your resume? Do you need proper interview attire? SCFI can help! Contact Rony at 631-761-8518.
2.	Hi. This is SCFI. Would you be interested in becoming a mentor to other fathers in our program? You can find out more by talking to Howard at 631-761-8518.
<b>Week 11</b>	<b><i>Information about the services, content related to fatherhood and relationship curriculum, reminders about week 12 interview (x1).</i></b>
1.	Hi. This is SCFI! Remember. You can't control what others do, but you can control what YOU do.
2.	Hi. This is SCFI. Your 12-week interview is coming up next week. Please call Ekta at 631-747-1265 to schedule the date. You will receive \$25 for your time.
<b>Week 12</b>	<b><i>Information about the services, content related to fatherhood and relationship curriculum, reminders about interview. Thank you text and reminder about continuing services. Interview reminder.</i></b>
1.	Did you know that SCFI has a mentoring program? You can find out more by talking to Howard at 631-761-8518.
2.	This is SCFI. Thank you for participating in our text messaging program. Goodbye, but this is only a goodbye from receiving text messages! You can still receive services. Please contact SCFI at any time!



### Appendix 3: Challenges Reported by Fathers

Below is a list of personal challenges that many people experience. Think about the challenges that you have had in the past month and select all that apply:

1. Unemployment
2. Not having a steady place to live (or homeless)
3. Drug or alcohol problem
4. Being accused of being violent to your partner
5. Being accused of neglecting or abusing your child(ren)
6. An overcrowded house
7. Being unable to pay child support
8. Being unable to pay other bills
9. Difficulty controlling your anger
10. Having your child(ren) in foster care
11. Living too far from your child(ren)
12. Working too many hours
13. Not having enough money to buy things for your child(ren)
14. Your child(ren)'s mother having a new partner who does not want me around
15. Having car problems or lack of transportation
16. Trouble with your child(ren)'s mother or her family
17. Immigration problems
18. Not having enough money for food
19. Other problem: \_\_\_\_\_

