

Encouraging Attendance and Engagement in Parenting Programs

Developing a Smartphone Application with Fathers, for Fathers

THE
BUILDING
BRIDGES
AND
BONDS
STUDY



Building Bridges and Bonds (B3), a federally funded study of Responsible Fatherhood programs, is testing a set of innovative approaches designed to help fathers advance their parenting and employment skills. One of these innovations is a new smartphone-based application called DadTime. It is one of the first mobile applications specifically designed to help fathers improve their engagement with and attendance at parenting programs.

This brief, the second in a series of publications on B3, describes how MDRC collaborated with fathers to develop DadTime. The first brief, “Three Innovative Approaches to Serving Low-Income Fathers,” which was published in April 2017, introduced the B3 study and described three new practices for Responsible Fatherhood programs, including the creation of DadTime, which is described in greater detail here.

OPRE REPORT 2018-68

JULY 2018

REKHA BALU
SHAWNA LEE
SAMANTHA STEIMLE



Prior evidence suggested that incorporating nudges such as reminders and help with planning can boost program attendance for vulnerable populations.

Why Develop Attendance Support for Responsible Fatherhood Programs?

Despite a strong desire to be involved with their children, some fathers experience numerous barriers to doing so. These barriers include not living with their children or having a challenging coparenting relationship with their children's mother. They may also face barriers to participating in relevant services, such as feeling uncomfortable attending traditional parenting programs or being unable to attend parent support programs because of work responsibilities.¹

In an effort to improve the well-being of fathers and their children, the U.S. Department of Health and Human Services' (HHS's) Administration for Children and Families (ACF) funded a set of Responsible Fatherhood grantees in 2015 that address the particular challenges these fathers face. ACF conceived of the Building Bridges and Bonds (B3) study to learn how new and emerging service approaches might promote Responsible Fatherhood

program goals. With funding from the Office of Family Assistance, HHS's Office of Planning, Research and Evaluation engaged MDRC to conduct the B3 study with six organizations that provide Responsible Fatherhood services, five of which are HHS grantees.² In 2016, each of the six local organizations participating in B3 added one or two program components or innovations to their usual services.

In launching the B3 study, MDRC knew that achieving high rates of participation could be difficult, given that fathers served by Responsible Fatherhood programs have a variety of challenging circumstances. Although these programs already invest a great deal of time and effort to encourage fathers' attendance, many fathers do not complete all their intended activities.³ Some fathers sign up for but do not attend the first session; other fathers begin but do not complete all sessions. MDRC thought this issue might be particularly challenging for organizations delivering a B3 innovation that was designed to build fathers' parenting skills, called Just Beginning.⁴ (See Box 1 for more details.) Just Beginning requires that fa-

OPRE REPORT 2018-68
JULY 2018

AUTHORS: Rekha Balu (MDRC), Shawna Lee (University of Michigan), and Samantha Steimle (MDRC)

SUBMITTED TO: Anna Solmeyer, Project Officer, Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services

PROJECT DIRECTOR: Ginger Knox, MDRC, 16 East 34th Street, New York, NY 10016

CONTRACT NUMBER: HHS-P23320095644WC

This report is in the public domain. Permission to reproduce is not necessary.

SUGGESTED CITATION: Balu, Rekha, Shawna Lee, and Samantha Steimle (2018). "Encouraging Attendance and Engagement in Parenting Programs: Developing a Smartphone Application with Fathers, for Fathers." OPRE Report 2018-68. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

DISCLAIMER: The views expressed in this publication do not necessarily reflect the views or policies of the Office of Planning, Research and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

This report and other reports sponsored by the Office of Planning, Research and Evaluation are available at www.acf.hhs.gov/programs/opre.

BOX 1

SNAPSHOT: JUST BEGINNING

Research has demonstrated a strong link between supportive fathering and child outcomes, and has shown that a lack of father involvement can pose developmental risks for children.* Moreover, in qualitative studies, men have acknowledged challenges in understanding how best to engage with their children, particularly infants and young children, and have voiced an interest in receiving support to build their parenting skills.†

A parenting program called Just Beginning, developed by Georgetown University and the Youth Law Center, addresses these challenges — with support and reinforcement from the DadTime application.

Just Beginning seeks to create an environment in which fathers can learn, practice, and receive feedback on parenting approaches that promote positive relationships, whether or not they live with their children. The program emphasizes the formation of a father’s relationship with and attachment to his young children (ages 2

months to 3 years) via supportive interactions during playtime.

Over the course of five 60- to 90-minute sessions, scheduled to take place about once a week, the program focuses on five key skills: (1) noticing how the child behaves; (2) following the child’s lead in play; (3) talking to the child; (4) encouraging and praising the child; and (5) tying all the concepts together. Program sessions include learning via Sesame Beginnings videos (a series of instructional videos that demonstrate parenting strategies corresponding to the Just Beginning program concepts) and facilitator-observed playtime between father and child, which the father and facilitator discuss afterwards.

The B3 team selected Just Beginning for its study of Responsible Fatherhood programs because it is designed specifically for fathers and it offers them high-quality experiential learning and immediate positive feedback on their interactions with their children.

NOTES: *Amato and Gilbreth (1999); Cabrera, Shannon, and Tamis-LeMonda (2007); Cancian, Slack, and Yang (2010); Carlson and Magnuson (2011); Cowan et al. (2008); King and Sobolewski (2006).

†Lee et al. (2013); Lee, Yelick, Brisebois, and Banks (2011); Walsh et al. (2014).

thers and children attend sessions together, which presents a particular engagement challenge for fathers who do not live with their children, because they must coordinate with the coparent to ensure that the child can attend the session with them. In response, the B3 team has sought creative solutions to encourage fathers’ engagement in these programs by drawing on the kinds of behavioral science insights — for example, using “nudges” to encourage particular behaviors — that research

has found help people follow through on their intentions in a variety of contexts.⁵

To boost participation in Just Beginning and to address the challenges that fathers face with program attendance, the B3 study team developed the DadTime smartphone application. DadTime is based on the structure and content of Just Beginning, and is used as a supplement to the Just Beginning sessions. It provides fathers with automated pro-



gram attendance reminders and interactive tools to help them apply what they have learned in Just Beginning sessions to subsequent interactions with their children. DadTime’s content was developed in partnership with the academic team behind the content for the mDad application,⁶ one of the first applications designed for fathers that took fathers’ feedback into account. DadTime’s look and feel and its technology platform were created by CauseLabs, an application development firm. The B3 study intends to explore whether fathers who are randomly assigned to participate in Just Beginning will use this type of mobile application, and it will test whether attendance at Just Beginning sessions is higher among fathers who are offered DadTime.

Why Offer a Mobile Application Over Other Communication Methods?

Before developing DadTime, the team considered multiple intervention approaches and ways of delivering support to fathers who enrolled in Just Beginning. Prior evidence suggested that incorporating nudges such as reminders and help with planning can boost program attendance for vulnerable populations.⁷ The study team explored how to combine these tools to help fathers attend more Just Beginning sessions and increase father-child play time. They decided to use a mobile application — rather than another approach, such as text messages — to deliver these communications, because it would provide a single platform for these

multiple types of support. It could also help to minimize the burden on program staff by automating the process of sending reminders to fathers and helping them plan for their sessions, rather than having staff members deliver these supports individually. Other applications, such as mDad, have helped promote positive parenting behaviors, but do not focus on attendance at a parenting program.⁸ Further, in the Just Beginning program, enrollment involves an in-person intake session — which presents an opportunity for fathers to download and activate the application with guidance from a staff member.

The basic DadTime design included features that prior evidence suggested could be useful, such as planning, reminders, and other encouragement nudges.⁹ For example, as shown in Figure 1, the application included reminders for upcoming sessions, personalized with the name of the child, and offered simple steps to help fathers plan their attendance at program sessions.

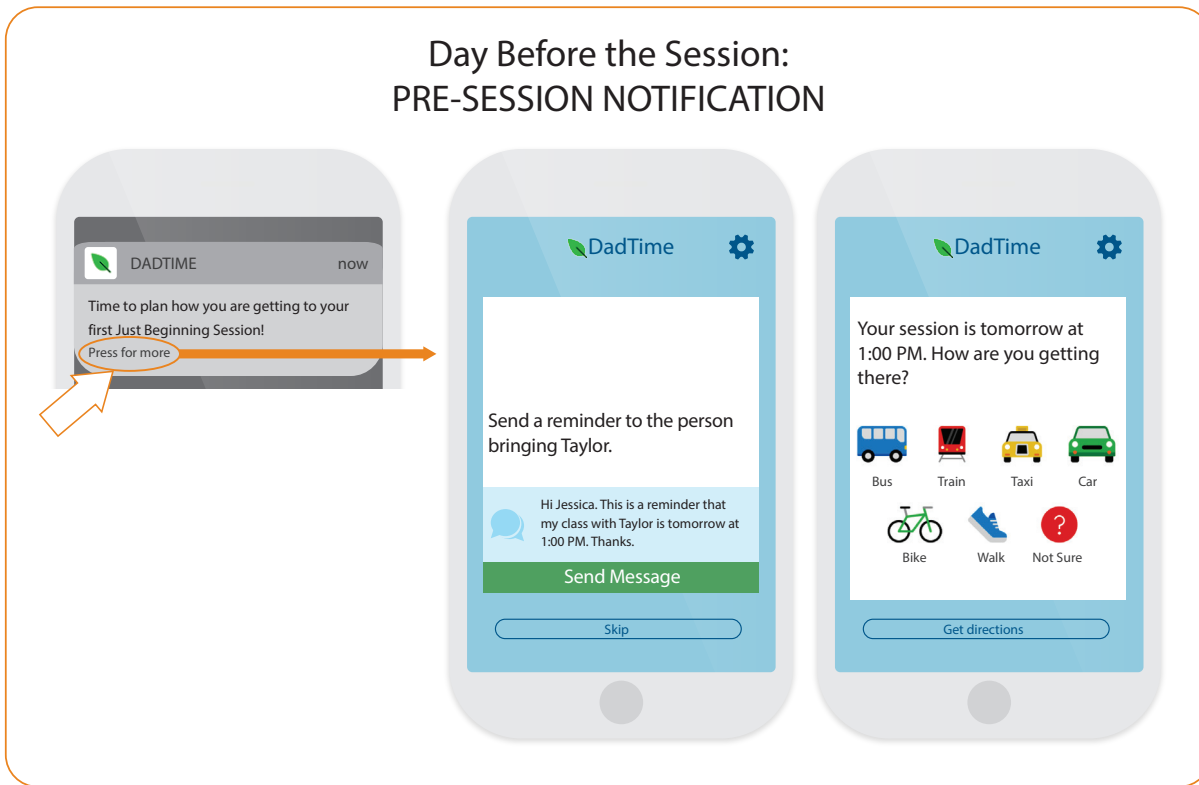
How Did Fathers Help to Develop DadTime?

During the pilot phase of the B3 study, the team sought feedback on the basic DadTime design from fathers who were participating in the Just Beginning program — the intended users. The goal was to listen to and learn from fathers, and then tailor specific wording, order, and presentation of the application’s content based on their reactions.

The study team presented the initial package of nudges mentioned above to fathers at two of three participating program sites, and asked them about the usefulness and usability of the applica-

FIGURE 1

EXAMPLES OF DADTIME INTERACTIONS BEFORE A SCHEDULED JUST BEGINNING SESSION



tion. To refine the content and format based on that feedback, the study team used a process from human-centered design called “rapid prototyping,” in which multiple iterations of a product are created based on user feedback.¹⁰ The team started with a rough, paper-based format, then created digital formats based on fathers’ feedback about features that matter to them, and improved on the format based on additional feedback. Over the course of three to five iterations, questions that the study team explored with fathers in the prototyping process included:

- How can phrases from the in-person Just Beginning curriculum best be translated into language that is digestible in a smartphone application? What language about parent-child engagement does and does not resonate with fathers of young children?

- What features can fathers use intuitively?
- What features of DadTime do and do not interest fathers as prospective users? What changes increased their interest in DadTime?

The team held several sessions of individual meetings during the summer of 2016 to collect feedback on what users found intuitive or confusing, pleasing or troubling to them. After each set of sessions, the team quickly designed another iteration and improved specific features based on fathers’ feedback.

Fathers weighed in on a variety of components of DadTime, such as different types of icons that it could display, whether a feature should be the same for all users or should be personalized, and whether user responses in one part of the application should shape what they see later. For example, the

FIGURE 2
EXAMPLES OF
DADTIME INTERACTIONS
ON THE DAY OF A
JUST BEGINNING SESSION

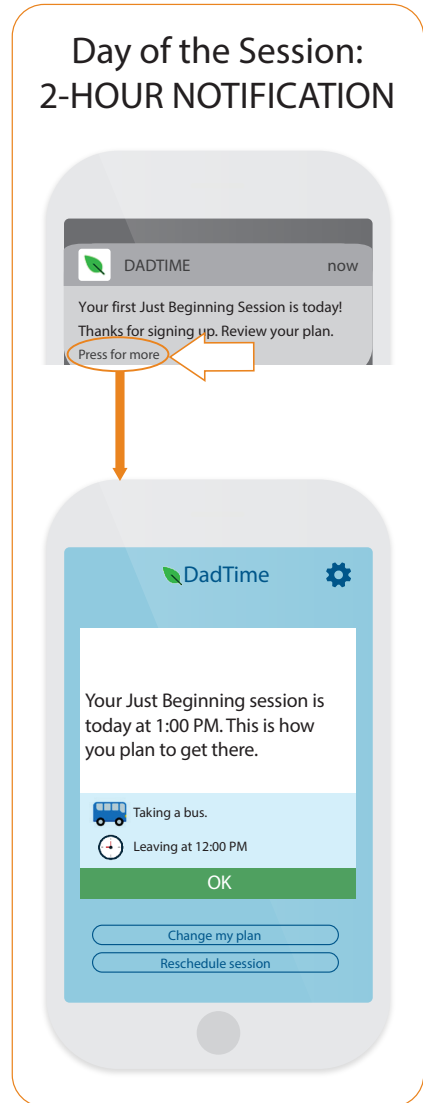
team observed that fathers preferred to control the time of day when their reminders are sent rather than leaving it up to the application, which might generate reminders at a time that is not useful for them. The team also observed how easy or difficult it was for fathers to read the text and advance from one screen to the next. Finally, team members asked fathers how many suggested options for play activities they wanted to see on a single screen (for example, just one at a time or several together).

In addition to assessing how intuitive certain features are to use, user-centered design and other user-oriented research suggest determining whether the user finds the content relevant and appropriate.¹¹ Exploring the content was particularly important for DadTime because the application presents a modified version of the ideas that fathers recently learned in their Just Beginning sessions. It was important that the sessions and the application reinforced one another in ways that made sense to the fathers.

Right after the B3 study launched, the team also met with program staff to show them prototypes of DadTime based on the initial feedback from fathers, and to ask them what concepts should be reinforced and when during the program fathers might benefit from additional outreach and support.

How Did the Study Team Apply What Fathers Shared?

As a result of the explorations described above, the B3 study team identified three key times when DadTime should communicate with fathers, by sending a push notification — a message that pops up on a mobile device — to their phones:¹²



- 1 Before the session:** Reminders for the next Just Beginning session are sent to fathers the day before the session is scheduled to take place (shown in Figure 1), and again, if fathers request, two hours before the scheduled session (shown in Figure 2). The application includes exercises for planning how to get to sessions, including pre-written text messages that the father can send to the person bringing his child to the ses-

FIGURE 3

EXAMPLES OF DADTIME INTERACTIONS AFTER A JUST BEGINNING SESSION

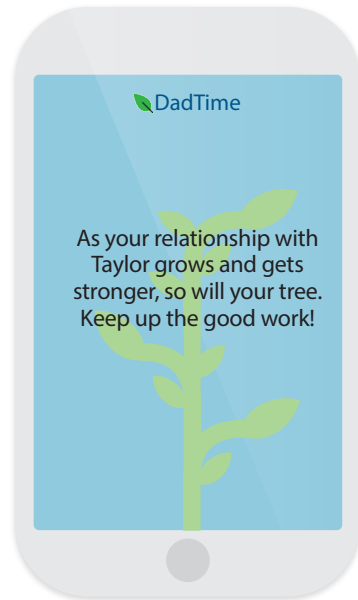


sion if he is not bringing the child himself, to help work out logistics.

2 Day after the session: This notification includes opportunities to reflect on what went well, what the father would like to try with his child next time (shown in Figure 3), and prompts for rescheduling if the father did not attend the session.

3 Weekend after the session: The application sends activity suggestions, including some play activities for the father to consider when he is with his child, an opportunity to watch Sesame Beginnings videos from his session (shown in Figure 3),¹³ and a “relationship tree” the team developed that grows new “leaves” to symbolize the father’s progress in the program (shown in Figure 4).

FIGURE 4
EARLY STAGE OF THE
RELATIONSHIP TREE USED IN
THE DADTIME APPLICATION



The prototyping process generated some additional insights that prompted the team to add or modify some design features in the application:

- Fathers felt anxiety related to the upcoming Just Beginning parenting sessions, so it was important to start application messages before a father's first session by asking him how he felt.
- The team used icons and emojis in the DadTime basic design to simplify the content and reduce the reading load, but did not know initially how fathers would respond to those symbols. This process helped the team learn that fathers of young children reacted positively to them.
- While many applications promote earning points (so-called gamification) for making progress in session attendance and using the application, fathers of young children re-

ported that they found points or badges inappropriate for the parenting context. They preferred the "relationship tree" approach (described above) when the team presented it as an alternative, because it represented growth in the father-child relationship.

What Else Will the Study Team Learn from DadTime?

DadTime is a type of intervention that can allow researchers to continue to learn from users after the prototyping phase, throughout its development and fielding. By observing how users interact with DadTime both during its initial development and later — the types of features used and the types of reminders that are ignored, for example — researchers can identify not only technical glitches, but also stumbling blocks where the interface between the application and its users may not play out as intended. The prototyping approach of repeating a three-step cycle that comprises (1) a quick mock-up, (2) close observation, and (3) improvement based on feedback can also apply to other interventions — delivered either via technology or in person. For example, researchers can observe how teachers react to the features and timing of a coaching program, or how parents react to a text message campaign, and then make modifications based on the intended users' reactions.

Forthcoming B3 publications will describe how DadTime was implemented in three Responsible Fatherhood service providers that are delivering Just Beginning, including how participants used the application, whether its format was useful for fathers as a way to receive multiple nudges, and the impact of the application on program attendance and participation outcomes.

Notes

- 1 Lee et al. (2013); Lee, Yelick, Brisebois, and Banks (2011); Walsh et al. (2014); Lee and Walsh (2015).
- 2 MDRC's research partners for the study are MEF Associates and Abt SRBI. Georgetown University, Youth Law Center, and the University of Cincinnati's Corrections Institute also provide technical assistance. The organizations that were selected to participate in the B3 study are Children's Institute, Inc.; The Fortune Society; Kanawha Institute for Social Research and Action; Passages Connecting Fathers and Families, Inc.; People for People, Inc.; and Seedco, alongside its community partners BronxWorks and Strive.
- 3 Knox, Cowan, Cowan, and Bildner (2011); Zaveri, Baumgartner, Dion, and Clary (2015).
- 4 For a description and the evaluation plan, see Israel, Behrmann, and Wulfsohn (2017); Harknett, Manno, and Balu (2017).
- 5 Richburg-Hayes, Anzelone, and Dechausay (2017).
- 6 Lee and Walsh (2015).
- 7 Farrell, Smith, Reardon, and Obara (2016); Lefforge, Donahue, and Strada (2007).
- 8 Lee and Walsh (2015).
- 9 Richburg-Hayes, Anzelone, Dechausay, and Landers (2017).
- 10 Human-centered design is explained in IDEO (2015).
- 11 Akin et al. (2013).
- 12 A push notification differs from a text message; it is a pop-up notification that appears on a smartphone.
- 13 Sesame Beginnings is a series of instructional videos that demonstrate parenting strategies that align with Just Beginning's concepts.

References

- Akin, Becci A., Stephanie A. Bryson, Mark F. Testa, Karen A. Blase, Thomas McDonald, and Heidi Melz. 2013. "Usability Testing, Initial Implementation, and Formative Evaluation of an Evidence-Based Intervention: Lessons from a Demonstration Project to Reduce Long-Term Foster Care." *Evaluation and Program Planning* 41, 19-30.
- Amato, Paul R., and Joan G. Gilbreth. 1999. "Nonresident Fathers and Children's Well-Being: A Meta-Analysis." *Journal of Marriage and the Family* 61, 3: 557-573.
- Cabrera, Natasha J., Jacqueline D. Shannon, and Catherine Tamis-LeMonda. 2007. "Fathers' Influence on Their Children's Cognitive and Emotional Development: From Toddlers to Pre-K." *Applied Developmental Science* 11, 4: 208-213.
- Cancian, Maria, Kristen Shook Slack, and Mi Youn Yang. 2010. "The Effect of Family Income on Risk of Child Maltreatment." Institute for Research on Poverty Discussion Paper 1385-10. Madison, WI: University of Wisconsin-Madison, Institute for Research on Poverty.
- Carlson, Marcia J., and Katherine Magnuson. 2011. "Low-Income Fathers' Influence on Children." *The Annals of the American Academy of Political and Social Science* 635, 1: 95-116.
- Cowan, Carolyn P., Philip A. Cowan, Nancy Cohen, Marsha K. Pruett, and Kyle Pruett. 2008. "Supporting Fathers' Engagement with Their Kids." Pages 44-80 in Jill Duerr Berrick and Neil Gilbert (eds.), *Raising Children: Emerging Needs, Modern Risks, and Social Responses*. New York: Oxford University Press.
- Farrell, Mary, Jared Smith, Leigh Reardon, and Emmi Obara. 2016. *Framing the Message: Using Behavioral Economics to Engage TANF Recipients*. OPRE Report 2016-02. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Harknett, Kristen, Michelle S. Manno, and Rekha Balu. 2017. *Building Bridges and Bonds: Study Design Report*. OPRE Report 2017-27. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

- IDEO. 2015. *The Field Guide to Human-Centered Design: Design Kit*. San Francisco: IDEO, 2015.
- Israel, Dina, Rebecca Behrmann, and Samantha Wulfsohn. 2017. *Three Innovative Approaches to Serving Low-Income Fathers: The Building Bridges and Bonds Study*. OPRE Report 2017-28. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- King, Valerie, and Juliana M. Sobolewski. 2006. "Nonresident Fathers' Contributions to Adolescent Well-Being." *Journal of Marriage and Family* 68, 3: 537-557.
- Knox, Virginia, Philip A. Cowan, Carolyn Paper Cowan, and Elana Bildner. 2011. "Policies That Strengthen Fatherhood and Family Relationships: What Do We Know and What Do We Need to Know?" *The Annals of the American Academy of Political and Social Science* 635, 1: 216-239.
- Lee, Shawna J., Tova B. Neugut, Katherine L. Rosenblum, Richard M. Tolman, Wendy J. Travis, and Margaret H. Walker. 2013. "Sources of Parenting Support in Early Fatherhood: Perspectives of United States Air Force Members." *Children and Youth Services Review* 3, 5: 908-915.
- Lee, Shawna, and Tova Walsh. 2015. "Using Technology in Social Work Practice: The mDad (Mobile Device Assisted Dad) Case Study." *Advances in Social Work* 16, 1: 107-124.
- Lee, Shawna J., Anna Yelick, Kimberly Brisebois, and Kevin L. Banks. 2011. "Low-Income Fathers' Barriers to Participation in Family and Parenting Programs." *Journal of Family Strengths* 11, 1: 1-16.
- Lefforge, Noelle L., Brad Donahue, and Marilyn J. Strada. 2007. "Improving Session Attendance in Mental Health and Substance Abuse Settings: A Review of Controlled Studies." *Behavior Therapy* 38, 1: 1-22.
- Richburg-Hayes, Lashawn, Caitlin Anzelone, and Nadine Dechausay with Patrick Landers. 2017. *Nudging Change in Human Services: Final Report of the Behavioral Interventions to Advance Self-Sufficiency (BIAS) Project*. OPRE Report 2017-23. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Walsh, Tova B., Carolyn J. Dayton, Michael S. Erwin, Maria Muzik, Alexandra Busuito, and Katherine L. Rosenblum. 2014. "Fathering after Military Deployment: Parenting Challenges and Goals of Fathers of Young Children." *Health and Social Work* 39, 1: 35-44.
- Zaveri, Heather, Scott Baumgartner, Robin Dion, and Liz Clary. 2015. *Parents and Children Together: Design and Implementation of Responsible Fatherhood Programs*. Washington DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation.

This brief and the research upon which it is based are funded by the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Family Assistance. The Building Bridges and Bonds project is overseen by the Administration for Children and Families' Office of Planning, Research, and Evaluation.

The parenting program Just Beginning was developed by Rachel Barr at Georgetown University and Carole Shauffer at the Youth Law Center. The content of the DadTime application was developed by MDRC in collaboration with Shawna Lee at the University of Michigan and Tova Walsh at Rutgers School of Social Work. The application interface was developed by MDRC in collaboration with CauseLabs.

The authors would like to express our sincerest appreciation to those organizations participating in the Just Beginning intervention of the Building Bridges and Bonds study, Children's Institute, Inc., People for People, Inc., and Seedco and their community partners BronxWorks and Strive; their partnership made this project possible.

Dissemination of MDRC publications is supported by the following funders that help finance MDRC's public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Annie E. Casey Foundation, Charles and Lynn Schusterman Family Foundation, The Edna McConnell Clark Foundation, Ford Foundation, The George Gund Foundation, Daniel and Corinne Goldman, The Harry and Jeanette Weinberg Foundation, Inc., The JPB Foundation, The Joyce Foundation, The Kresge Foundation, Laura and John Arnold Foundation, Sandler Foundation, and The Starr Foundation.

In addition, earnings from the MDRC Endowment help sustain our dissemination efforts. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Elizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. O'Neill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

For information about MDRC and copies of our publications, see our website: www.mdrc.org.