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Study Protocol for a Randomized Clinical Trial of a Fatherhood Intervention for African American Non-resident Fathers: Can we Improve Father and Child Outcomes?

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Abstract

Purpose—African American (AA) fathers who live apart from their children face multiple obstacles to consistent and positive involvement with their children. Consequently, significant numbers of children are bereft of their father's positive involvement. Intervention research that is explicitly focused on promoting the positive involvement of non-resident AA fathers with their young children is limited. The purpose of this article is to describe the study protocol of a randomized trial (RCT) designed to test the Building Bridges to Fatherhood program against a financial literacy comparison condition; and discuss early implementation challenges.

Methods—Fathers (n = 180) are recruited to attend 10 group meetings, reimbursed for transportation, given dinner and activity vouchers for spending time with their child, and incentivized with a \$40 gift card at each data collection time point. Mothers are incentivized (\$40 gift card) at data collection and must be amenable to father child interaction. Intervention targets include father psychological well-being, parenting competence, communication, problem-solving ability; father-mother relationship quality; and child behavioral and emotional/social development.

Results—To date, 57 fathers have been randomized to study condition. Recruitment has been influenced by father and mother hesitancy and the logistics of reaching and maintaining contact with participants. Strategies to surmount challenges to father and mother recruitment and engagement have been developed.

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Conclusions—The prospective benefits of positive father involvement to children, fathers and families outweigh the challenges associated with community-based intervention research. The findings from this RCT can inform the body of knowledge on engaging AA non-resident fathers in culturally relevant fatherhood programming.

Keywords

Fatherhood; intervention; African American; non-resident fathers; children

Introduction & Background

African American (AA) children are twice as likely than as all other children to grow up in households without their biological father.^{1, 2} Thus, the numbers of non-resident fathers (fathers living apart from their children) are more prevalent in AA families.² When parents are living apart, the risks for estranged father-child relationships run high.³

Disparities in the numbers of children growing up without their father in the household may be linked to fathers and mothers upbringing. Sixty-five percent of AA men grow up in single-mother-headed households and apart from their biological fathers. Since AA fathers may not have directly reaped the benefits of their own father's involvement in their upbringing,^{4, 5} they may lack the experience of learning about fathering from their own fathers and may be unprepared for fatherhood.^{6–8} Women who grow up without the positive involvement of fathers in their lives can be similarly impaired by multigenerational father absence, believing that children will flourish despite their father's lack of positive involvement.^{9–11}

Research supports the importance of positive father involvement to the wellbeing of children,¹² mothers,¹³ and fathers.^{14, 15} Fathers who are positively involved with their children actively contribute to their children's well-being¹⁶ by being engaged, accessible and responsible.¹⁷ Positively involved fathers can bolster academic achievement¹⁸ by employing parenting styles¹⁹ that can complement or augment the contributions of mothers.²⁰ Mothers who have the support of involved fathers receive greater financial, emotional and psychological support than mothers whose children's fathers are uninvolved.^{3, 13} Positive fathering benefits fathers by promoting male maturity and self-sacrifice in men, bolstering self-esteem, enhancing physical and mental health, and decreasing the likelihood of engagement in antisocial behaviors.^{14, 21–23}

Despite the potential benefits to families several challenges impede the positive involvement of AA non-resident fathers. The single most important reason appears to be the quality of the relationship between parental caregivers.^{24–26} Complex relationships with one and sometimes multiple mothers of their children, racism, discrimination and involvement in the criminal justice system also influence positive involvement.^{27, 28} Finally, the female dominated early childhood environment may appear unwelcoming to fathers.²⁹ Thus, a variety of fatherhood challenges can impede positive father involvement.

Attention to fatherhood has increased over the last 2 decades with interventions developed specifically for fathers with involvement in the criminal justice system,^{30, 31} low income

fathers,³² a variety of cultural groups,³³ and more recently AA non-resident fathers.^{34–37} Prior fatherhood research has been limited by reliance on maternal information,³⁸ a focus on small groups of adolescent fathers,^{39, 40} resident fathers,^{41, 42} or low-income fathers exclusively.⁴³ Moreover, fatherhood programs have prioritized preparing fathers for healthy marriages⁴⁴ or employment to collect child support.^{45, 46} We know of only one fatherhood program that underwent rigorous testing in a RCT that was developed for and with the guidance of AA fathers; this program was developed to support AA fathers' involvement in helping prevent risky behaviors in preadolescent sons.^{47, 48} The purpose of this paper is to describe the protocol of the Dedicated African American Dads (DAAD) study that will test the Building Bridges to Fatherhood (BBTF) program, an intervention developed to nurture positive involvement in AA non-resident fathers. Further, we will describe challenges and strategies for recruiting AA non-resident fathers and their children's mothers into the study.

Methods

Study Aims

There are three specific aims that this study will address. They are to: (1) test the direct effects of the BBTF program on: father's outcomes (psychological well-being, parenting competence, and communication and problem solving) and paternal involvement (material support, in-kind support, and direct father-child interaction), controlling for father and child characteristics; (2) test the mediating effects of the father and mother relationship and father outcomes on paternal involvement across the two conditions; and (3) compare the effects of the BBTF program, controlling for father outcomes, the father and mother relationship, and paternal involvement on child outcomes (behavioral, emotional/social development) as compared to the attention control group.

Overview and Study Design

The Dedicated African American Dad (DAAD) study is a RCT that compares the effects of the BBTF fatherhood intervention to an attention control intervention for AA non-resident fathers of children aged 2–5 ([Clinical Trials.gov](https://clinicaltrials.gov/ct2/show/study?term=14022704-IRB01) ID: 14022704-IRB01). The study title reflects the importance of targeting AA fathers from a strengths-based, rather than a deficits perspective.⁴⁹ AA non-resident fathers and custodial mothers/guardians of their children are recruited for participation. Data on father, child and mother outcomes are collected at 3 time points over the course of the study by research assistants, blinded to condition. The Institutional Review Board (IRB) approved this RCT. To provide additional protection for maintaining confidentiality of participants' sensitive information, researchers also obtained a Certificate of Confidentiality. Cohorts of 12–15 AA non-resident fathers are assigned to each condition.

Both programs are implemented in a sequence of three content units. Each unit is delivered weekly for 3 weeks followed by a 1-week hiatus for 9 weekly sessions over 12 weeks. The purpose of the 1-week hiatus is to afford fathers opportunities to spend planned, organized time with their child. An important program incentive includes giving fathers discount coupons or vouchers to participate in local events with their child (e.g., museums, sporting events, movies etc.). This program sequencing is particularly salient to non-resident fathers,

who often struggle with organizing activities and garnering resources for spending time with their child. Both conditions will have a booster session 6 weeks post intervention. Thus fathers will participate in 9 weekly sessions plus a booster session for a total of 10 sessions.

This study is implemented in waves/cohorts and group implementation sites alternate between the West and South sides of Chicago. Once the groups begin at one site, recruitment begins for the next wave that will be conducted at the next site. Each wave begins with 12 weeks of community-based recruitment in proximity to the site. After participants have been enrolled, they are randomized into the 2 conditions that begin in parallel. This design minimizes historical contamination within a site because of the 12-week hiatus between the beginning of one series of groups and the end of the previous groups.

Data are collected at three time points, baseline, 12- and 24-weeks post intervention. Changes in intervention targets (psychological well-being, parenting competence); father and mother relationship quality; father involvement (material support, in-kind support, direct father and child interaction); and child outcomes (behavioral, social, emotional) are assessed.

Sampling Design

Fathers are recruited from the approximately 171,000 AA men between the ages of 18 and 65 residing in 13 predominantly AA (73–98%) community areas. These community areas are mostly low-income (median income \$13,596–\$43,728), with 23% to 55% of incomes being below poverty level.⁵⁰ Father inclusion criteria include: (1) AA biological father of a child 2 to 5 years old; (2) child lives with father no more than 48 hours per week (e.g., only spends the weekends with his or her father); and (3) child lives with the biological mother (or other custodial relative such as grandmother). The rationale for limiting fathers' eligibility based upon the age of the target child (2–5 years) is because when children are young, they are highly dependent on parenting for their growth and development. Children learn vital skills (i.e. language movement, socio-emotional development), often by mimicking their parents during this developmental stage.⁵¹ Early father involvement has been shown to have positive outcomes on cognitive development,^{18, 52} and delivering preventive strategies before age five is the most cost effective strategy at reducing children's mental health problems.⁵³ This period of time is also when non-resident father involvement begins to wane.^{50, 54} The rationale for limiting the amount of time fathers spend with their children is based upon the focus of this study which is on non-resident fathers. The definition of non-residency was obtained from the Fragile Families & Child Well-being Study, the largest study to date to examine unmarried families.⁵⁵ Non-resident fathers who spend greater than 48 hours per week with their children would likely mirror the involvement of resident fathers, which reflects higher levels of involvement.⁵⁶

Additional criteria for fathers' eligibility in the study include: (1) child's mother or primary guardian is willing to complete the child assessments; (2) child's mother or primary guardian is amenable to the father spending time with their child; and (3) father is able and willing to travel to one of two intervention sites to attend the group meetings. Exclusion criteria include: (1) fathers with histories of child abuse, neglect, or violence perpetrated against the child or the child's mother (based on mother or father report) and active

involvement in the criminal justice system that precludes fathers' ability to travel to the group meetings.

After baseline father consent and assessments are obtained via interview, the child's mother or guardian is recruited to complete research measures. Mothers are sent letters informing them of the study, along with a copy of the consent document. The letter states that if the mother is unwilling to participate she is instructed to notify the research team. Otherwise the mother will be contacted after 5 days by a research assistant to schedule data collection.

Power Analysis and Sample Size

Previous research, that engaged both parents in an intervention to improve parenting skills, with similar design and aims⁵⁷ suggests that an intervention that is similar to BBTF can produce an improvement in father engagement of $d = .42$.⁵⁸ Assuming an effect size of $d = .42$, a one-tailed alpha of .05, and a sample size of 144 participants (72 per group), we estimated power of .80 to test the direct effects for this design. We estimate power for tests of indirect effects assuming a binary treatment condition, continuous mediator, and continuous outcome. To Achieve 80% power for an indirect effect with a sample size of $n=144$ and $\alpha = .05$ will require a minimum effect size of $d=0.49$ for the treatment-mediator effect and $r=.24$ for the mediator to outcome effect. Assuming a 20% dropout rate, a total sample of 180 participants (90 per condition) is required.

Recruitment procedures

African American research assistants of both genders, with at least a high school education, who are engaged in the community, comfortable in low-income communities and highly personable are trained to recruit participants and collect assessment data for this RCT. They are trained by the study team to establish relationships with the community and prospective participants that engender trust and facilitate recruitment of AA non-resident fathers. For example, research assistants meet with contacts identified from churches, barbershops, community centers, schools, day care centers, local businesses, health centers, clinics, Black fraternities and sororities, sports venues to obtain approval to post information about the study or present the study information to the key informants' contacts. Community-based recruitment efforts are anticipated to take longer than site-based recruitment because of the time it takes to build relationships within the community. Nevertheless, community-based recruitment is an important strategy for the current study because there is no single community site with large enough numbers of AA non-resident fathers with children in the target age range.

Active and passive recruitment strategies are employed. Active approaches include meeting directly with potential participants or individuals who may know potential participants (i.e., presenting information about the study at community organizations). Passive recruitment includes making study information available to potential participants without direct contact with members of the study team (i.e. by responding to study advertisement and/or word of mouth recruitment efforts such as notices placed in church bulletins, neighborhood newsletters, community organizations' email blasts and live radio interviews). All program advertisements include a brief description of a self-improvement program for AA fathers

and provide a number to call for further information. A dedicated telephone line is available for screening and/or provision of additional information about the study. A Quick Response Code was placed on study advertisements so that interested fathers could use their smart device to directly connect to a study interest form. Once the electronic interest form is submitted, the research assistants can then contact prospective participants. Active and passive recruitment strategies were vetted with the University of Illinois at Chicago's Community Engagement Advisory Board (CEAB) of the Center for Clinical and Translational Science (CCTS).

Retention Strategies

Incentives—In addition, to monetary incentives for completing research measures, fathers are reimbursed for the cost of public transportation to attend the group sessions and receive a meal at each of the sessions. Three times during the 12-week intervention (weeks 4, 8, and 12), there is a hiatus and fathers are given a \$30 activity voucher to serve as a motivator for continued attendance. Activity vouchers are given so that fathers can participate with their child in fun, engaging and educational activities (e.g. Zoo, Children's Museum). Our prior work with fathers suggest that this is a retention strategy that is highly valued by AA fathers who are often seeking opportunities and resources for spending time with their children.^{37, 59, 60}

Reminders—Multiple means of remaining in contact with fathers include obtaining work, home, and cell phone numbers, home and email addresses, confirming whether they accept text messages, and obtaining the contact information of friends, relatives, or coworkers who will know how to contact them should their phone service be terminated or mailing address change. Fathers will receive reminder telephone calls, text messages, or e-mails two days prior to and the day of each group session and data collection appointment. Fathers who miss a session receive a phone call from the group leader letting them know that they were missed and encouraging them to attend the next session.

Convenient data collection—Fathers are given the opportunity to participate in data collection at a location of their choosing, such as their homes. Mother assessments will be conveniently conducted via phone interview, or in person. Our intent is to insure that the process of collecting data is not overly burdensome, particularly for mothers who are not actively participating in the intervention. Just as the fathers, mothers are asked to provide contact information for friends, relatives or coworkers who will know how to reach them.

Randomization

Approximately 2 weeks prior to the start of the groups, participants are block randomized into the two conditions using the wave/cohort as a block. Microsoft Excel is used to randomly assign participants to the two groups. Fathers are randomized when consenting and baseline data collection has occurred, and if maternal data collection is either completed or is imminent (i.e. recruiters have made contact with the mother and she has not refused participation).

Intervention Group: Building Bridges to Fatherhood (BBTF)

The Building Bridges To Fatherhood (BBTF) program, is a culturally and contextually relevant fatherhood intervention developed in collaboration with a father's advisory council of AA fathers.³⁷ BBTF addresses critical gaps in current intervention research targeting AA non-resident fathers by incorporating content that affirms what is known about paternal involvement in AA non-resident fathers,⁶¹ capitalizing on the strengths of fathers⁶² and providing content that helps fathers of 2- to 5-year-old children recognize their value to their children and the value of fatherhood to themselves.^{18, 63, 64} The Billingsley African American Family Model,⁶⁵ an ecological framework extended from Bronfenbrenner's⁶⁶ work, provided a strong conceptual and empirical basis for the components of the intervention. This ecological perspective considers the layers of systems surrounding the AA family that must be considered when intervening with parents to support children.⁶⁷ These multiple systems include individual and familial characteristics, and societal and cultural influences. Barriers and facilitators of AA non-resident father involvement, the contexts of AA non-resident fathers' families, communities, histories, and larger society were not only considered during the design of BBTF, but were intentionally incorporated into the intervention. For example, the program emphasizes the importance of AA fathers in their children's lives and includes contextually and culturally relevant intervention targets that are salient to the life experiences of AA men (i.e. racial stress, psychological well-being, and quality of co-parenting relationships).³⁷

BBTF Session Components

Format: The BBTF program uses a group-based format and short video scenes to create multiple opportunities for fathers to share ideas, problem-solve, and support one another. The video scenes portray AA families interacting in real-life scenarios with their children, their children's mothers, and other fathers. The video scenes also afford fathers the opportunity to watch and critique father-child models similar to them, who are engaged in relatable situations. This modeling helps fathers visualize the behavior they are working towards or, in some cases, observe father behavior that inadvertently reinforces child misbehavior, or conflict with the child's mother. The video scenes are an integral component of the BBTF program.

Content: The three content units of the BBTF program are: *Fatherhood*, *Parenting*, and *Communication*. For each session (see Table 1), one or more principles or strategies are identified for discussion such as "fathers are important," "handling child misbehavior," and "effective and ineffective communication." Information presented during the group is reinforced with role-play and group activities, handouts and home practice assignments. The role-play and group activities give fathers weekly opportunities to rehearse new strategies within the comfort and security of the group while also receiving feedback and support from the group leaders. In addition, the session handouts that summarize the major points discussed each week can be shared with others and used to gain greater support from extended family.

Session delivery: The BBTF program is designed to be delivered to groups of 12–15 fathers. The sessions are facilitated by two group leaders who are trained to facilitate father-

to-father support and encouragement. Thus, rather than having the group leaders portrayed as the only experts in the room, group members are recognized as having valuable information to share. Group leaders follow the group leader manual to standardize the intervention. The manual includes narrator text, transcripts of the video scenes, discussion questions, role-play and group activities, home practice assignments and handouts. An important component of the manual is the “*Notes to Group Leaders*” that alert group leaders to aspects of the program that may be particularly challenging or require more problem-solving. For example, the discipline strategy “taking the child out of the game and putting them on the bench” will likely lead to discussions around the similarity of this strategy to “time-outs,” which, based on fathers feedback during program development, is a controversial discipline strategy for AA fathers.³⁷ *Notes to Group Leaders* allow the group leader additional time to prepare for these types of discussions.

Booster session: The booster session is intended to help fathers retain content beyond immediate post intervention. The booster session reviews principles and strategies from prior sessions and gives fathers the opportunity to discuss continuing challenges, and receive support for their efforts. Booster sessions are led by the original group leaders at the original site during the originally scheduled time (e.g., from 6 p.m. to 8 p.m. on Wednesday evenings).

Intervention fidelity procedures—Several methods are in place to assure the integrity and validity of the BBTF intervention. The BBTF is a manualized intervention and group facilitation is guided by the detailed group leader manual. BBTF group leaders are AA men with experience facilitating groups with AA fathers. Group leaders are trained in a 2-day standardized training led by the PI and Co-I. Training for BBTF includes review of the structure and content of each of the BBTF group sessions, group leader facilitation model (i.e. facilitating group members’ support and encouragement of one another), and opportunities to practice group leading skills. To monitor delivery of the BBTF, all groups are audio recorded and a random selection of 25% of audio recorded sessions are rated for adherence to the BBTF protocol and the quality of group leader facilitation skills using an adaptation of the Breitenstein Fidelity Checklist.⁶⁸ In addition, group leaders complete a weekly group leader checklist to monitor adherence to the protocol. Detailed feedback on the BBTF Fidelity Checklist is provided to the group leaders to provide ongoing training and coaching, prevent intervention drift, and assure fidelity to the delivery model.

Comparison Group: Money Smart Financial Literacy Program

The MSFLP was selected for the attention control condition for two main reasons (1) to provide an active intervention that would control for the attention BBTF fathers receive as part of the intervention and (2) provide an intervention that is informative and relevant to the fathers in the study. Fathers in the MSFLP condition participate in a nine-session comprehensive financial education curriculum designed to help low- and moderate-income individuals enhance their financial skills and create constructive banking practices. Financial education fosters financial stability for individuals, families and entire communities and increases the likelihood of being able to increase savings, buy homes and improve financial health.⁶⁹ The MSFLP, developed by the Federal Insurance Deposit Corporation (FDIC), has

reached over 3 million consumers since 2001.⁷⁰ According to research on the program,^{70, 71} the curriculum can positively influence how individuals manage their finances, and these changes are sustainable in the months after the training. The *Money Smart* program is freely available for use by those interested in sponsoring financial education workshops and the materials are easily reproduced and have no copyright restrictions.

MSFLP Session Components

Format: Each of the modules is similarly structured and includes a comprehensive guide for instructors. The guide includes everything necessary to teach the program, including easy-to-follow cues, group leader scripts, and interactive class exercises; overhead slides in PowerPoint and PDF format; and a take-home guide for participants that includes tools and information that participants can use independently after completing a module.

Content: The Money Smart training modules cover basic financial topics that include a description of deposit and credit services offered by financial institutions, choosing and maintaining a checking account, spending plans, the importance of saving, how to obtain and use credit effectively, and the basics of building or repairing credit (see Table 2).

Session delivery: Money Smart is delivered to groups of participating fathers sequentially. Each module takes between 1–2 hours of classroom time to teach. The instructor guide for each module provides a break-down of topics, subtopics, target audience, and activities for the module. The program format allows for flexibility in delivery and instructors are encouraged to adapt the program to meet the specific needs of the audience. For example, an instructor can teach modules sequentially or combine one or more individual module(s) to meet the needs of the audience. For the purposes of serving as the comparator in this RCT, the MSFLP has been collapsed into 9 sessions (see Table 1) with a booster session 6 weeks post-intervention.

Booster session: The booster session focuses on reviewing prior session content and keeping financial goals.^{70, 71} Fathers are encouraged to discuss their progress with adhering to a personal spending plan and identifying ways to decrease spending and increase income. They also have the opportunity to discuss their efforts tracking daily spending, budgeting to estimate monthly income and expenses, and their use of budgeting tools that help them manage their money.

MSFLP fidelity procedures—The CD of the instructor-led Money Smart curriculum includes a helpful *Guide to Presenting the Money Smart Curriculum*. The guide helps instructors learn how to effectively use the training materials. In addition, Money Smart train-the-trainer videos provide instructors with an overview of the curriculum components, information to become familiar with the student materials, and understand the importance of advanced preparation. The videos also highlight effective strategies to use the curriculum. Group leaders have been trained in the use of the curriculum and complete weekly checklists to monitor adherence to the protocol.

Measures

All questionnaires are administered via interview by the data collector. This method is most effective for ensuring that all items are completed accurately and that questions fathers and mothers may have about item meaning can be immediately addressed. Data are obtained from multiple informants (fathers and child's mothers/guardians). Covariate outcomes, assessed via the demographic data form, are completed at baseline and final assessment. All other measures are completed at three time points (baseline, 12 weeks, and 24 weeks).

Father intervention targets—Father data collected from fathers includes measures of psychological well-being, parenting competence, communication and problem solving, and paternal involvement. Measures of psychological well-being include variables of self-esteem, general stress, racial stress and depression. Self-esteem is measured with the 16 item *Taylor Self-Esteem Inventory (TSEI)* which takes about 5 minutes to complete. Psychometric evaluation of the TSEI demonstrated, Spearman-Brown split-half reliabilities of .84, and test-retest reliability of .93. The validity has been established by its high correlation with the Rosenberg and Coopersmith Inventories of self-esteem (competing measures).⁷² General stress is assessed via the 10-item *Perceived Stress Scale (PSS)*. The PSS measures the perception of levels of stress and takes approximately 2 minutes to complete.⁷³ Cronbach's alpha reliability ranges from .67 to .86. Racial stress is examined via the *Perceived Racism Scale (PRS)* that contains 20 items, and takes approximately 4 minutes to complete. The PRS measures the perception of experiences of racism and has a Cronbach's alpha = .86 – .97. The PRS demonstrates convergent and discriminant validity and concurrent validity with similar measures of perceived racial stress.^{74, 75} Depression is measured by the *Center for Epidemiologic Studies Depression Scale (CESD)*. The 20 item CESD measures depressive feelings and behaviors and takes about 4 minutes to complete. Validity is supported by its significant correlations with other measures of depression⁷⁶ and alpha reliability of .85.^{77, 78}

The second category of father intervention targets includes parenting competence (parenting self-efficacy and satisfaction), and parenting skills and knowledge. Parenting self-efficacy and satisfaction are assessed in fathers with the *Parenting Sense of Competence Scale (PSOC)*. The PSOC has 17 items and takes about 10 minutes to complete. The Cronbach's alpha for the total scale and for each dimension of sense of competence (satisfaction and efficacy) were .79, .75, and .76, respectively.⁷⁹ Parenting skills and knowledge are measured in both fathers and mothers by the *Parent Behavior Checklist (PBC)-short form* which contains 32 items and takes approximately 10 minutes to complete. Alpha reliability coefficients for the three PBC subscales (developmental expectations, discipline, nurturing) are, respectively, .93, .85 and .73.^{80, 81}

The third category of father intervention targets includes communication, problem solving and father-mother conflict and supportiveness. Communication is assessed via the measure of tolerance for disagreement. The *Tolerance for Disagreement Scale (TFDS)* (father report) has 15 items, takes about 5 minutes to complete, and measures conflict in interpersonal communication by examining the degree to which an individual can tolerate other people disagreeing with what the individual believes to be true.⁸² Alpha reliability estimates for the

TFDS are expected to be about .85. Problem solving is assessed via the *Problem Solving Inventory (PSI)*, father report), a self-report measure of problem solving. It contains 30 items and takes about 10 minutes to complete. Test-retest reliability based on 2-week duration is approximately .85 for each of the subscales, and .89 for the total inventory. Internal consistencies using Cronbach's alpha ranged from .72 to .85 for the subscales and .90 for the total inventory.⁸³ Father-mother conflict and supportiveness are measured by the *Quality of Relationships Inventory (QRI)*, father and mother report). The 25-item QRI measures ways parents feel supported by their co-parent, takes about 5 minutes to complete, and exhibits good internal and test-retest reliability (.88 and .86, respectively).⁸⁴

The final category of father intervention targets is paternal involvement, which is assessed via measures of material and in-kind support, and direct father-child interaction. The *Fragile Families Survey (FFS)* measures material support and in-kind support and has 13 items that identify ways fathers provide support for their children. It takes about 6 minutes to complete. The internal consistency on the scale for fathers is .93.⁸⁵ The 16 item *Julion Index of Paternal Involvement (JIPI)* measures direct father-child interaction (i.e. instances of caregiving, teaching and nurturing), takes about 6 minutes to complete, and has a Cronbach's alpha of .96.⁸⁵ Both the FFS and JIPI are completed by fathers and mothers.

Child outcomes—Child outcomes, collected from both fathers and mothers are measured by the *Behavior Assessment System for Children*, second edition, parent-rating scales (*BASC-2, PRS*). The BASC-2, PRS measures child adaptive and problem behaviors and includes emotional and social development. The pre-school version for ages 2–5 has 134 items and takes about 10 minutes to complete.⁸⁶

Covariates—Covariate outcomes include father and child characteristics, demographic variables, and criminal justice system involvement. Father demographic variables and criminal justice system involvement are assessed by the *Demographic Data Form (DDF)*, father report) that contains 19 items, and takes about 5 minutes to complete. Child characteristics, child's age and gender, are also assessed by the DDF (father report). Mothers provide demographic information via the maternal version of the DDF (MDDF). This form was developed by the research team and used in prior research.^{37, 85}

Social context validity—Social context validity (SCV) is the degree to which participants' perceive an intervention to be consistent and compatible with their beliefs and experiences; and actively engage in the intervention.⁸⁷ SCV is assessed via measures of consumer satisfaction and active participation. Consumer satisfaction with the intervention is measured with weekly and end of program satisfaction surveys. Active participation is measured by attendance and active engagement (completion of weekly practice checklists). Measures of SCV were developed by the research team.^{37, 85}

Enrollment Procedures

Interested fathers are given an explanation of the study in person or over the phone. This includes informing them about the inclusion criteria, study randomization, data collection and participation in group meetings. Written consent and collection of survey data occurs at

the first data collection appointment with fathers. In addition, fathers provide the mothers contact information. Maternal consenting and data collection is conducted in person or via telephone interview by the research assistants and contact information that mirrors what is collected for fathers is obtained. Fathers are ineligible to participate in the study if the mother does not consent to participation. A cohort of 12–15 fathers is assigned to each condition.

Data Management

Tracking participants across multiple recruitment sites is complex and a very important component of this study. A password protected Microsoft Access database has been created to monitor and manage data collection and recruitment efforts. Access is frequently used to manage research data.⁸⁸ Assessment data is collected via laptop computers through secure wireless internet connection directly into the password protected Research Electronic Data Capture (REDCap), a freely available web-based data collection platform. REDCap was created by staff at Vanderbilt University and is being increasingly used to capture electronic data across numerous institutions.⁸⁹ The National Institute of Health's Clinical and Translational Science Award provided funding for the development of REDCap.⁹⁰ Participants' unique numerical study IDs are used when survey data is entered into REDCap. If missing data is noted within assessment data the research assistants have been trained to complete an interview correction form to capture the missing data.

Data Analytic Plan

Data analysis will be described with respect to the three study aims and five hypotheses to be tested. As necessary, missing data will be imputed using SAS Proc MI, a multiple imputation algorithm based on the work of Rubin.⁹¹ Descriptive statistics on the sample data for all research variables will be obtained. All continuous data will be examined for statistical normality. Where possible, we will normalize these data using Tukey's ladder of transformation⁹² prior to statistical analysis. Measures that cannot be successfully transformed to achieve normality are expected to be close enough to a normal distribution that the robust nature of the F-test should make it possible to obtain unbiased *p* values. SPSS (Ver. 23) and SAS (Ver. 9.3) will be used for data management and statistical analysis. A one-tailed .05 significance level will be used for all statistical tests except where noted below. All analyses will be performed on an intent-to-treat basis.

One-way ANOVAs and chi-square analysis on the demographic and baseline research measures will be performed between the intervention and comparison groups to determine if they are equivalent. Potential covariates (i.e. father and child characteristics) will be identified based upon their relation to the outcome variables.

Hypothesis 1: *After controlling for father and child characteristics, BBTF program fathers will have greater paternal involvement than the comparison group at 12 weeks and 24 weeks.*

The following variables will be tested: father and child demographic data (DDF, MDFF) and paternal involvement as measured by the FFS and JIPI. Data analysis will be a repeated-measures analysis of variance (RM-ANOVA) to address Hypothesis 1. The basic design for

these analyses will be a 3×2 design, with three assessment time points (baseline, 12 weeks, and 24 weeks) crossed with the two treatment conditions (BBTF and MSFLP). The null hypothesis for all these analyses will be that changes for all paternal involvement measures (material support, in-kind support, and direct father-child interaction) will remain equal across the two groups over time. The alternative hypothesis is that they will improve over time in the BBTF group relative to the comparison group. An initial multivariate analysis will be conducted first to see if there is any overall effect. If the null hypothesis is rejected in the multivariate analysis, univariate analyses will be conducted.

In order to determine timing of changes occurred across the three assessment time points, a follow-up analysis will be conducted with time reparameterized into a set of two orthogonal Helmert contrasts. The two contrasts are of the form (1, -1/2, -1/2; 0, 1, -1). Significance for the first contrast will indicate that the critical changes occurred between times 1 and 2. Significance for the second contrast will indicate that the critical changes occurred between times 2 and 3. These analyses will report the transition point or points where the changes were greatest between the treatment and comparison groups.

Hypothesis 2a: *After controlling for father and child characteristics, BBTF program fathers will report improved intervention targets (psychological well-being, parenting competence, communication, problem-solving ability, father-mother relationship quality) relative to the comparison control group at 12 and 24 weeks.* The following variables will be tested: father and child demographic data (DDF, MDDF), and father intervention targets (psychological wellbeing: TSEI, PSS, PRS, CESD; parenting competence: PSOC, PBC; communication, problem-solving, and mother father relationship (TFPS, PSI, QRI).

This analysis will parallel the analysis done in hypothesis 1.

Hypothesis 2b: *After controlling for father and child characteristics, differences in intervention targets associated with the BBTF program will mediate BBTF effects on paternal involvement.* The following variables will be tested: father and child demographic data (DDF, MDDF, father intervention targets (psychological wellbeing: TSEI, PSS, PRS, CESD; parenting competence: PSOC, PBC; communication, problem-solving, and mother father relationship (TFPS, PSI, QRI) and father involvement (FFS & JIPI).

This analysis will use a regression approach to mediator analysis, as described in MacKinnon.⁹³ This approach looks at the extent to which intervention effects on changes in paternal involvement over time can be explained by intervention effects on the intervention targets. This effect will be estimated using a series of three regression analyses. In Equation 1, the dependent variable (change in paternal involvement from Time 1 to Time 2) will be regressed on a binary treatment measure. In Equation 2, the mediators (changes in intervention targets) are added to the Equation 1 regression model. Finally, in Equation 3 changes in the mediators (changes in the intervention targets) will be regressed on the binary treatment measure. The mediation effect is estimated by looking at the difference between the regression coefficients for the treatment measure in Equations 1 and 2. A parallel set of analyses will be repeated for changes from Time 1 to Time 3. If there is evidence of

significant effects from treat to mediator and from mediator to dependent variable, we will calculate indirect effects using the methods described by Hayes⁹⁴

Hypothesis 3a: *After controlling for father and child characteristics, children of fathers receiving the BBTF program will demonstrate improved child outcomes relative to the children of fathers in the comparison group at 12 weeks and 24 weeks.* The variables that will be examined include: father and child demographics (DDF, MDDF) and child outcomes (BASC-2, PRS)

This analysis will parallel the analysis done in Hypothesis 1.

Hypothesis 3b: *Child outcomes will be mediated by improvements paternal involvement and father-mother relationship.* The variables that will be examined include: child outcomes (BASC-2PRS), paternal involvement (FFS, JIPI), father-mother relationship (QRI).

This analysis will use the same regression approach to mediator analysis described in Hypothesis 2b, with the only differences being that the outcome variable will be the child outcomes rather than paternal involvement and the mediator will be paternal involvement rather than intervention targets.

Study Limitations

This study is important because of its potential to advance the science related to non-resident fatherhood research. Nevertheless, there are some limitations. First, the study findings will not be generalizable beyond AA non-resident fathers with stable enough relationships to garner the mother's participation in data collection and who have access to spending time with their child. Since the positive impact of effective co-parenting on child and father outcomes is well-documented,^{95–98} future research conducted with AA non-resident fathers will need to explicitly target efforts to establish and maintain positive relationships between non-resident co-parents with extremely fragile or nonexistent relationships.

Inclusion in this study was limited to fathers who are biological fathers. There are diverse family structures among AA families.^{99–101} Many children reside in homes, or are in contact with step fathers, adopted fathers, father figures, and other family members. We restricted participation to biological fathers because program efficacy can be more clearly examined by avoiding additional potentially confounding variables such as step and surrogate parenting. As a result, this study will not provide evidence of program efficacy for non-resident AA fathers who are not biological fathers to children 2–5 years old.

Some fathers may have more than one 2–5 year-old child born to different mothers. In order to participate in this study, the father must self-select one of his 2–5 year old children for participation. This targeted child is likely to be the child whose mother is most amenable to participating. As a result of targeting one of their children, fathers with multiple co-parenting relationship may face additional contention from the mother(s) of their other child(ren). Our premise is that fathers can then apply communication and problem solving skills that are a component of the intervention to these more challenging maternal encounters. Furthermore, fathers may also have additional children outside the target 2–5

year age range (e.g., some fathers may have teen or adult children). Accordingly, the wide range of father experiences may increase the diversity of needs within the groups. However, prior group-based fatherhood research supports the notion that a wide range of father experience contributes to the depth of discussion and affords both new and experienced fathers with opportunities to help one another.^{37, 102}

Finally, because of the nature of community-based social service agencies and community recruitment sites, it is likely that many fathers who participate in the study will be from low-income households. If the BBTF program is effective in positively influencing paternal involvement among fathers who may be from low-income households and faced with multiple social challenges, it is believed that the program will readily disseminate to fathers with higher incomes without the aforementioned challenges. Fathers with higher incomes may face different challenges that influence their positive involvement with their children, and enhanced communication and problem solving skills may help to surmount those challenges as well.

Discussion

Current Challenges and Lessons Learned

Father Recruitment—Despite the significant numbers of AA men, and AA non-resident fathers in Chicago, the practicalities of conducting an RCT across a broad urban environment are cumbersome. Recruiters must establish contacts and relationships with a broad array of churches, community organizations, barbershops, and businesses in order to reach prospective participants. Despite fathers' desire to be positively involved with their children,^{116, 117} there are two major issues that affect father recruitment. The first issue is stigma associated with participating in a program for non-resident fathers. Societal and media depictions of AA non-resident fathers as “dead beat dads,” contribute to fathers concerns about being stereotyped.¹⁰³ In fact, an eligible participant assumed that the study was explicitly for absent and irresponsible fathers rather than for fathers who deeply desire a positive relationship with their children. In order to overcome this concern, fathers are reminded that the study is the *Dedicated* African American Dads (DAAD) study, and the study is designed to affirm, rather than malign AA fathers. Fathers enrolling in the study are also given a signed letter by the PI congratulating them on their commitment to their children and their support of the larger population of non-resident fathers through their research participation.

The current study employs both direct and indirect recruitment of fathers that demonstrate respect for fathers and counter stereotypical depictions of non-resident fathers. Direct approaches recruit fathers themselves, rather than conducting recruitment through interaction with mothers because fathers feel more respected and valued when approached directly.^{59, 64, 104, 105} This approach places the onus for participation in the hands of the father, rather than at the discretion of the mother and affords fathers' the autonomy to pursue knowledge to promote positive father involvement. To our knowledge, this is the first study to conduct community-based recruitment that directly recruits AA non-resident fathers into an intervention that is designed to promote positive parental engagement with mothers, father interaction with their young children; and examine outcomes beyond participant

attendance and satisfaction. This approach circumvents site specific recruitment limitations such as reliance on site personal (e.g. teachers, principals, administrators, nurses, physicians and clinic staff) to engage prospective research participants.^{106, 107}

Indirect recruitment approaches are intended to cast a wide net in the community. We include recruitment locations predominated by women (i.e. day care settings), or frequented by men who are ineligible for the study (i.e. fathers with children over age 5) because they may know eligible fathers in their families or communities. Even in this context of passing study information from women and ineligible men, our indirect recruitment approach respects fathers as autonomous decision makers in research participation because they must contact us to express their interest in the study. Insights into both direct and indirect recruitment strategies for AA non-resident fathers can inform a broad spectrum of intervention research targeting AA men. Multiple health disparities impact AA men (i.e. cardiovascular disease, cancer, mental illness, substance abuse) and this population is long overdue for culturally and contextually relevant attention.^{108, 109}

The second issue that influences father participation is that enrollment eligibility requires mothers' participation and completion of child-related study measures. Fathers have voiced that they are uncertain whether their child's mother will be willing to participate, either due to strained relationships or a general lack of support for the father. Consequently, some fathers are hesitant to enroll in the study because they do not want to be beholden to the mother. To encourage father participation, we ask eligible fathers to complete informed consent and baseline research measures and our research team will shoulder the responsibility for garnering the mother's participation. This strategy has resulted in participation from fathers who, initially believed they would be ineligible to participate.

Gaining the Mother's Support for Father Participation—Father eligibility hinges upon maternal participation. Consequently, we have faced challenges related to mother recruitment and engagement. Maternal recruitment has been influenced by the emotional and physical distance between non-resident fathers and the mothers of their children. In fact, some fathers do not have accurate contact information for the mother because the mother's contact information has recently changed, or telephone service has been interrupted. Sometimes fathers communicate with the mother through social media or a family member. We address this challenge by obtaining multiple methods of contacting mothers and training the research assistants to re-contact fathers to confirm or obtain accurate mother contact information. In addition, rather than halting mother recruitment efforts when telephone service is interrupted, we retry disconnected numbers because the interruption in telephone service may be temporary.

Multiple attempts via telephone and text are often needed to make first contact with the mother. "Cold-calls" to the mother without any prior relationship with the research team takes time because some mothers are wary about responding to unknown telephone callers. An effective strategy has been to send detailed study information (electronic version of study flyer, clinical trials website and university website information) via text. In addition we have a regimented protocol for frequency of attempts (daily, different times of the day, calling from alternate telephone numbers, and taking a 2-day break between calls). When we are

able to speak with mothers and give them specifics about how the program works, the intent of the interventions, and what is expected of them, mothers are usually willing to enroll in the study.

Regarding mother engagement, prior to the start of the study, we presumed that mothers would be interested in facilitating positive paternal involvement for the sake of the child; nevertheless some mothers have been reluctant. Mothers have voiced frustration with the fathers' current level of involvement with the child and doubt that fathers will follow through with participating in the study. They have also voiced skepticism that participation in the intervention will improve fathers' involvement with their children. It is possible that the 2–5 age range is a difficult time for parents because contentious relationships are still “raw,” and mothers may not be ready to reconcile their differences with the father for the sake of the child. As noted in prior research some mothers may question the importance of paternal involvement to successful children's outcomes.¹⁰

Research assistants have been trained to address maternal concerns by implementing a 3-step protocol. First the data collector allows the mother to voice her concerns and validates her perspective; next the data collector informs mothers of the importance of positive father involvement to the overall health and wellbeing of the child; and finally mothers are reminded that the purpose of the study is to give fathers knowledge and skills to remain positively involved in the life of their children. This strategy has been effective in countering mothers' initial resistance to participate in the study. Finally, even though mothers are appreciative of the incentive for completing research measures, we have no definitive evidence that a nominal monetary incentive is a deciding factor in mothers' participation.

To date, we have randomized 57 fathers to study condition. At the time of recruitment 3 fathers declined participation citing that they were either not interested or would not be able to attend the groups due to time constraints or work schedules. No mothers who were contacted for potential enrollment have refused to participate because they were concerned about the safety of their child, and two mothers refused because of a particularly disagreeable relationship with the child's father. Mothers who refused to participate in the study cited lack of time and uncertainty about whether fathers were sincere about increasing their positive involvement with their children. When we were certain that we had accurate contact information for the mother, we classified them as passive refusals if they fail to respond to written communication, phone calls and text messages.

Conclusions

Although there are inherent challenges to employing a community-based approach to recruiting AA fathers and mothers, the prospective benefits of increased father involvement to children, fathers and families outweigh the challenges. In fact young children's developmental outcomes are enhanced when they reap the benefits of their fathers' positive engagement.^{110, 111} The BBTF program was expressly designed for, and guided by AA non-resident fathers. Nevertheless, an inordinate number of AA children grow up in households without their biological fathers, and it is important to introduce fatherhood programs early in children's lives so that fathers are engaged with their children when they are particularly

developmentally vulnerable.^{112, 113} Shared, cooperative and mutually respectful parenting is vital to positive father involvement.^{114, 115} Therefore it is equally important that when targeting non-resident fathers in intervention research, fathers must be provided with skills that help them navigate relationships with their children's mothers.

Fathers assert their desire to be responsible fathers.^{116, 117} Nevertheless, there are multiple barriers to consistent and affirmative father involvement in non-resident fathers.^{117–119} We hypothesize that fatherhood programs that help fathers engage effectively with their children and their children's mothers can surmount the challenges that impede fathers' positive involvement with their children.⁹⁷

In summary, this paper illustrates a community based RCT that rigorously evaluates a fatherhood intervention designed specifically for non-resident AA fathers. This trial fills the void in knowledge surrounding the recruitment and engagement of AA non-resident fathers from urban communities. Fathers, children and families who have typically been underserved in parenting intervention research will be benefactors of this research. The encumbrance is on the research community to do more to make a difference in the lives of AA fathers, children and families.

REFERENCES

1. Cheadle JE, Amato PR, King V. Patterns of nonresident father contact. *Demography*. 2010; 47(1): 205–225. [PubMed: 20355691]
2. Livingston G, Parker K. A tale of two fathers: More are active, but more are absent. Pew Research Center. 2011
3. Stewart SD. Children with nonresident parents: Living arrangements, visitation, and child support. *Journal of Marriage and Family*. 2010; 72(5):1078–1091.
4. Hunter AG, Friend CA, Murphy SY, Rolins A, Williams-Wheeler M, Laughinghouse J. Loss survival, and redemption: African American male youths' reflections on life without fathers, manhood, and coming of age. *Youth & Society*. 2006; 37(4):423–452.
5. Fletcher R, StGeorge J. Heading Into Fatherhood—Nervously: Support for Fathering From Online Dads. *Qual Health Res*. 2011; 21(8):1101–1114. [PubMed: 21464468]
6. Bradford K, Hawkins AJ. Learning competent fathering: A longitudinal analysis of marital intimacy and fathering. *Fathering: A Journal of Theory, Research, and Practice About Men as Fathers*. 2006; 4(3):215–234.
7. Lemay CA, Cashman SB, Elfenbein DS, Felice ME. A qualitative study of the meaning of fatherhood among young urban fathers. *Public Health Nursing*. 2010; 27(3):221–231. [PubMed: 20525094]
8. Hofferth SL, Pleck JH, Vesely CK. The Transmission of Parenting from Fathers to Sons. *Parenting*. 2012; 12(4):282–305. [PubMed: 23284271]
9. Gee CB, McNeerney CM, Reiter MJ, Leaman SC. Adolescent and young adult mothers' relationship quality during the transition to parenthood: Associations with father involvement in fragile families. *Journal of Youth and Adolescence*. 2007; 36(2):213–224.
10. Makofane M. "Not all men are fathers": Experiences of African women from families with absent fathers. *Soc Work*. 2015; 51(1):22–44.
11. Wolcott, VW. *Remaking respectability: African American women in interwar Detroit*. UNC Press Books; 2013.
12. Cabrera N, Fitzgerald HE, Bradley RH, Roggman L. Modeling the dynamics of paternal influences on children over the life course. *Applied Developmental Science*. 2007; 11(4) 185-186-189.

13. Kainz G, Eliasson M, von Post I. The Child's Father, an Important Person for the Mother's Well-Being During the Childbirth: A Hermeneutic Study. *Health Care Women Int.* 2010; 31(7):621–635. [PubMed: 20526927]
14. Garfield CF, Clark-Kauffman E, Davis MM. Fatherhood as a component of men's health. *JAMA: The Journal of the American Medical Association.* 2006; 296(19):2365–2368. [PubMed: 17105800]
15. Milkie MA, Denny KE. Changes in the Cultural Model of Father Involvement Descriptions of Benefits to Fathers, Children, and Mothers in Parents' Magazine, 1926–2006. *J Fam Issues.* 2014; 35(2):223–253.
16. Carlson MJ, Magnuson KA. Low-Income Fathers' Influence on Children. *Ann Am Acad Pol Soc Sci.* 2011; 635(1):95. [PubMed: 25520525]
17. Lamb, MD.; Pleck, JH.; Charnov, EL.; Levine, JA. A biosocial perspective on paternal involvement and involvement. In: Lancaster, JB.; Altmann, J.; Rossi, AS.; Sherrod, LR., editors. *Parenting across the life span: Biosocial dimensions.* Hawthorne, NY: Aldine; 1987. p. 111-142.
18. Jaynes WH. A Meta-Analysis The Relationship Between Father Involvement and Student Academic Achievement. *Urban Education.* 2015; 50(4):387–423.
19. McKinney C, Renk K. Differential parenting between mothers and fathers: Implications for late adolescents. *J Fam Issues.* 2008
20. Biblarz TJ, Stacey J. How Does the Gender of Parents Matter? *Journal of Marriage and Family.* 2010; 72(1):3–22.
21. Coles RL. Just doing what they gotta do: Single black fathers coping with the stresses and reaping the rewards of parenting. *J Fam Issues.* 2009; 30(10):1311–1338.
22. Eggebeen DJ, Knoester C, McDaniel B. The Implications of Fatherhood for Men. *Handbook of Father Involvement: Multidisciplinary Perspectives.* 2012; 338
23. Anderson EA, Kohler JK, Letiecq BL. Predictors of depression among low-income, nonresidential fathers. *J Fam Issues.* 2005; 26(5):547–567.
24. Panter-Brick C, Burgess A, Eggerman M, McAllister F, Pruett K, Leckman JF. Practitioner Review: Engaging fathers—recommendations for a game change in parenting interventions based on a systematic review of the global evidence. *Journal of Child Psychology and Psychiatry.* 2014; 55(11):1187–1212. [PubMed: 24980187]
25. Varga CM, Gee CB. Racial identity, father involvement, and coparenting in adolescent African American mothers and fathers. *The New School Psychology Bulletin.* 2010; 8(1)
26. Varga CM, Gee CB, Rivera L, Reyes CX. Coparenting Mediates the Association Between Relationship Quality and Father Involvement. *Youth & Society.* 2014 0044118X14548529.
27. Brunson RK. "Police don't like Black people": African-American Young Men's Accumulated Police Experiences. *Criminology & Public Policy.* 2007; 6(1):71–101.
28. Smith WA, Allen WR, Danley LL. "Assume the Position... You Fit the Description" Psychosocial Experiences and Racial Battle Fatigue Among African American Male College Students. *Am Behav Sci.* 2007; 51(4):551–578.
29. Palm G, Fagan J. Father involvement in early childhood programs: Review of the literature. *Early Child Development and Care.* 2008; 178(7–8):745–759.
30. Buston K, Parkes A, Thomson H, Wight D, Fenton C. Parenting Interventions for Male Young Offenders: A Review of the Evidence on What Works. *J Adolesc.* 2012; 35(3):731–742. [PubMed: 22070988]
31. Eddy JM, Martinez CR, Burraston B VI. A randomized controlled trial of a parent management training program for incarcerated parents: Proximal impacts. *Monogr Soc Res Child Dev.* 2013; 78(3):75–93.
32. Gordon DM, Hunter B, Woods LN, et al. Increasing outreach, connection, and services to low-income, non-custodial fathers: How did we get here and what do we know. *Fathering.* 2012; 10(1): 101–111. [PubMed: 24817832]
33. Waller MR. Viewing low-income fathers' ties to families through a cultural lens: Insights for research and policy. *Ann Am Acad Polit Soc Sci.* 2010; 629(1):102–124.

34. Caldwell CH, Rafferty J, Reischl TM, De Loney EH, Brooks CL. Enhancing parenting skills among nonresident African American fathers as a strategy for preventing youth risky behaviors. *Am J Community Psychol*. 2010; 45(1):17–35. [PubMed: 20082239]
35. Caldwell CH, Bell L, Brooks CL, Ward JD, Jennings C. Engaging nonresident African American fathers in intervention research: What practitioners should know about parental monitoring in nonresident families. *Research on Social Work Practice*. 2011; 21(3):298–307.
36. Caldwell CH, Antonakos CL, Assari S, Kruger D, Loney EH, Njai R. Pathways to prevention: improving nonresident African American fathers' parenting skills and behaviors to reduce sons' aggression. *Child Dev*. 2014; 85(1):308–325. [PubMed: 23746345]
37. Julion WA, Breitenstein SM, Waddell D. Fatherhood intervention development in collaboration with African American non-resident fathers. *Res Nurs Health*. 2012
38. Hawkins AJ, Palkovitz R. Beyond ticks and clicks: The need for more diverse and broader conceptualizations and measures of father involvement. *The Journal of Men's Studies*. 1999; 8(1): 11–32.
39. Anderson LS, Riesch SK, Pridham KA, Lutz KF, Becker PT. Furthering the Understanding of Parent–Child Relationships: A Nursing Scholarship Review Series. Part 4: Parent–Child Relationships at Risk. *Journal for Specialists in Pediatric Nursing*. 2010; 15(2):111–134. [PubMed: 20367782]
40. Mazza C. Young dads: The effects of a parenting program on urban African-American adolescent fathers. *Adolescence*. 2002; 37(148):681–693. [PubMed: 12564822]
41. Holmes EK, Galovan AM, Yoshida K, Hawkins AJ. Meta-analysis of the Effectiveness of Resident Fathering Programs: Are Family Life Educators Interested in Fathers? *Family Relations*. 2010; 59(3):240–252.
42. Magill-Evans J, Harrison MJ, Rempel G, Slater L. Interventions with fathers of young children: Systematic literature review. *Journal of Advanced Nursing*. 2006; 55(2):248–264. [PubMed: 16866816]
43. Roy KM, Dyson O. Making daddies into fathers: Community-based fatherhood programs and the construction of masculinities for low-income African American men. *Am J Community Psychol*. 2010; 45(1):139–154. [PubMed: 20077133]
44. Cowan PA, Cowan CP, Pruett MK, Pruett K, Wong JJ. Promoting Fathers' Engagement With Children: Preventive Interventions for Low-Income Families. *Journal of Marriage and Family*. 2009; 71(3):663–679.
45. Horn, WF. Is it working? Early evaluations of fatherhood-renewal programs. In: Clayton, O.; Mincy, RB.; Blankenhorn, D., editors. *Black Fathers in Contemporary American Society*. Sage Publications; 2003. p. 138–152.
46. Pearson J, Thoennes N, Davis L, Venohr J, Price D, Griffith T. OCSE Responsible Fatherhood Programs: Client characteristics and program outcomes. Denver, CO. Center for Policy Research. 2003
47. Caldwell CH, Antonakos CL, Assari S, Kruger D, Loney EH, Njai R. Pathways to prevention: improving nonresident African American fathers' parenting skills and behaviors to reduce sons' aggression. *Child Dev*. 2014; 85(1):308–325. [PubMed: 23746345]
48. Revell MA. The African American Father Does Matter. *Lamaze 2 15 ICEA*. 2014; 30(1):25.
49. Cochran D. African American fathers: A decade review of the literature. *Families in Society: The Journal of Contemporary Social Services*. 1997; 78(4):340–351.
50. Shannon JD, Cabrera NJ, Tamis-LeMonda C, Lamb ME. Who stays and who leaves? Father accessibility across children's first 5 years. *Parenting: Science and Practice*. 2009; 9(1–2):78–100.
51. Rogoff B, Paradise R, Arauz RM, Correa-Chávez M, Angelillo C. Firsthand learning through intent participation. *Annu Rev Psychol*. 2003; 54(1):175–203. [PubMed: 12499516]
52. Downer J, Campos R, McWayne C, Gartner T. Father involvement and children's early learning: A critical review of published empirical work from the past 15 years. *Marriage & Family Review*. 2008; 43(1–2):67–108.
53. Breitenstein SM, Gross D, Ordaz I, Julion W, Garvey C, Ridge A. Promoting mental health in early childhood programs serving families from low-income neighborhoods. *Journal of the American Psychiatric Nurses Association*. 2007 Oct 1; 13(5):313–320.

54. Carlson M, Turner K. Fathers' involvement and fathers' well-being over children's first five years. University of Wisconsin-Madison), working paper. 2010:181–208.
55. Reichman NE, Teitler JO, Garfinkel I, McLanahan SS. Fragile families: Sample and design. *Children and Youth Services Review*. 2001; 23(4/5):303–326.
56. Coley RL, Hernandez DC. Predictors of paternal involvement for resident and nonresident low-income fathers. *Dev Psychol*. 2006; 42(6):1041. [PubMed: 17087540]
57. Fagan J. Randomized Study of a Prebirth Coparenting Intervention With Adolescent and Young Fathers*. *Family Relations*. 2008; 57(3):309–323.
58. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates; 1988.
59. Julion WA, Gross DA, Fogg L, McLaughlin G. "It's not just about MOMMAs:" African American non-resident fathers descriptions of paternal involvement. *Research in Nursing and Health*. 2007; 30(595):610.
60. Johnson WE. Social Work Strategies for Sustaining Paternal Involvement among Unwed. *Professional Development: The International Journal of Continuing*. 5(1)
61. Leavell AS, Tamis-LeMonda CS, Ruble DN, Zosuls KM, Cabrera NJ. African American, White and Latino fathers' activities with their sons and daughters in early childhood. *Sex Roles*. 2012; 66(1–2):53–65.
62. Threlfall JM, Seay KD, Kohl PL. The parenting role of African-American fathers in the context of urban poverty. *Journal of Children and Poverty*. 2013; 19(1):45–61. [PubMed: 23914131]
63. Fleming J, King A, Hunt T. Just Call Me Dad: Health and Social Benefits to Fathers and their Children. *Children Australia*. 2014; 39(01):34–41.
64. Stahlschmidt MJ, Threlfall J, Seay KD, Lewis EM, Kohl PL. Recruiting Fathers to Parenting Programs: Advice from Dads and Fatherhood Program Providers. *Children and Youth Services Review*. 2013
65. Billingsley, A. *Mighty like a river: The Black church and social reform*. USA: Oxford University Press; 1999.
66. Bronfenbrenner U. *The ecology of human development: Experiments by design and nature*. 1979
67. Reisch, M. How Research in the Social Sciences has Influenced American Attitudes about Poverty; Remarks at Capitol Hill Forum for Sage Publications 50th Anniversary Event; May 5, 2015; 2015.
68. Breitenstein SM, Gross D, Garvey CA, Hill C, Fogg L, Resnick B. Implementation fidelity in community-based interventions. *Res Nurs Health*. 2010; 33(2):164–173. [PubMed: 20198637]
69. Fox J, Bartholomae S, Lee J. Building the case for financial education. *J Consumer Aff*. 2005; 39(1):195–214.
70. Lyons AC, Scherpf E. Moving from unbanked to banked: evidence from the Money Smart program. *Financial Services Review-Greenwich*. 2004; 13(3):215–232.
71. Lyons AC, Scherpf E. An evaluation of the FDIC's financial literacy program Money Smart. Official Report to the Women's Bureau at the US Department of Labor. 2003
72. Taylor J, Tomasic M. Taylor's measures of dysphoria, anxiety, anger, and self-esteem. *Handbook of tests and measurements for black populations*. 1996; 2:295–305.
73. Cohen, S.; Williamson, G. Perceived stress in a probability sample of the United States. In: Spacapan, S.; Oskamp, S., editors. *The Social Psychology of Health*. Newbury Park, CA: Sage; 1988.
74. Steffen PR, McNeilly M, Anderson N, Sherwood A. Effects of perceived racism and anger inhibition on ambulatory blood pressure in African Americans. *Psychomatic Medicine*. 2003; 65:746–750.
75. McNeilly MD, Anderson NB, Armstead CA, et al. The perceived racism scale: a multidimensional assessment of the experience of white racism among African Americans. *Ethnicity & Disease*. 1996; 6(1–2):154–166. [PubMed: 8882844]
76. Myers JK, Weissman MM. Use of a self-report symptom scale to detect depression in a community sample. *Am J Psychiatry*. 1980; 137(9):1081–1084. [PubMed: 7425160]

77. Wiemann CM, Agurcia CA, Rickert VI, Berenson AB, Volk RJ. Absent fathers as providers: Race/ethnic differences in support for adolescent mothers. *Child Adolescent Soc Work J*. 2006; 23(5): 617–634.
78. Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977; 1:385–401.
79. Johnston, Mash. A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology*. 1989; 18(2):167–175.
80. Fox RA, Bentley KS. Validity of the Parenting Inventory: Young children. *Psychology in the Schools*. 1992; 29:101–107.
81. Fox RA. Development of an instrument to measure the behaviors and expectations of parents of young children. *Journal of Pediatric Psychology*. 1992; 17:231–239. [PubMed: 1593396]
82. Teven JJ, McCroskey JC, Richmond VP. Measurement of tolerance for disagreement. *Communication Research Reports*. 1998; 15(2):209–217.
83. Heppner PP, Petersen CH. The development and implications of a personal problem-solving inventory. *J Couns Psychol*. 1982; 29(1):66–75.
84. Pierce GR, Sarason IG, Sarason BR. General and relationship-based perceptions of social support: are two constructs better than one? *J Pers Soc Psychol*. 1991; 61(6):1028–1039. [PubMed: 1774625]
85. Julion, WA. [Doctoral]. Rush University College of Nursing; 2002. Facilitators and Hindrances to Paternal Involvement in African American nonresident fathers.
86. Reynolds CR, Kamphaus RW. BASC-2: Behavior assessment system for children. 2004
87. Skinner CH. Contextual validity: Knowing what works is necessary, but not sufficient. *Display Ad Rates*. 2013:15.
88. Schneider JK, Schneider JF, Lorenz RA. Creating user-friendly databases with Microsoft Access. *Nurse Researcher*. 2005; 13(1):57–75. [PubMed: 16220841]
89. Harris PA. Research electronic data capture (redcap)-planning, collecting and managing data for clinical and translational research. *BMC Bioinformatics*. 2012; 13(Suppl 12):A15.
90. Terranova PF, Barohn RJ, Aaronson LS, Godwin AK, Smith P, Waitman LR. The Role of Information Systems in Clinical and Translational Research (Frontiers: The NIH Clinical and Translational Science Award Driving Information Systems). *Information Systems as Infrastructure for University Research Now and in the Future*. 2012; 69
91. Rubin, D. Multiple imputation for nonresponse in surveys. New York: John Wiley & Sons; 1987.
92. Tukey, J. Exploratory Data Analysis. Reading MA: Addison-Wesley Publishing; 1977.
93. MacKinnon, DP. Introduction to statistical mediation analysis. Erlbaum Psych Press; 2008.
94. Hayes, AF. Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Press; 2013.
95. Ball J, Moselle K. Fathers' contributions to children's well-being. *Father Involvement Initiative-Ontario Network*. 2007
96. Pleck JH. Why could father involvement benefit children? Theoretical perspectives. *Applied Developmental Science*. 2007; 11(4) 196-197-202.
97. Dush CMK, Kotila LE, Schoppe-Sullivan SJ. Predictors of supportive coparenting after relationship dissolution among at-risk parents. *Journal of Family Psychology*. 2011; 25(3):356. [PubMed: 21534670]
98. Feinberg ME, Jones DE, Kan ML, Goslin MC. Effects of family foundations on parents and children: 3.5 years after baseline. *Journal of Family Psychology*. 2010; 24(5):532. [PubMed: 20954763]
99. Whitaker IP, Whitaker MM, Jackson K. Single Parenting in the African American Community: Implications for Public Policy and Practice. *J Hum Behav Soc Environ*. 2014; 24(2):230–249.
100. Brown AK. Cultural Perspective on African American Culture. *International Journal of Education and Literacy Studies*. 2013; 1(2):54–68.
101. Kreider, R.; Ellis, R. Living arrangements of children: 2009 (Current Population Reports, P70-126). Washington, DC: US Census Bureau; 2011.

102. Caldwell CH, Bell L, Brooks CL, Ward JD, Jennings C. Engaging nonresident African American fathers in intervention research: What practitioners should know about parental monitoring in nonresident families. *Research on Social Work Practice*. 2011; 21(3):298–307.
103. Fleck MO, Hudson DB, Abbott DA, Reisbig AM. You can't put a dollar amount on presence: young, non-resident, low-income, African American fathers. *Issues Compr Pediatr Nurs*. 2013; 36(3):225–240. [PubMed: 23902292]
104. Breland-Noble AM, Bell CC, Burriss A, Poole HK. AAKOMA Project Adult Advisory Board. The significance of strategic community engagement in recruiting African American youth & families for clinical research. *J Child Fam Stud*. 2012; 21(2):273–280. [PubMed: 22984337]
105. Coates EE, Phares V. Predictors of paternal involvement among nonresidential, Black fathers from low-income neighborhoods. *Psychology of Men & Masculinity*. 2014; 15(2):138.
106. Foster JM, Sawyer SM, Smith L, Reddel HK, Usherwood T. Barriers and facilitators to patient recruitment to a cluster randomized controlled trial in primary care: lessons for future trials. *BMC Medical Research Methodology*. 2015; 15(1):1. [PubMed: 25555466]
107. Nelson S, Milgrom P. Minority participation in a school-based randomized clinical trial of tooth decay prevention in the United States. *Contemporary clinical trials*. 2012; 33(1):60–66. [PubMed: 21986390]
108. Young AMW, Perez LM, Northridge ME, Vaughn RL, Braithwaite K, Treadwell HM. Bringing to light the health needs of African-American men: The Overtown men's health study. *Journal of Men's Health and Gender*. 2007; 4(2):140–148.
109. James C, Salganicoff A, Ranji U, Goodwin A, Duckett P. Putting men's health care disparities on the map: Examining racial and ethnic disparities at the state level. 2012
110. Cabrera, N. *Gender and Couple Relationships*. Springer; 2016. Why Do Fathers Matter for Children's Development?; p. 161-168.
111. Choi J, Jackson AP. Nonresident fathers' parenting, maternal mastery and child development in poor African American single-mother families. *Race and Social Problems*. 2012; 4(2):102–111.
112. Goldberg JS. Identity and Involvement Among Resident and Nonresident Fathers. *J Fam Issues*. 2013
113. Jones J, Mosher WD. Fathers' involvement with their children: United States, 2006–2010. *Natl Health Stat Report*. 2013; (71):1–21. (71).
114. Gonzalez M, Jones D, Parent J. Coparenting experiences in African American families: An examination of single mothers and their nonmarital coparents. *Fam Process*. 2014; 53(1):33–54. [PubMed: 24479612]
115. McHale J, Waller MR, Pearson J. Coparenting Interventions for Fragile Families: What Do We Know and Where Do We Need To Go Next? *Fam Process*. 2012; 51(3):284–306. [PubMed: 22984970]
116. Hammond WP, Caldwell CH, Brooks C, Bell L. Being There in Spirit, Fire, and Mind: Expressive Roles Among Nonresidential African American Fathers. *Research on Social Work Practice*. 2011; 21(3):308–318.
117. Holcomb P, Edin K, Max J, et al. In Their Own Voices: The Hopes and Struggles of Responsible Fatherhood Program Participants in the Parents and Children Together Evaluation. 2015
118. Coakley TM, Shears JK, Randolph SD. Understanding Key Barriers to Fathers' Involvement in Their Children's Lives. *Child Youth Serv*. 2014; 35(4):343–364.
119. Coakley TM, Washington TJ, Kelley A. Fathers' Perspectives on Supports and Barriers That Affect Their Fatherhood Role. *SAGE Open*. 2014; 4(1):2158244014521818.

Table 1**Intervention Program Content**

BBTF
Session 1: Fathers are important: the benefits to children and parents of positive father involvement
Session 2: Fatherhood: A journey, not a destination: the process of becoming a positively involved father takes time and attention
Session 3: Fathers know your rights: legal issues that impact fathers' positive involvement with their children
1-Week Hiatus with Activity Voucher
Session 4: Understanding your children: knowledge about healthy child development
Session 5: Nurturing your children: application of parenting skills that support child wellbeing
Session 6: Guiding your children: effective discipline strategies reframed in ways that are acceptable for AA fathers
1-Week Hiatus with Activity Voucher
Session 7: Clear communication: effective communicating with your child's mother and others
Session 8: Keeping your cool: dealing with stressful interpersonal situations while maintaining composure
Session 9: Problem solving: steps to effective problem solving while staying focused on goals as fathers
1-Week Hiatus with Activity Voucher
Session 10: Booster Session: problem-solving around the remaining challenges to positive father involvement and refreshing the content offered during the 12-week program; 6 weeks post intervention

Table 2**Comparator Program Content**

MSFLP
Session 1: Bank on it: an introduction to bank service Borrowing basics: an introduction to credit
Session 2: Check it out: choosing and keeping a checking account To your credit: how your credit history will affect your credit future
Session 3: Pay yourself first: why you should save
1-Week Hiatus with Activity Voucher
Session 4: Keep it safe: know your rights as a consumer Financial recovery: how to recovery financially and build credit after a financial setback
Session 5: Charge it right: how to make a credit card work for you Powerful resources: important resources for managing finances
Session 6: Investing: stocks and bonds
1-Week Hiatus with Activity Voucher
Session 7: A roof over your head: renting vs buying
Session 8: Understanding your taxes: making your W2 work for you
Session 9: Insurance: life, home, and auto insurance
1-Week Hiatus with Activity Voucher
Session 10: Booster Session: Discussing progress towards financial literacy; 6 weeks post intervention