Learning Together in Context: Attending to Culture in Early Childhood Family Engagement Initiatives

by

Shana E. Rochester

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Education and Psychology)
in the University of Michigan
2018

Doctoral Committee:

Professor Nell K. Duke, Chair
Professor Stephanie J. Rowley
Assistant Professor Christina J. Weiland
Professor Camille M. Wilson

Shana E. Rochester

shanroch@umich.edu

ORCID iD: 0000-0003-1635-8878

DEDICATION

Dedicated to my own family—past, present, and future—whose love and perseverance inspire me on this journey each day.

ACKNOWLEDGEMENTS

- To the One who has kept me and guided my steps from the very beginning, I give all my thanks to You. You believed in me when I did not believe in myself. You provided me with the strength needed to finish this dissertation. I thank You for your favor, mercy, and love.

- This dissertation would not have been possible without a robust support system. I am so fortunate to have had such great coaches, supporters, cheerleaders, and teammates as I embarked on this journey.

- To my dissertation committee, I am so grateful for your thoughtful and insightful suggestions to improve my dissertation. Nell, I did not start my graduate program as your advisee, but you welcomed me with open arms and supported my vision for my graduate experience from the very beginning. You pushed me to be a better writer and never doubted my ability to successfully complete my degree, even when I sometimes did. You have been a model of academic excellence. Your attention to detail and your strong passion for all that you do is inspiring. Thank you for helping me reach heights I never thought I'd see. Chris, from the very beginning, I've been so in awe of your brilliance. I appreciate you for supporting me and giving me the opportunity to join your lab. I am so thankful for your patience, guidance, and support during my graduate career. Also, thank you for instilling in me the importance of research-practice partnerships and rigorous methodology.

- Stephanie, you have been so supportive of me. Thank you for always being in my corner and helping me deepen my research knowledge of Black families. Thank you for being a model of work-life balance and always availing yourself to help me. Camille, thank you for your willingness to serve on my committee. I knew you would push me intellectually, encourage me to examine myself in the research process, and hold my critical scholarship to a high standard. I appreciate your insights and for helping me to better understand the craft of research.

- To my family, thank you. It was you who kept me going in the darkest moments and who rejoiced with me on the best days. Mom, you are strength personified. I am eternally grateful for your constant love and support from Day One. Dad, thank you for showing me that hard work pays off and for encouraging me to do the best I can in all that I do. Regardless of what each of you had on your plate, you always made sure I had what I needed and never complained about your sacrifices. Des, you are the best little brother anyone could ask for! You are the most selfless person I know and you constantly push me to be a better me. Thank you for showing me how to be comfortable in my own skin and how to be unapologetically myself. Know that I am always here for you. Grandma, thank you for your honesty and your ability to keep

me humble. I am so appreciative of your presence, especially in the final months of completing my degree when you sat with me while wrote and made edits. I admire your selflessness. Pop Pop, although you were not here to see me finish, your hard work and dedication inspired me to press on. Mom Mom, thank you for your love and joy. Andre, thank you for being you. Words cannot express how thankful I am for your love and unwavering support. You are a gift from God and I am very blessed to have you in my life.

- To my soul sisters—Carina, Frances, Najja, and Casta—thank you for letting me be myself. You all inspire me and have poured into me countless times. Thank you for the jam sessions, the prayers, the words of encouragement, and for your friendship.

- I would not be here if it were not for the guidance of my Spelman mentors and colleagues. They laid the foundation for my time at Michigan and supported me into the scholar I am today. Ms. Cherry Jackson, I am so grateful for your selflessness. Thank you for being the best supervisor ever and for taking me under your wing. Nayena (Dr. A. Nayena Blankson), thank you for believing in me! I have you to thank for even considering a Ph.D. I appreciate you helping me navigate the graduate school process. You are a great colleague and friend. Dolores (Dr. Dolores Bradley Brennan), thank you for being a great example of how to do this work with grace, academic excellence, and humility. I am so happy to have you as a colleague and mentor. To Drs. Karen Brakke, Sandra Patterson, Angela Farris Watkins, and the late Dr. B. LaConyea Butler, thank you for sharing your wisdom and encouraging me during Spelman journey and beyond. To the future Drs. April Brown, Morgan Jerald, Maria Jones, and Kelsei Thomas, thank you for encouraging me to strive for academic excellence. You may not have known it, but your passion and inspired me daily. To the MBRS-RISE program (especially Ms. Byrd and Ms. Philpot), thank you for nurturing my academic curiosity.

- To the faculty and staff at the University of Michigan and beyond, thank you for your support. Drs. Pamela Davis-Kean, Robert Jagers, Jacqueline Mattis, Henry Meares, Frederick Morrison, thank you for investing in me and supporting me over the years. To Byron Coleman, Joanna Elliot, Janie Knieper, Katie Schmitt, and Tina Sanford, thank you for your administrative support. A special thanks to Raymond McDaniel for helping me to build confidence in my writing and grow as a scholar. Nina, I am eternally grateful for your insights. I am certain my dissertation and my last year would not have come together so beautifully without your support.

- To my friends and graduate school colleagues, you all are so brilliant and inspiring. To Drs. Tabitha Bentley, Natalie Davis, HyeJin Hwang, Tamarie Macon, Faheemah Mustafaa, Esohe Osai, Latisha Ross, Kelly Slay, and the future Drs. Casta Guillaume, Corine Jackman, Omari Keeles, Katie Revelle, Crystal Wise, thank you for your wisdom. To the fellow lab members in the Equity in Early Learning lab, fellow students in the Black Student Psychological Association (BSPA), fellow Duke advisees, and members of my intramural teams, thank you for your support.

- I am grateful to the Combined Program in Education and Psychology, Center for Political Studies, Ford Foundation, Dr. Joseph R. Morris, Rackham Graduate School, Ford Foundation, and the Sarri family for providing financial support for my dissertation research.

- To the families and school districts that welcomed me into their lives, thank you. I could not have completed this work without each of you. To Keir and Deata McLemore, you are truly gems. Your conviction and support of children and families are so inspiring. Trische' Duckworth, Genera Fields, Julia Lindsey, and Jon Williams, thank you for your research assistance. Trische', I am so thankful for your friendship and support during my dissertation process.

- To all who sacrificed to be physically present during my oral dissertation defense: Edna Roane, Sylvia Rochester, Destry Rochester Jr., Andre Thompson, Donna Jones, Carlisle Rhodes, and (in alphabetical order) Mrs. Calixte Guillaume, Casta Guillaume, Maggie Hanna, HyeJin Hwang, Corine Jackman, Omari Keeles, Amanda Ketner, Julia Lindsey, Aixa Marchand, Lillie Moffett, Katie Revelle, Paola Rosada, Anna Shapiro, and Crystal Wise, thank you.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

ABSTRACT

Family engagement is an influential contributor to children's success in school. Both children and families benefit, as children whose families are actively involved in their learning tend to have higher test scores and fewer reports of negative behavior; and families can better understand their child's skills and abilities and have more positive attitudes toward their child's school (Grant & Ray, 2016). Although schools seek to involve all families through a wide variety of school-based activities, many families, particularly families of color, are often not reached through traditional means of family engagement. When families of color and families from other marginalized groups (e.g., low-socioeconomic-status communities) are included in studies, there is some evidence to suggest that initiatives are less effective for them. Developing more culturally responsive, family-centered learning initiatives may better address families' needs in ways that foster positive academic and social development of school-aged children.

This dissertation includes two stand-alone manuscripts, both related to the design, implementation, and evaluation of culturally responsive family engagement initiatives targeting families from racially/ethnically minoritized backgrounds. The first manuscript reports on the impact of a family workshop series on African American families' home literacy engagement, caregivers' self-efficacy in providing literacy support, and children's literacy gains. The workshop sessions included research-supported literacy strategies in the context of collaborative activities that built on families' existing literacy engagement, background knowledge, and cultural experiences. I randomly assigned 90

families (94 children) to experimental and control groups. Results indicated a positive impact of the workshop series on caregivers' self-efficacy in providing their children with reading and writing support (d = 0.37), although these findings were sensitive to data analytic decisions. In non-experimental dosage analyses, I found a positive association between attending three or more sessions and children's academic reading attitudes (d = 0.38) and their self-efficacy in reading and writing (d = 0.69). There were no series impacts, however, on children's literacy achievement or caregivers' reported home literacy engagement.

In the second study in this dissertation, I conducted an interpretive synthesis of family engagement initiatives developed for families of kindergarten through third-grade children from racially/ethnically minoritized backgrounds. Among peer-reviewed journal articles published between 1995 and 2017 about programs that aimed to attend to families' cultural background (N = 21), I examined the ways in which initiatives aligned with one or more parts of Gay's (2010) framework for culturally responsive teaching. I also synthesized the findings of a subset of the articles (N = 11) that evaluated the described programs to determine their overall effectiveness. Results suggest that although most initiatives affirmed families' cultural heritages as valid and sought to bridge children's home and school experiences across program dimensions, initiatives were quite varied in terms of the breadth of and depth in which families' cultures were represented across program features, such as the program delivery and content.

This dissertation addresses two common critiques of culturally responsive approaches to teaching and learning: 1) a lack of empirical evidence that demonstrates the value-added of such programs for children's academic and social development; and 2)

the often-siloed nature of educators' application of theories of culture and learning, such as culturally responsive teaching, to practice. It contributes to the field by describing alternative and, in some cases, successful models of engagement for educators to consider when supporting children and families from specific cultural groups.

References

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). New York, NY: Teachers College Press.

Grant, K. B., & Ray, J. A. (2016). Family engagement and the responsive educator. In K. B. Grant, & J. A. Ray (Eds.), *Home, school, and community collaboration: Culturally responsive family engagement* (3rd ed., pp. 3–30). Los Angeles, CA: Sage.

INTRODUCTION

Identifying ways to improve children's learning has been a major priority for researchers and educators nationwide. Many schools and districts capitalize on the support that families already provide to children to increase their academic and social development by providing multiple ways for families to be involved in schools, which can lead to benefits for children and families (Grant & Ray, 2016). For example, children whose families are more involved in their children's school learning are more likely to adjust well to school, have better grades and social skills, and go on to postsecondary education (Fantuzzo, McWayne, Perry, & Childs, 2004; Henderson & Mapp, 2002; Jeynes, 2003, 2005). These benefits often spill over to families too: parents who are more involved in their children's schooling have more positive attitudes toward their child's school and are better equipped to work collaboratively with their children (Diffley, 2004; Grant & Ray, 2016; Hill & Taylor, 2004).

Although family engagement with schools has a positive influence on children's school success, there are several barriers that can limit families' level of engagement. Common barriers include scheduling issues (e.g., programs are offered when parents are working), past negative school experiences, and a lack of confidence in parents' own ability to help their child succeed in school (Henderson & Mapp, 2002). These barriers tend to disproportionately affect families deemed as "hard-to-reach," which include families of low socioeconomic status, families with limited levels of formal education,

families of color, families whose first language is not English, and families who are recent immigrants (Mapp & Hong, 2010).

When hard-to-reach families do participate in school-based educational events, there is some evidence to suggest that their needs are not consistently met (Manz, Hughes, Barnabas, Bracaliello, & Ginsburg-Block, 2010). Programs that serve families of color and families from under-resourced communities report lower attendance rates and higher rates of attrition as compared to programs that have samples of White, middle-class families (e.g., Duppong-Hurley, Hoffman, Barnes, & Oats, 2015). Mapp and Hong (2010) argue that it is not families who should be classified as hard-to-reach, but schools themselves, whose current methods of engagement are likely disconnected from families' day-to-day needs. As such, educators should consider alternative approaches to engage these families in ways that honor families' contributions to their children's' learning, which are often overlooked in more traditional school engagement efforts (Cooper, 2009; Mapp, 2003).

Overview of the Dissertation

This dissertation draws on theories of cultural responsiveness and the family engagement literature to investigate the role of culture in education programs designed to support racially/ethnically minoritized children and families. I developed and tested the impact of a series of literacy workshops designed for African American families. In addition, to understand how others have approached culturally responsive programming within the family engagement literature, I synthesized research on culturally responsive family engagement published in peer-reviewed journals. Findings from these studies

provide empirical support for incorporating families' strengths, cultural knowledge, and experiences within the design and implementation of engagement initiatives in schools.

I report the research findings from the dissertation using an alternative format that includes two journal-length manuscripts ready to be submitted for review by research journals. A benefit of the alternative format dissertation is that study findings can more quickly reach a broad audience, such as researchers and practitioners (Duke & Beck, 1999). Both manuscripts have been written for researchers. Each study includes an abstract; provides a study rationale and reviews previous research; describes the methods used; presents findings; and discusses implications, limitations, and the significance of the study.

In the first study, I tested the impact of a series of culturally responsive family literacy workshops on first- and second-grade families' literacy engagement, attitudes, and skills. The study addressed the following two research questions: First, does a socially and culturally situated workshop series for low-income African American families have positive impacts on families' end-of-program reports of home literacy engagement, adult caregivers' self-efficacy in providing reading and writing support, and children's end-of-program literacy knowledge, skills, and attitudes? Second, do families who attend more workshop sessions have higher end-of-program reports of literacy engagement, beliefs, knowledge, skills, and attitudes? The second research question addresses the non-causal association between session dosage and families' gains.

The study involved a sample of 90 African American families (94 first- and second-grade children) from two mid-sized school districts in the Midwestern United States. I used a randomized controlled trial design to randomly assign families to a

workshop condition, in which they were invited to attend the literacy workshops, or a control condition. At each session, families learned, engaged in, and received feedback on their use of research-informed literacy strategies addressing six literacy constructs. These strategies were embedded within literacy activities aligned with the social (e.g., writing recipes) *and* cultural (e.g., texts with African American themes) context of African American homes.

Results of ordinary least squares regression models indicated that caregivers who attended the workshop sessions had more self-efficacy in their ability to provide their children with literacy support, although robustness checks suggested that this finding was sensitive to data analytic decisions. Given the low rate of take-up (only 46% of families assigned to the workshop group attended one or more sessions), I also analyzed the influence of attending more sessions on families' gains. Dosage analyses revealed that children who attended more workshop sessions had more positive attitudes toward academic reading and more positive reading and writing self-efficacy. However, there was no association between workshop dosage and families' home literacy engagement or on children's literacy knowledge and skills. Findings of this study suggest that honoring and extending families' existing knowledge may influence their beliefs in their own abilities and may improve children's literacy engagement. In addition, findings suggest the need for additional strategies to increase participation and sustain families' participation in the workshop series as well as a possible need for adaptations of workshop series itself to expand its impact.

In the second study, I conducted a critical integrative synthesis of kindergarten to third grade family engagement initiatives that aim to be culturally responsive and were

designed to improve young children's academic and social skills. The purpose of the review was to describe the role of theory in program development; synthesize the ways in which programs addressed the six tenets of culturally responsive teaching (Gay, 2010); and summarize the empirical support for culturally responsive engagement programs. I systematically searched electronic databases, hand searched review articles regarding culturally responsive approaches to family engagement, and examined the work of expert family engagement scholars to identify 21 studies (15 unique programs) published in peer-reviewed journals for inclusion in the study.

Results from the second study revealed that about half of the programs (N = 7) were guided by theory, some of which related explicitly to culturally responsiveness. In addition, although all programs attended to families' cultural heritage to some degree, only a handful reflected consideration of families' cultural knowledge, strengths, and experiences consistently across multiple aspects of the program design and implementation phases. Many programs provided some considerations of cultural responsiveness, such as using racially/ethnically-matched facilitators, translating program materials and content, and holding sessions in locations familiar to participating families. The few studies that demonstrated an understanding of families' cultural values throughout many or every aspect of the program (e.g., recruiting families, training staff, facilitating discussions) tended to move beyond involving families to empowering families to be active participants in their own learning, increase their school- and community-based sources of social support, and advocate for their children. This study highlights several methods used to design culturally responsive family initiatives and

summarizes empirical support for considering aspects of racially/ethnically minoritized families' lived experiences within engagement efforts.

In summary, the dissertation studies have implications for researchers and practitioners interested in developing approaches to family engagement in schools that can improve children's academic and social development. Programs that integrate deep considerations for racially/ethnically minoritized families' cultural experiences tend to provide benefits for families that extend beyond academic engagement with their children. The studies also contribute to the existing—yet limited—research base on the praxis of culturally responsive family engagement.

References

Cooper, C. W. (2009). Parent involvement, African American mothers, and the politics of educational care. *Equity & Excellence in Education*, *42*(4), 379–394. doi:10.1080/10665680903228389

Diffley, D. (2004). *Teachers and families working together*. Boston, MA: Pearson.

Duke, N. K., & Beck, S. W. (1999). Education should consider alternative formats for the dissertation. *Educational Researcher*, *28*(3), 31–36. doi:10.2307/1177255

Duppong-Hurley, K., Hoffman, S., Barnes, B., & Oats, R. (2015). Perspective on engagement barriers and alternative delivery formats from non-completers of a community-run parenting program. *Journal of Child and Family Studies*, *25*, 545–552. doi:10.1007/s10826-015-0253-0

Fantuzzo, J., McWayne, C., Perry, M. A., & Childs, S. (2004). Multiple dimensions of family involvement and their relations to behavioral and learning competencies for urban, low-income children. *School Psychology Review*, *33*(4), 467–480.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). New York, NY: Teachers College Press.

Grant, K. B., & Ray, J. A. (2016). Family engagement and the responsive educator. In K. B. Grant, & J. A. Ray (Eds.), *Home, school, and community collaboration: Culturally responsive family engagement* (3rd ed., pp. 3–30). Los Angeles, CA: Sage.

Henderson, A., & Mapp, K. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement.* Austin, TX: National Center for Family and Community Connections with Schools.

Hill, N. E., & Taylor, L. C. (2004). Parental school involvement and children's academic achievement: Pragmatics and issues. *Current Directions in Psychological Science*, *13*(4), 161–164. doi:10.1111/j.0963-7214.2004.00298.x

Jeynes, W. H. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education*, *40*(3), 237–269. doi:10.1177/0042085905274540

Jeynes, W. H. (2003). A meta-analysis: The effects of parental involvement on minority children's academic achievement. *Education and Urban Society*, *35*(2), 202–218. doi:10.1177/0013124502239392

Manz, P. H., Hughes, C., Barnabas, E., Bracaliello, C., & Ginsburg-Block, M. (2010). A descriptive review and meta-analysis of family-based emergent literacy

interventions: To what extent is the research applicable to low-income, ethnic-minority or linguistically-diverse young children? *Early Childhood Research Quarterly, 25*(4), 409–431. doi:10.1016/j.ecresq.2010.03.002

Mapp, K. L. (2003). Having their say: Parents describe why and how they are engaged in their children's learning. *School Community Journal*, *13*(1), 35–64.

Mapp, K. L. & Hong, S. (2010). Debunking the myth of the hard-to-reach parent. In S. L. Christenson, & A. L. Reschly (Eds.), *Handbook of school-family partnerships* (pp. 345–361), New York, NY: Routledge.

CHAPTER 1: TESTING THE IMPACT OF A SERIES OF SOCIALLY AND CULTURALLY SITUATED LITERACY WORKSHOPS FOR AFRICAN AMERICAN FAMILIES

Abstract

This study investigated the impact of a series of socially and culturally situated literacy workshops on African American caregivers' home literacy engagement and self-efficacy in supporting their children in literacy, and on African American first- and second-graders' literacy knowledge, attitudes, and skills. Using a randomized controlled trial (RCT) design, 90 families and 94 children were randomly assigned to and offered to participate in the five monthly two-hour workshops during the academic year. The workshops embedded literacy learning within authentic activities familiar to families and capitalized on African American families' knowledge and skills to support literacy development. Caregivers learned how to incorporate a range of research-informed literacy strategies that address six literacy constructs into everyday literacy practices. Caregivers provided information about their home literacy engagement and a range of literacy measures were administered to children in the workshop and control groups prior to the workshops and at their conclusion. Results indicated a significant main impact of the workshop series on caregivers' self-efficacy in providing reading and writing support, although these effects should be interpreted with caution as they were sensitive to data analytic decisions. In addition, in non-experimental analyses, attending three or more sessions was associated with more positive academic reading attitudes and higher self-efficacy in reading and writing for children as compared to their peers who attended only

one or two sessions. The study provides empirical support for family interventions that situate literacy learning in a social and cultural context to improve children's literacy development.

Testing the Impact of a Series of Socially and Culturally Situated Literacy Workshops for African American Families

Literacy environments and interactions families maintain at home influence the language and literacy knowledge and skills children bring to school with them. This early knowledge and skill development serves as the foundation of literacy development and is an important predictor of later academic success (Dickinson, McCabe, & Anastasopoulos, 2003; Duncan et al., 2007; Kendeou, van den Broek, White, & Lynch, 2009). In addition to engagement in literacy activities, parents often socialize, or pass their own expectations, attitudes, and beliefs about literacy learning to their children at home; which can shape the ways in which children think about the role that literacy plays in their own lives (Taylor, Clayton, & Rowley, 2004). These family socialization practices vary for children from different social and racial backgrounds, which can lead to differences in the ways families engage with their children around literacy (Heath, 1983; Taylor & Dorsey-Gaines, 1988).

Scholars have attempted to provide additional support for families through family literacy initiatives, offering suggestions for specific ways caregivers can engage with their children at home that complement their classroom literacy learning. A long-standing criticism of family literacy programs is that they privilege school-valued literacies, which seldom build on the knowledge, skills, and practices of families from marginalized groups (Anderson, Anderson, Friedrich, & Kim, 2010; Auerbach, 1989, 1995; Reyes & Torres, 2007). While some family interventions attempt to situate literacy in a social context for families in ways that reflect their backgrounds and are congruent with how they engage in literacy within their everyday lives (e.g., Purcell-Gates, Anderson, Gagne,

Jang, Lenters, & McTavish, 2012; Rodriquez-Brown, 2004; Rolla San Francisco, Arias, Villers, & Snow, 2006), few have tested the impact of such programs with rigorous experimental methods, making the effectiveness of these programs less known. The present study examines the effectiveness of a series of socially and culturally situated literacy workshop sessions that embed research-informed strategies within short activities to support 1) African American families' home literacy engagement, 2) caregivers' self-efficacy in providing literacy help, and 3) first- and second-grade children's literacy growth.

How Effective are Family Literacy Interventions?

Many programs have focused on enhancing home or family literacy (e.g., Burgess, Hecht, & Lonigan, 2002; Snow, Burns, & Griffin, 1998). These initiatives can be categorized as those that take an intergenerational approach, in which caregivers and children are both taught strategies to support their individual and collective literacy development, and those that involve adult caregivers and sometimes their children in activities to support their children's school-based literacy learning (Morrow, Paratore, Gaber, Harrison, & Tracey, 1993). Irrespective of the program type, training, or teaching, sessions can involve 1) caregivers attending sessions with their children, 2) caregivers attending sessions alone, or 3) caregivers attending part of a session alone and later practicing the strategies with their children. The most often studied family literacy programs are those in which the aim is to develop children's literacy knowledge and skills and not necessarily that of adult caregivers.

Unfortunately, as several scholars have pointed out, efforts to affect the home literacy environments have not been consistently successful. Meta-analyses using strict

inclusion criteria (e.g., studies using experimental or quasi-experimental design, studies that reported statistics permitting calculation of effect sizes) reported studies (N = 16) of such efforts targeting children in during the early elementary years found that most interventions did not show statistically significant effects on reading acquisition (Sénéchal &Young, 2008); and the effect of family literacy interventions (N = 30) on children's comprehension vs. code-related skills is quite small (d = 0.18; van Steensel, McElvany, Kurvers, & Herppich, 2011). There is some evidence to suggest, however, even these low effects may not reflect the impact of family literacy interventions for some families.

A descriptive review (N = 31) and meta-analysis of a subset of studies (N = 14) examined the effects of family-based emergent literacy interventions for preschoolers by racial/ethnic and socioeconomic background (Manz, Hughes, Barnabas, Bracaliello, & Ginsburg-Block, 2010). They found that although some interventions included samples of families from minority backgrounds, interventions with 50% or more families from ethnic-minority backgrounds had smaller effects (d = .16) for children than those with samples of children from primarily Caucasian backgrounds (d = .64 to 1.21; Manz et al., 2010). Although the review focused on the preschool level, background characteristics are likely equally salient for families of children in the lower elementary grades—a topic the focal intervention in this study addresses.

Although findings from Manz and colleagues (2010) provide insights about how family literacy programs influence families from certain backgrounds differently, the mechanisms that explain *why* differences exist in effect sizes across families remain unclear given that study differences beyond families' background (e.g., rates of

attendance, subgroup analyses within studies for each racially/ethnically minoritized group) were not included in the meta-analysis. When examining the attrition and attendance of families of color in family literacy interventions, the factors that influence potential differences in effects remain unclear. Most family literacy interventions that include large samples of African American and Latino families do not investigate the differential program effects based on family racial/ethnic background. In a recent review of implementation quality in 46 family literacy programs for children through second grade, Rie and colleagues (2017) found large ranges of attrition and attendance across programs (attrition range = 1% to 60%; attendance range = 40% to 83%). In other words, attrition and attendance among family literacy programs can vary substantially from one program to the next. Interestingly, the program with the most attrition (60%) included a large sample of low-income families, who were significantly more likely to be African American and more likely to be younger and less educated (Wagner et al., 2003 as cited by Rie et al., 2017).

A possible explanation for the finding that family literacy programs are less effective for low-income and racially/ethnically minoritized families may be that intervention practices do not align with families' cultural knowledge, values, experiences, and goals (Hammer, Nimmo, Cohen, Draheim, & Johnson, 2005; Janes & Kermani, 2001). This finding is consistent with a long-standing critique of family literacy programs (e.g., Auerbach, 1989, 1995; Reyes & Torres, 2007; Tett & St. Clair, 1997), which argues that often school-valued literacies—rather than home languages and literacy practices—are imposed on families, particularly families from marginalized communities. These school-valued literacies often reflect a mainstream cultural literacy experience that

resembles the home literacy experiences of White, middle-class children and families (Gutiérrez, Morales, & Martinez, 2009). More contemporary perspectives of family literacy programs use a literacy-as-a-social-and-cultural-practice frame (Heath, 1983) to highlight differences in how literacy is learned and taught across other sociocultural contexts (Anderson et al., 2010; Compton-Lilly, Rogers, & Lewis, 2012; Manz et al., 2010).

One approach that may better align family literacy programs with low-income and racially/ethnically minoritized families is to embed literacy learning within existing family routines and traditions. Approaching literacy from a family-based perspective in which literacy learning is situated within everyday social activities could increase the likelihood that they will continue to engage in program activities (Bennett-Armistead, Duke, & Moses, 2014; Hiatt-Michael, 2006). Another approach to family literacy that could better support marginalized families is to incorporate racially/ethnically minoritized families' cultural knowledge, values, beliefs, and experiences. There is some evidence to suggest that specific culture-based values and belief systems inform children of color's development (Gutiérrez & Rogoff, 2003; Hilberg & Tharp, 2002; Tyler et al., 2008), which may have implications for their home literacy learning. For example, collectivism, or the importance of striving for achievements that benefit one's family or community, is a common value in many Latino and African American communities (Oyserman, Coon, & Kemmelmeier, 2002; Tyler et al., 2008). In addition, culturally situating literacy learning, or building on families' funds of knowledge, or "historically accumulated and culturally developed bodies of knowledge and skills essential for household or individual functioning and well-being" (p. 133; Moll, Amanti, Neff, &

Gonzalez, 1992), may empower families while introducing academic skills within a familiar context.

The notion that family literacy programs should acknowledge the sociocultural context of literacy development in homes is not new. In fact, many family literacy programs have thoughtfully attended to family social life and families' cultural backgrounds, such as immigration status, language ability, and ethnicity in the last few decades (e.g., Gadsden, 1995; Huennekens & Xu, 2010; Leyva & Skorb, 2017; Meoli, 2001; Purcell-Gates et al., 2012; Rodriquez-Brown, 2004; Spielman 2001). According to Gadsden (2004), a reoccurring concern in the field, however, is the "[limited] empirical evidence on the efficacy of [culturally focused] approaches" (p. 415; Gadsden, 2004) and the few investigations that test the impact of such approaches on children and families' literacy knowledge, skills, and engagement (Faircloth & Thompson, 2012; Manz et al., 2010). Since Gadsden's (2004) initial critique, there have been attempts to test the impact of socially and culturally focused family literacy interventions through studies designed to afford a strong causal inference.

Culturally Situated Family Literacy Interventions

Although some family literacy interventions include a significant number of families from racially/ethnically minoritized backgrounds (DeBaryshe & Gorecki, 2007; Morrow, 1992; St. Clair & Jackson, 2006; St. Clair, Jackson, & Zweiback, 2012), few have explicitly incorporated families' cultural backgrounds. One way that scholars often address culture is by considering families' language needs by providing on-site translators during the program facilitation (Reutzel, Fawson, & Smith, 2005), by providing materials in English and another language for bilingual families (Kim &

Guryan, 2010), or by implementing a language adaptation of an existing program (e.g., Nievar, Jacobson, Chen, Johnson, & Dier, 2011; Rolla San Francisco et al., 2006). Although these linguistic modifications allow families to receive and provide literacy support in a language in which they are most comfortable, they are seldom accompanied by program changes that capitalize on families' existing knowledge, skills, and experiences to foster literacy development (Janes & Kermani, 2001; Sidhu, Gale, Gill, Marshall, & Jolly, 2015).

Family literacy interventions that attend to families' cultural background often do so in the context of shared book reading with families of young children. A year-long program for a small sample of UK bilingual Pakistani families attended to families' culture by using bilingual books and incorporating children's experiences with mosques in the sessions (Hirst, Hannon, & Nutbrown, 2010). Children in the experimental group reported greater knowledge of environmental print and letter recognition than control-group children. Hammer and Sawyer (2016) developed culturally-informed books based on Latina Head Start mothers' parenting beliefs and "aspects of their culture . . . they wanted their children to learn" (p. 63; e.g., respecting your elders, enjoying festivals and gatherings that occurred in their respective homelands) gleaned from semi-structured interviews. Although the home visiting program had no effect on standardized assessments of expressive and receptive vocabulary, children randomly assigned to the intervention group used a broader range of words in a narrative task (d = .27) and had longer mean length of utterances during a book reading task (d = .79) than their control-group peers. O'Brien and colleagues (2014) utilized children's school books and informational pamphlets about families' homelands and cultural groups as sites for

literacy engagement and found significant receptive vocabulary gains between treatment- and control-group children with low initial vocabulary skills, and significant gains in phonological awareness between treatment- and control-group children at all levels of initial vocabulary skills (low, medium, and high).

Taken together, these socially and culturally situated literacy interventions used families' own experiences and strengths as the foundation for literacy learning. They included samples of families from different socioeconomic, linguistic, and cultural backgrounds and tailored aspects of the program (i.e., materials, themes, activities) to families' existing literacy engagement. Although these interventions demonstrate promise, no programs reported in the literature have been designed to support literacy learning specifically for African American children and families. Currently, African Americans have the lowest performance in reading as compared to all other racially/ethnically minoritized groups on NAEP outcomes at 4th grade (The Education Trust, 2015). Developing a strengths-based family literacy program that connects school valued literacies and children's home literacy experiences may support African American children's literacy development, particularly those from low-income communities.

The African American Family Literacy Project

The African American Family Literacy Project (AAFLP) is a series of socially and culturally situated literacy workshops I designed to provide African American families of first- and second-grade children with research-informed strategies to support their children's literacy development. I chose these grades because a workshop series during this time may encourage families to provide additional literacy support prior to standardized testing, which often takes place in third grade. The workshop series

provided families with strategies to support the development of six key literacy areas and skills: letter-sound knowledge, word reading, vocabulary, comprehension, writing, and digital and print reading volume. These strategies included explicitly teaching letter-sound relationships to support their child's letter-sound knowledge; engaging in cueing and prompting (e.g., slide through each sound of a word, re-read) to facilitate word reading; explicitly teaching context clues to strengthen vocabulary development; scaffolding the use of comprehension strategies (e.g., questioning, visualizing) to help children learn to use them independently; creating opportunities for writing for an authentic audience at home; and increasing the amount of reading their children do with print material and digital media. I sequenced these literacy areas across the workshop sessions developmentally (e.g., letter-sound knowledge activity in session one focused on explicit teaching of short vowels; session two focused on consonant-vowel-consonant-e words).

I targeted these literacy areas because: a) state standards acknowledge these areas as developmentally appropriate literacy skills to target for first- and second-grade children (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010); and b) meta-analyses and longitudinal studies identify these skills as predictors of later reading and writing achievement (Mol & Bus, 2011; Muter, Hulme, Snowling, & Stevenson, 2004; Sparks, Patton & Murdoch, 2014). See Appendix A for a complete list of literacy constructs and strategies.

Rationale for Attending to Sociocultural Context in the AAFLP

The workshop series took a sociocultural approach to fostering literacy learning in ways that affirmed families' cultural heritage and built on their existing literacy practices.

Theoretically, the sociocultural context of African American families is multifaceted and is directly and indirectly influenced by a range of external factors (e.g., historical, social, economic) that shape children's development (Bronfenbrenner & Morris, 1998). It is important to note that this perspective is equally valid for families from other racially/ethnically minoritized backgrounds. However, these factors may differentiate based on individual characteristics that affect the developmental competencies differently across racially/ethnically minoritized groups (Garcia Coll et al., 1996; Scott, Brown, Jean-Baptiste, & Barbarin, 2012). For example, historically, literacy for African Americans in the United States was used as a tool to oppress, to fight oppression, to support identity development, and gain freedom (Harris, 1992; Tatum & Muhammad, 2012). As a result, many families in the African American community place a high value on developing strong reading and writing skills at an early age.

African American children's development appears to be influenced by shared cultural experiences (e.g., Garcia Coll et al., 1996; Tyler et al., 2008). The Triple Quandary framework posits that African Americans negotiate "three distinct yet interrelated psychological realms of lived experience" (p. 293; Tyler, Boykin, Boelter, & Dillhunt, 2005): a mainstream realm that includes cultural themes rooted in European ethos (e.g., individualism); a negotiation of the minority experience in which political and social injustices are a part of everyday life (e.g., racism, discrimination); and an Afro-cultural realm characterized by cultural themes related to a West African worldview and related experiences (Boykin, 1983; Boykin & Allen, 2003; Boykin, Tyler, & Miller, 2005). A body of literature has examined the presence of and preference for three home cultural values in low-income African American households and their relationship to

African American elementary school children's literacy learning: (1) communalism, importance of familial/community interconnectedness, and interdependence; (2) verve, high levels of stimulation, and simultaneous engagement in several activities; and (3) movement, orientation toward physical movement, music, and rhythm (Tyler et al., 2008).

Empirically, a handful of studies have found that African American families' home cultural socialization practices are related to child learning. Some evidence suggests that parents of African American elementary school-aged children socialize their children around communalism (e.g., sharing, working together, helping others) significantly more than mainstream socialization themes, namely individualism and competition (Tyler, Boykin, Boelter, & Dillhunt, 2005). In addition, some African American children prefer communalistic learning environments (Tyler, Boykin, Miller, & Hurley, 2006). In relation to literacy outcomes, there is some evidence that African American children do better on spelling, vocabulary, math, and picture sequencing tasks when completed in contexts with high stimulation (i.e., random string of each tasks), as compared to low stimulation (i.e., tasks grouped by type; Bailey & Boykin, 2001); and have better listening comprehension when stories with high movement themes are read in high movement expressiveness contexts (Boykin & Cunningham, 2001), or when stories have a mix of African American sociocultural attributes (i.e., use of proverbial statements and rhyming/rhythm when communicating, games and play activities with movement and human interaction, flexible social environment with spontaneous activities, emphasis on respect for eldership and family/community adult role models; Bell & Clark, 1998).

Taken together, these sociocultural values and themes are important to consider in developing literacy workshops for African American families.

I structured the AAFLP workshops and session activities with the home cultural values of communalism, verve, and movement in mind. I also attended to the local community. The five workshop themes reflected aspects of African American families' lived experiences and included the following: 1) the history and importance of literacy in the African American community, 2) using our home to leverage literacy learning, 3) literacy and the things we like to do, 4) learning about our community through literacy, and 5) literacy in our everyday lives. The workshop series was open to children's family members (e.g., siblings, grandparents, aunts) including their parents. Each workshop session began with a meal, which allowed families to talk amongst each other and other attending families.

I modeled the structure of the sessions after a series of family literacy workshops designed by Roberts, Jordan, and Duke (2014). After the family meal, study children went to another room for supervised play time for approximately 20 minutes. Caregivers were verbally introduced to the six focal strategies (one for each literacy construct) as they followed along on a written handout (see Appendix B for an example). Then, I walked the caregivers through each activity and stopped to highlight specific instances in which the target strategy could be used. After the walkthrough, there was time for discussion and for parents to ask questions. Before the children came back into the room, caregivers were encouraged to practice the activities on their own using the target strategies and receive feedback as needed from the study author and research assistants.

I reserved most of the session time for caregivers and children to collaboratively engage in short 10-minute shared literacy activities, in which families rotated through the activities in the order of their choosing. I embedded research-supported literacy strategies within authentic literacy activities (e.g., reading a poem by an African American poet about hair braiding, reading/singing song lyrics, writing to family/community members) that incorporated aspects of families' cultural knowledge, funds of knowledge, and experiences. Starting with the second session, caregivers had the opportunity at the beginning of each session to reflect on their use of the strategies at home and ask questions.

The AAFLP also acknowledged that the literacy development of African American children is informed by aspects of familial context in addition to a broader adaptive culture. Many families, including African American families, engage in common family routines (e.g., mealtime conversations) and tend to read and write for authentic purposes (e.g., Heath, 1983; Jordan et al., 2000, Purcell-Gates, 1996; Purcell-Gates et al., 2012). There is also some evidence to suggest that intervention programs that incorporate literacy activities that are less common in schools, such as those that support high-quality language interactions specifically during mealtime for kindergarteners (Jordan, Snow, & Porche, 2000) or that engage preschool families designed with specific areas of the home in mind (e.g., *Literacy in the Kitchen*; Roberts, Duke, & Rochester, 2015), lead to gains in children's expressive language and listening comprehension. Some African American families in particular use orally transmitted narratives and contextualized language (Champion, Hyter, McCabe, & Bland-Stewart, 2003; Craig & Washington, 2004; Thompson, Craig, & Washington, 2004) and often engage in both

traditional (e.g., shared book reading, independent reading) and non-traditional (e.g., playing games, scripture reading, singing songs) literacy practices in their home communities (Daniels, 2012; Purcell-Gates, 1996; Rochester, 2017; Scott et al., 2012). As a result, the workshop activities included the use of books (e.g., families discussed a story about an urban-residing family that experiences a blackout), authentic texts (e.g., newspapers, brochures written about their specific community), and game-like activities (e.g., sorting household items into bins based on certain letter-sound relationships) to support literacy development.

Although attending to African American families' cultural knowledge and experiences may bolster their use of research-informed literacy practices, it is equally important to address common practices that may undermine children's literacy learning. For example, many African American families have rich literacy interactions during book reading, such as adhering to the text, encouraging children to be the primary storytellers, or using a combination of caregiver reading and child storytelling (Hammer, Nimmo, Cohen, Draheim, Johnson, 2005; Heath, 1983). Research suggests, however, that some African American families seldom engage in questioning, particularly at higher levels (Hammer et al., 2000). There is some evidence to suggest that answering higher-order questions (e.g., comparing and contrasting actions by characters) when reading is related to improvements in reading comprehension (Bitter, O'Day, Gubbins, & Socias, 2009; Taylor, Pearson, Peterson, & Rodriguez, 2003). The AAFLP encouraged families to ask higher-order questions during shared reading by providing templates for asking questions that required children to draw inferences from the text (i.e., What do you think

_____?) and connect aspects of the texts to other things they read and their previous experiences (i.e., What does _____ remind you of and why?).

Purpose and Research Questions

The literacy experiences of families traditionally marginalized by race/ethnicity and socioeconomic status are often omitted from programs designed to improve literacy skills for young children. The purpose of this study was to test the impact of a series of socially and culturally situated workshops for low-income African American first- and second-grade children and their families as a model for other culturally responsive family literacy initiatives. The study sought to address the following research questions:

1. Does the AAFLP have positive impacts on a) African American families' end-of-series reports of home literacy engagement, b) adult caregivers' self-efficacy in supporting their children in literacy, and c) African American children's end-of-series literacy knowledge, skills, and attitudes?
2. Do families who attend more workshop sessions have a) higher end-of-series reports of home literacy engagement, b) adult caregivers with higher self-efficacy in supporting their children in literacy, and c) children with higher end-of series literacy knowledge, skills, and attitudes?

Method

Research Design

The present study used an experimental design with block random assignment to determine the impact of a series of socially and culturally situated literacy workshops. Children and families were randomly assigned to one of two conditions: a workshop condition, in which they were invited to participate in the workshop series during the study period; or a control condition, in which they received books. A randomized

controlled trial (RCT) allows for exogenous assignment to conditions, and eliminates alternative explanations between the cause (i.e., literacy workshop series) and the hypothesized effect (i.e., improvement in literacy outcomes; Murnane & Willett, 2011). In other words, rather than attributing differences in home literacy engagement—for example—to sources of variation outside of families (e.g., one teacher requires parents to read together at home while another does not), causal claims can be made about the workshop series.

Sample

During the 2016-2017 academic year, children and families attending public elementary schools within two mid-sized school districts in the Midwestern United States were invited to participate in the study. In the first district, three of seven (43%) school principals agreed to participate; and in the second district, two of the five public elementary schools with eligible children agreed to participate (40%). Two schools in the first district served prekindergarten through first-grade students and one served children in grades two through five, whereas both schools in the second district served children in kindergarten through sixth grade. Students were also recruited from a small summer program that primarily served African American children and was aimed at providing academic enrichment during the summer months. Many children in the summer program attended one of the seven schools in the first district. Each school served a large percentage of African American and economically disadvantaged children (district one = ~60% and 70%; district two = ~60% and 85%).

Participating schools were comparable to non-participating district schools serving first- and second-grade children with respect to average percent of African

American students (64.2% participating vs. 55.8% non-participating), and average percent of students classified as economically disadvantaged (81.6% participating vs. 81.7% non-participating). First- and second-grade teachers distributed recruitment packets to children whom they identified as African American or Black or whose administrative records indicated that the family self-identified as African American or Black. Caregivers completed both a consent and permission form to participate in the study.

Within the 22 participating classrooms in the five schools and the summer program, 26% of 369 eligible first- and second-grade children returned consent and permission forms, for a total of 95 families (99 children). Of the 95 families, three were excluded from the study after randomization because one child changed schools before submitting new contact information, one child was expelled from the school, and one child was moved from first grade to kindergarten. Two families (two children) withdrew before the end of the study. Thus, the final sample size for the present study was 90 African American families. Four families enrolled two children in the study (i.e., three families had one child in first grade and one in second grade, respectively; one family had twin second-grade boys), for a total of 94 children.

Children in the final sample were 55% female and ranged in age from 5.82 years to 9.28 years (M = 7.13, SD = 0.80). Approximately 61% of sample children were first-graders. Of the 61 (67%) caregivers for whom demographic information was available, all were female and included mostly mothers/step-mothers (87%) and grandmothers (12%). Of the 53 (58%) caregivers for whom age information was available, caregivers ranged in age from 21 to 66 (M = 33.55, SD = 10.06). Of the 60 (67%) caregivers for

whom co-parenting data were available, 67% of the female caregivers co-parented with another individual (i.e., child's father, step-father, grandmother). Less than half of the study families (39%) were employed full-time. Of the 59 (66%) caregivers for whom education data were available, 80% had received at least a high school diploma and 7% had received at least a bachelor's degree.

Procedures

Random assignment of children to conditions. To increase the power of the experiment to detect impacts of the socially and culturally situated literacy workshops, a blocking variable was introduced into the random assignment procedure. Blocked individual random assignment was used to block families based on their recruitment site, child's grade, and child's gender. Within each site and immediately after agreeing to participate in the study, a random number generator was used to assign each child a number. Children were then placed on one of four lists based on their gender and grade (i.e., first-grade girls, first-grade boys, second-grade girls, second-grade boys) to ensure an equal number of children represented by gender and grade. These numbers were then rank-ordered and every other child was assigned to the treatment condition. Families not assigned to the treatment condition were placed in the control group. Table 1.1 shows the number of children assigned to each group based on the randomization blocks[1].

Pre-workshop testing children and caregivers. Upon receiving consent and permission forms and prior to random assignment, a trained assessor visited each classroom at least two weeks prior to the start of the workshop series to pretest all children using the literacy outcomes measures described later in this section. All

[1] See Appendix C for additional information about the randomization process.

assessors had experience working with young children. Training included attending a session in which the study author 1) taught the assessors how to administer each assessment, 2) served as a model child as the assessor practiced using the materials, and 3) provided feedback on assessment administration.

Consistent with the administration protocols, some assessments (N = 4) were administered to the entire class (e.g., attitudes toward reading and writing), which included children who were not enrolled in the study. Only data of children for whom consent was already obtained was collected; data for the remaining children was left with the classroom teacher. For classrooms in which only a few children participated in the project, children were assessed on whole class measures in small groups (27% of sample children). The whole-class/small-group assessment session lasted about 30 minutes. For the remaining measures (N = 4), the trained assessors individually administered the measures to the children enrolled in the study. The individual assessment session lasted about 30 minutes.

To make data collection more feasible in Site One, 23 children (7 workshop and 16 control) received only half of the baseline assessment battery. To determine children who received the full battery of assessments, children were matched by treatment status, grade, and gender within their classroom. One child in each pair was randomly selected to receive the full range of assessments. As a result, some children received the full battery of assessments and others only half at pre-workshop[2].

[2] To determine whether pre-workshop differences existed between children who received all literacy measures and those who received only half, I ran a series of independent samples *t*-tests on child pre-workshop scores within and across conditions. Results indicated no statistically significant pre-workshop literacy score differences between children who received the full range of assessments and those who received half of the assessments in either the workshop or control conditions. There were also no significant differences across conditions; or between children in the workshop and control groups who received all measures and children in the workshop and control groups who only received half. There were, however, age

Adult caregivers received a 20- to 25-minute primary caregiver questionnaire that was sent home with each child. The questionnaire included items that captured family demographic information, family home literacy engagement, and caregiver self-efficacy in providing reading and writing support. Caregivers had the option to complete a paper and pencil version of the questionnaire or complete it over the phone. Families who did not return a paper and pencil version received at least two phone calls to complete the survey. Caregivers completed questionnaires before the start of the workshop series with workshop families receiving a $10 gift card and control families receiving a $25 gift card for each completed questionnaire. The difference in compensation rate was to account for workshop families receiving gift cards for attending each workshop session and to incentivize participation among families in the control group that otherwise had little connection to the research study.

Workshop series programming. Two primary components made up the workshop series programming: session facilitation and text messaging.

Session facilitation. Families assigned to the workshop condition were invited to attend five literacy workshops I developed. A detailed description of the session activities is provided in the literature review section. Sessions took place at three-week intervals and each session lasted two hours including a 30-minute meal. Asking caregivers about their availability and offering sessions at times convenient for most caregivers determined dates and times of sessions. At each site, sessions were held twice at study

---

differences. Children in the workshop group who received half of the assessments were somewhat younger than children in the workshop group who received the full range of assessments ($M_{\text{Workshop Partial}} = 75.09$, $SD_{\text{Workshop Partial}} = 4.11$, $M_{\text{Workshop Full}} = 87.19$, $SD_{\text{Workshop Full}} = 9.56$, $p < 0.001$). Similarly, children in the control group who received half of the assessments were somewhat younger than children in the control group who received the full range of assessments ($M_{\text{Control Partial}} = 77.96$, $SD_{\text{Control Partial}} = 6.41$, $M_{\text{Control Full}} = 89.19$, $SD_{\text{Control Full}} = 8.76$, $p < 0.001$). Given that these age differences were consistent across the workshop and control group, it is likely that this data collection decision will not bias the study findings.

schools: once on a weekday and once during the weekend to maximize family participation. When requested, transportation was provided for families to and from the workshop session.

After each session, families were compensated with a gift card to a store that sold children's books and other items (e.g., Walmart). The gift card amount increased as the sessions progressed, with families earning the following amounts for attending each session: $15 (session one), $20 (sessions two and three), $25 (sessions four and five). In addition, children chose a book from one of four children's book series each time they attended a workshop session and could receive up to five books. Each series had a protagonist who was African American.

Text messaging. All families assigned to the workshop group in Site Two received text messages three times a week. These messages, modeled after an existing text messaging approach that found a positive influence of messaging on parental involvement and child letter and word recognition (i.e., York & Loeb, 2014) provided low-cost ongoing literacy support for session attending and non-attending families[3].

Control group. Families assigned to the control group were assumed to continue their typical literacy practices with their children. These families were not given instructions about how to support the literacy development of their children at home. To make the intervention more equitable for families who did not receive an invitation to participate in the workshop series, children assigned to the control group received children's books from one of four series before the first workshop session.

[3] Because only Site Two workshop families received text messages, I was unable to explore the effect of these messages on caregiver and children's literacy gains. Comparing Site One and Site Two workshop groups would have confounded site with text messaging. See Appendix D for additional texting details.

Retention strategies. Multiple strategies for retention were used to encourage regular participation and attendance. Workshop families who attended the sessions received a family meal, child care for younger and older siblings, were permitted to bring other family members, and received monetary compensation for completing assessments and attending sessions. In addition, workshop families received reminder postcards and phone calls about upcoming sessions. The purpose of these strategies was not only to encourage continued participation in the workshops, but also to foster relationships with families, which is an important component of establishing trust among families (Coard et al., 2007).

Post-workshop testing children and caregivers. Within three weeks of completing the last workshop session, assessors returned to the classrooms and completed post-workshop testing of children who participated in the study. The same whole-class and individually-administered assessment procedures were used at posttest to collect child outcomes for all study children. Caregivers completed either a paper-and-pencil or over-the-phone post-workshop questionnaire, which did not include the demographic section. Like the pre-workshop testing procedures, workshop families received a $10 gift card and control families received a $25 gift card for returning the completed questionnaire.

Measures

Caregiver outcome measures. Caregiver outcome measures included home literacy engagement and self-efficacy in providing reading and writing support.

Home literacy engagement. I developed a Home Literacy Engagement Questionnaire to assess home literacy engagement. The 29-item questionnaire ($\alpha = .93$)

reflected a broad range of literacy activities, some of which were the focus of the workshop series. I chose some items from the Home Literacy Behavior Checklist (Bennett-Armistead, Duke, & Moses, 2013) that were consistent with activities highlighted in the program (e.g., reading poems) and developed other items myself. I asked caregivers to indicate how often in the past three months on a three-point scale from "rarely" to "often" they engaged in literacy-related behaviors with their child (e.g., reading to their child, talking with their child about unfamiliar words, engaging in storytelling) and how often their child participated in literacy activities outside of school (e.g., played games that involve reading and writing). Families with more than 50% of questions answered were given a sum score for their home literacy engagement.

Caregiver self-efficacy in providing reading and writing support. Caregiver self-efficacy in helping their child in reading and writing was measured using a 10-item scale adapted from the Parental Self-efficacy for Helping the Child Succeed in School scale (Hoover-Dempsey & Sandler, 2005). Caregivers rated their ability to assist their children with reading and writing on a five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items include statements such as, "I feel successful about my efforts to help my child learn literacy/reading skills" and "I can make a significant difference in my child's reading performance." The items were adapted to allow caregivers to rate their ability to support their child in reading and writing, rather than broad statements about their child's schooling (e.g., "I feel successful about my efforts to help my child learn"). Each adult with more than 50% of her questions answered was given a composite self-efficacy score for reading and writing which was calculated by averaging the scores. The alpha reliability for the caregiver self-efficacy measure was .88.

Child outcome measures. Child outcome measures included literacy knowledge and skills (letter and word recognition, decoding, vocabulary knowledge, listening comprehension, and writing), and attitudes toward and self-efficacy in reading and writing. These measures aligned with the intervention targets.

Letter and word recognition. Letter and word recognition were measured using the Letter-Word Identification subtest of the Woodcock-Johnson Tests of Achievement (Woodcock, McGrew, & Mather, 2001), a nationally normed-referenced measure. The test has excellent test-retest reliability ($\alpha = .94$) and has been used widely in diverse samples of young children (Howes et al., 2008). Children named a subset of letters and read a series of words of increasing difficulty. Both forms A and B of the letter and word recognition measure were used, counterbalancing form by testing period and condition. Scores represented the correct number of items out of 76.

Decoding skills. Word reading and decoding skills were measured using the Z-test (Cunningham et al., 1999), which has strong internal consistency in a rural sample of first and second-graders ($\alpha = .96$). Children read a series of real words and nonwords that began with the onset *z* and end with common rimes (e.g., *-ay, -oke, -ight*) of increasing difficulty, using their knowledge of letter-sound relationships to correctly decode the words. Scores represented the correct number of correctly decoded words out of 37.

Vocabulary. Vocabulary was assessed using a 15-item measure of children's ability to use sentence-level and pictorial context as a clue to the meaning of words (Wise & Duke, 2017). The measure had strong internal consistency ($\alpha = .87$). Trained assessors presented children with sentences that have unfamiliar words and different types of context clues (i.e., picture, definition, synonym, antonym) and asked children to describe

what they thought the word meant. Then, children chose the word's definition from a list of three choices. Vocabulary scores included the total number of correctly identified word meanings.

Listening comprehension. Listening comprehension was measured using the sixth edition of the Qualitative Reading Inventory (QRI; Leslie & Caldwell, 2016). Stories were counterbalanced at pretest and posttest by grade. First-grade children listened to one of two level two passages, "Father's New Game" or "The Lucky Cricket," while second-grade children listened to one of two level three passages, "A Special Birthday for Rosa" or "A New Friend from Europe." Children listened to passages a grade level above their own given that their listening comprehension would be stronger than their reading comprehension. Children responded to a series of explicit and implicit comprehension questions about the passage. Inter-scorer reliability for comprehension questions was 98% for both explicit and implicit questions (Leslie & Caldwell, 2016). Scores reflect the total number of comprehension questions answered correctly out of 8.

Writing fluency. Child writing fluency was measured via a timed writing exercise. Before the workshop sessions, children were given 10 minutes to respond to the following prompt: "I have a friend named Nelson who lives in another state and wants to learn about the children in Michigan. I would like you to write a letter to my friend Nelson and tell him all about yourself. There are no right or wrong answers, you can tell Nelson anything you want. Also, don't worry about spelling. Nelson will be able to read it." This prompt was chosen to assure that children would have sufficient background knowledge related to the prompt. To assess writing at the end of the workshops, children

were given 10 minutes to tell Nelson what he or she has learned that year in school. Writing scores represented the total number of words written.

Attitudes toward reading. Child attitudes toward reading were measured using the Elementary Reading Attitude Survey (ERAS; McKenna & Kear, 1990; McKenna, Kear, & Ellsworth, 1995). The ERAS is a child-reported survey that has been normed using a nationally representative sample and is developmentally appropriate for early elementary-aged children (McKenna, Kear, & Ellsworth, 1995). This 20-item measure has two subscales, attitudes toward recreational reading and attitudes toward academic reading. These subscales asked children to rate their agreement with reading-related questions such as, "How do you feel when you read a book on a rainy Saturday?" and "How do you feel when it's time for reading in class?" by selecting one of four pictures of Garfield the cat that represent different emotional states. These pictures ranged from very positive to very negative. The internal consistency reliability for the recreational, academic, and full-scale attitude measures for first-graders are .74, .81, and .88 respectively. For second grade, these reliabilities are .78, .81, and .87 respectively. Composite scores for recreational and academic reading were calculated separately for each child.

Attitudes toward writing. Attitudes toward and self-efficacy in writing were measured using the Elementary Writing Attitude Survey (EWAS; Kear, Coffman, McKenna, & Ambrosio, 2000). The EWAS was normed using a nationally representative sample of children (Kear, Coffman, McKenna, & Ambrosio, 2000). Children responded to 31 items asking how they would feel if they engaged in several writing activities. Sample items include questions such as, "How would you feel if you had a job as a writer for a newspaper or magazine?" and "How would you feel writing about things that have

happened in your life?" The alpha reliability for this measure for first- and second-graders is .85. Composite scores for writing attitudes were calculated for each child.

Self-efficacy in reading and writing. Child self-efficacy in reading and writing was measured using an adapted version of the Reader Self-Perception Scale 2 (Henk, Marinak, & Melnick, 2012). Three items on this measure asked children to rate on a four-point scale the degree to which they considered themselves a good reader, the degree to which they felt good inside when they read, and the degree to which they liked to read. The remaining three items asked children to rate their self-efficacy in writing. This adapted measure had strong internal consistency ($\alpha = .97$). A composite of all six items was calculated for each child.

Treatment status. A dichotomous variable was created to record whether children and families were in the treatment group (set equal to 1, when children were assigned to the workshop condition) or the control group (set equal to 0, when children were assigned to the control condition).

Workshop series dosage. Family workshop attendance served as a measure of workshop dosage. For families who attended at least one workshop session, a dichotomous variable was constructed to measure dosage (set equal to 1, when families attended three or more sessions and set equal to 0, when families attended one to two sessions). Given that caregivers received a different set of strategies at every other workshop session (e.g., the comprehension activity for Session One and Session Three focused on asking comprehension questions, while Session Two and Session Four focused on visualizing), attending three or more sessions permitted caregivers at least two opportunities of guided practice and feedback with one strategy set.

Covariates and descriptive characteristics. Caregivers reported the highest level of education they achieved, their age, their child's age, their child's gender, and their child's grade level. Continuous indicators were used to measure child age in months. Adult caregiver age was continuously coded with larger numbers representing older caregivers. A dichotomous indicator was constructed to represent caregiver education, coded 1 if the caregiver has more than a high school diploma and 0 if the caregiver had a high school diploma or less. Dichotomous indicators were constructed to represent child gender and child grade level, each coded 1 if the child fell into the demographic category (i.e., female, first grade) and 0 otherwise.

Data Analytic Plan

A standard application of the RCT methodology, provided all assumptions are met, provides an unbiased estimate of the total effect of being assigned to the treatment condition (vs. control) for participants randomized to participate in the workshop series. This estimate is called the intent-to-treat (ITT) estimate and approximates the effect of being assigned to the treatment and control conditions, independent of whether families take up their assigned conditions (e.g., attending the workshop series, using the culturally responsive books) or not (Murnane & Willett, 2011).

I estimated the ITT effect of being assigned to the series on reports of home literacy engagement, adult caregiver self-efficacy, and children's literacy knowledge, skills, and attitudes (research question 1) using an ordinary least squares (OLS) regression model in which a literacy outcome for participant *i* nested in block *j* was modeled as follows:

$$OUTCOME_{ij} = \beta_0 + \beta_1 TREAT_{ij} + \beta_2 PRE_{ij} + I_{ij} + X_j + \varepsilon_i \qquad (1)$$

where *OUTCOME* represented the relevant literacy outcome; *TREAT* was a dichotomous indicator of treatment status; *PRE* was the participant's relevant literacy score at pre-workshop testing (e.g., home literacy engagement and self-efficacy for caregivers or child pretest, each matched to the relevant outcome measure); *I* was a vector of participant covariates (e.g., caregiver age and education in models with caregiver outcomes; child age in models with child outcomes); *X* was a vector of block randomization indicators; and ε was an error term. The parameter of interest was β_1.

I also estimated treatment-on-the-treated (TOT) effects—the effect of the treatment on families who receive the treatment (e.g., the individual workshop sessions). The TOT assumes there is no effect of the treatment on families who did not participate in the workshops (Murnane & Willett, 2011) and is calculated by dividing the ITT estimates from equation (1) by the percent of treatment group members who are treated (e.g., the Bloom estimator; Bloom, 1984).

To address the second research question testing the association between of workshop dosage (i.e., attending three or more workshop sessions) and key outcomes, I fit an OLS regression model as follows:

$$OUTCOME_{ij} = \beta_0 + \beta_1 DOSAGE_{ij} + \beta_2 PRE_{ij} + I_{ij} + X_j + \varepsilon_i \qquad (2)$$

where all variables were the same as those found in Equation 1, with the exception of the treatment indicator, which was changed to *DOSAGE*, a dichotomous indicator of attending three or more sessions out of five. In equation 2, the parameter of interest is β_1.

Attrition and baseline equivalence. Overall, the level of attrition in the study was relatively high.[4] A total of 41 families (46%; $n_{\text{workshop}} = 23$, $n_{\text{control}} = 18$) and 43 children

[4] Attrited families included those that fit any of the following criteria: any family who returned neither the pre-workshop nor post-workshop questionnaire; workshop group families who did not return a post-

(46%; $n_{workshop}$ = 24, $n_{control}$ = 19) attrited from the study. I conducted a series of attrition analyses to better understand to nature of participant attrition in the present sample. Attrition was balanced by treatment status (percentage point difference = 0.05, p = .696), which suggests that workshop (48%) and control (43%) group families attrited at similar rates. In accordance with attrition standards by *What Works Clearinghouse* (Ho, Imai, King & Stuart, 2007; WWC, n.d.), attrition in the present study was categorized as high given the differential rate of 5% and overall attrition rate of 46% and thus was a potential threat to internal validity.

Following WWC recommendations, I next examined equivalence of the treatment and control groups on observable characteristics for the sample of individuals that remained through the end of the study. Baseline equivalence was calculated separately for caregivers and children. As shown in Table 1.2, the treatment/control difference on one out of four caregiver characteristics were above recommended WWC thresholds. Specifically, at pre-workshop, workshop caregivers were significantly older (M = 35.68) than control caregivers (M = 29.50). One additional baseline characteristics had an absolute effect size difference between 0.05 and 0.25 but did not reach statistical significance: self-efficacy in providing reading and writing support (ES = -0.12, p = .465). All regression models included age and pre-workshop scores in accordance with these results.

I found treatment/control differences for one out of 12 child characteristics were above WWC thresholds. As shown in Table 1.3, children in the workshop group had statistically significantly lower listening comprehension scores (ES = -0.36, p = .027)

---

workshop questionnaire and did not attend at least one workshop session; and control group families who did not return the post-workshop questionnaire.

than control children at pre-workshop. Five additional baseline characteristics had absolute effect sizes differences between 0.05 and 0.25 but did not reach statistical significance: gender (ES = 0.11, p = .382), age (ES = 0.18, p = .139), decoding skills (ES = -0.15, p = .325), academic reading attitudes (ES = 0.06, p = .697), writing attitudes (ES = 0.22, p = .125), and self-efficacy in reading and writing (ES = 0.12, p = .415). In accordance with these results, all regression models included age, each outcome's respective pre-workshop score, and pre-workshop listening comprehension.

Missing data in the non-attritor sample. For caregivers in the sample who did not attrit (N = 49, or 54%), there was a moderate amount of missing data, ranging from 4.1% to 34.7% (see the note for Table 1.2 for more details). There was a moderate amount of missing data for children in the non-attritor sample on all covariates, ranging from 3.9% to 29.4% (see the note for Table 1.3 for more details). Most missing child data could be attributed to children in Site One receiving half of the assessment battery at baseline (e.g., to planned missingness). See Appendix E for full missingness details and results. I used multiple imputation (50 datasets) to account for missing caregiver and child pre-workshop data with all analytical variables used in the imputation model (Graham, 2009). Given that the study was underpowered due to rates of attrition, I used .10 as a threshold for significant effects in all regression models. All regression analyses were conducted in Stata 13.

Results

Family Literacy Engagement and Caregiver Self-efficacy at Baseline

At baseline, both workshop (M = 60.93, SD = 13.04) and control (M = 60.47, SD = 10.92) families reported often engaging in home literacy activities with their children.

This score indicates that families reported, on average, "sometimes," rather than rarely or quite often, engaging in most literacy activities. In addition, families were quite confident in their ability to provide reading and writing support to their children in the workshop (M = 39.48, SD = 5.57) and control group (M = 40.98, SD = 7.03). This score indicates that, on average, families reported that they "agree" or "strongly agree" with statements regarding their ability to provide reading and writing support.

Series Participation

Approximately 46% (N = 22 out of 48) of families randomly assigned to the workshop condition and 84% (N = 21 out of 25) of workshop families in the non-attritor sample attended at least one workshop session (M = 2.59, SD = 1.10). Of the families in the non-attritor sample that attended workshops, four families (19%) attended only one session, seven families (33%) attended two sessions, seven families (33%) attended three sessions, three families (14%) attended four sessions, and one family (5%) attended all five sessions. Primary caregivers (i.e., mothers, grandmothers) most often accompanied children at the workshop sessions, although fathers attended sessions on three occasions. Having less participation from fathers is consistent with previous research on fathers' involvement in their children's educational experiences (Gadsden, 2001, 2012; Nord, Birmhall, & West, 1997). Most families brought at least one other sibling and, in some cases, extended family members (e.g., cousins, aunts).

Main Impacts

RQ 1. The first research question asked whether the workshop series had positive impacts on families' home literacy engagement and caregivers' self-efficacy in providing reading and writing support. Controlling for caregiver age, education, and pre-workshop

scores, there was no statistically significant impact on families' home literacy engagement (ES = -0.13, p = .467). As shown in Table 1.4, there was a statistically significant impact of the workshop series on caregivers' self-efficacy in providing reading and writing support (ES = 0.31, p = .101).

For children, it was hypothesized that the workshop series would have a positive impact on children's literacy knowledge, skills, and attitudes. As shown in Table 1.5, there were no significant impacts of the workshop series on children's letter and word recognition (ES = 0.15, p = .173), decoding skills (ES = 0.04, p = .674), vocabulary (ES = -0.01, p = .859), listening comprehension (ES = 0.22, p = .131), writing fluency (ES = 0.13, p = .335), academic reading attitudes (ES = 0.13, p = .390), recreational reading attitudes (ES = 0.05, p = .426), writing attitudes (ES = 0.11, p = .426), or self-efficacy in reading and writing (ES = 0.05, p = .746), controlling for child pre-workshop score, age, and pre-workshop listening comprehension, although nearly all coefficients across outcomes were positive in magnitude.

RQ 2. The second research question (non-causal) asked whether attending more workshop sessions—as indicated by a three-session cutoff—was associated with more positive home literacy engagement, caregiver self-efficacy, and children's literacy skills and attitudes. Given the high rate of missing data on non-attritor caregiver outcomes (39%), dosage effects for caregivers could not be computed. Only five of the 10 workshop families in the non-attritor sample who attended one or two sessions had post-workshop outcomes, and only eight of the 11 families who attended three or more sessions had post-workshop outcomes, thus limiting the model's degrees of freedom to fewer than the model parameters.

For children, results indicated that attending three or more workshop sessions was positively associated with children's academic reading attitudes (ES = 0.38, p = .050) and children's self-efficacy in reading and writing (ES = 0.69, p = .030). As shown in Table 1.5, there were no significant associations between attending three or more sessions and children's letter and word recognition (ES = -0.15, p = .445), decoding skills (ES = -0.01, p = .980), vocabulary (ES = 0.03, p = .779), listening comprehension (ES = -0.02, p = .929), writing fluency (ES = -0.32, p = .248), recreational reading attitudes (ES = 0.38, p = .167), or writing attitudes (ES = -0.22, p = .199), controlling for child pre-workshop score, pre-workshop listening comprehension, and age.

As a robustness check for the non-attritor sample, caregiver and child literacy models were fit without multiple imputation. There was some evidence that caregiver results were sensitive to data analytic decisions (Appendix D). Specifically, the positive effect of attending the workshops sessions on caregiver self-efficacy in supporting their child in reading and writing reached statistical significance in the imputed dataset but was not statistically significant in the unimputed dataset.

Discussion

This study contributes to prior research by highlighting the ways in which intervention programs can support African American families to engage in literacy at home and foster their children's reading and writing development by situating activities in a familiar social and cultural context. Cultural knowledge and practices, including storytelling and the importance of family/community, were embedded within targeted literacy activities that utilized familiar and real-life literacy texts to teach caregiver research-informed literacy strategies to improve literacy development. Overall, the

study's findings demonstrate that the socially and culturally situated series has promise for improving caregivers' beliefs about providing reading and writing support at home and children's beliefs about their own reading and writing abilities but did not have effects on children's actual literacy achievement.

Rates of attendance among the full sample of workshop families were similar to other culturally and socially situated programs (Duppong-Hurley, Hoffman, Barnes, & Oats, 2015; Hammer & Sawyer, 2016; Jordan, Snow, & Porche, 2000; Leyva & Skorb, 2017), suggesting that almost half of workshop families are consistently being reached by such programming efforts. For those families that did attend, results of this study indicate that being randomly assigned to participate in the workshop series led caregivers to feel more confident in their ability to provide their children with reading and writing support. This finding provides some empirical evidence to confirm the effect of family literacy programs on caregivers' self-efficacy. Families who attended the workshop sessions could practice using and received feedback on their use of literacy strategies, which may have increased their perception of their competence. Positive parental self-efficacy is beneficial for parent-child interactions, as parents with a high sense of self-efficacy are more likely to actively participate in educational activities and persist during challenging situations (Ardelt & Eccles, 2001; Bandura et al., 1996; Kikas & Mägi, 2015). Perhaps attending caregivers drew upon the strategies they learned in the sessions when engaging in literacy activities with their children may have successfully adapted their support based on their child's individual literacy needs.

It is important to note that many family literacy programs use qualitative reports of the program's impact on caregivers gleaned from interviews with participating

families only. As a result, these studies are unable to capture the influence of the program relative to families in the control group. Still, there is compelling anecdotal evidence that families who receive training to support their children's literacy development at home have more confidence in providing support (Rasinski & Stevenson, 2005), believe that they can contribute more effectively to their child's learning (Hammer & Sawyer, 2016; Hirst, Hannon, & Nutbrown, 2010), and have improved their parent-child interactions around reading and writing (Saint-Laurent & Giasson, 2005), consistent with the findings of the present study.

Surprisingly, caregivers who attended the workshop sessions did not report engaging in literacy activities at a greater rate than families who did not attend the workshops. These null findings are counter to other findings on the effect of family literacy programs on home and caregiver outcomes, which found that participating families read and write more with their children (Morrow & Young, 1997) and engaged in significantly more reading strategies and activities (Roberts, 2013; Sylva, Scott, Totsika, Ereky-Stevens, & Crook, 2008) than their control group counterparts. Findings from the present study are somewhat consistent with those from a socially situated program. Roberts, Duke, and Rochester (2015) found that a five session workshop series with preschool children had effects on families' read aloud and writing engagement, but had no influence on literacy activities that are not also common in schools, such as reading recipes and pointing out print in the community. The study did not, however, collect home literacy information from families in the control group, as it was not expected that there would be significant changes in control group family practices during the intervention period.

Perhaps caregivers who attended the workshop sessions do not perceive themselves as changing their home literacy engagement because they used the workshop sessions to supplement the literacy engagement they would typically carry out at home. Anecdotally, some mothers reported that while they didn't necessarily engage in the literacy strategies at home, they and their children looked forward to attending the workshop sessions. Another plausible explanation for why there were no impacts on home literacy engagement could be that caregivers integrated the literacy strategies into their existing routines, rather than increase the frequency of their typical literacy engagement. The caregiver questionnaire asked caregivers to indicate whether they rarely, sometimes, or frequently engaged in certain literacy activities. Caregivers received bookmarks at each session with strategies for supporting their child within each area of literacy. Although caregivers practiced the strategies during the workshop session, it is possible that they could have applied the strategies to other literacy activities (e.g., homework help) that were not included in caregiver measures.

Contrary to expectations, there were no impacts of the workshop series on children's literacy knowledge, skills, and attitudes; although the impact was in a positive direction for most outcomes. Other family literacy interventions with samples of school-aged children in families from racially/ethnically minoritized backgrounds have also found mixed results, with some finding no effects on child literacy skills (Faires, Nichols, & Rickelman, 2000; Kim & Guayan, 2010) and others finding differences only for children in the sample with the lowest literacy scores (O'Brien et al., 2014; Rasinski & Stevenson, 2005). Among the interventions that have found program effects on child learning, these interventions tend to target and test a narrow range of literacy skills, such

as word reading (Reutzel, Fawson, & Smith, 2005) and comprehension (Morrow & Young, 1997).

A common—but often unstated—assumption of family literacy programs is that providing support to caregivers will increase their participation in literacy activities at home, which will in turn, result in better literacy achievement. If caregivers who attended the workshop sessions did not change their home literacy engagement, it is likely that their children's development would resemble that of their peers who did not attend the workshop sessions. If caregivers did change their practices in some ways unmeasured by the study, there are several possible reasons why attending the workshop sessions did not impact children literacy knowledge, skills, and attitudes. Perhaps, having five 2-hour sessions (each with a 30-minute meal) was not intensive enough to produce lasting effects in children's literacy development over a five-month span. Increasing the number of sessions, increasing the length of the program, and providing parents with general guidelines about the frequency of at-home engagement may give caregivers enough time to use workshop strategies, which may result in changes in children's literacy learning.

Given the low post-workshop questionnaire return rate for caregivers who attended at least one session, caregiver dosage analyses could not be conducted. There were sufficient data on child literacy skills, knowledge, and attitudes to determine the influence of attending three or more sessions. Notably, children who attended three or more workshop sessions had greater self-efficacy in their own reading and writing ability than their peers who attended two or fewer sessions. These results, while not allowing a clear causal inference, may have important consequences for children's literacy development. It is possible that, through attending more sessions, children had an

increased opportunity to self-identify as a reader and writer, rather than learn more literacy skills. The workshop sessions highlighted relevant features of the children's identity, such as including Black characters and themes; their home life, such as reading popular song lyrics; and their community, such as writing directions from home to a friend's house. Perhaps the workshops recast their confidence in their ability to be successful readers and writers, which was buttressed by the positive effects of the workshops for caregivers. As a result, children who attended more sessions may have felt more confident in their ability to carry out reading and writing activities, which could lead to children working harder to read and attempt more difficult texts (Fulmer & Frijters, 2011; Schunk, 2003).

In addition, greater workshop dosage was associated with more positive attitudes toward reading for academic purposes. Having positive attitudes toward reading can lead to children seeking more opportunities to read and increase their reading motivation, which can be particularly beneficial given that children's reading motivation decreases as they get older (Petscher, 2010). Children may have viewed the literacy workshops as an extension of schools and schooling events, as the sessions were held in their school's cafeteria, library, or in a classroom. The few studies of family literacy interventions that have assessed children's attitudes toward reading have found mixed results. Morrow and Young (1997) used teacher-reported measures of reading attitudes of elementary children and found positive effects for children whose caregivers participated in family sessions, while Saint-Laurent and Giasson (2005) found no effect of literacy sessions on children's general attitudes toward reading using student-reported measures.

Literacy knowledge and skills did not differ between children whose families attended two or fewer workshop sessions and those whose families attended three or more. In other words, providing caregivers with at least two opportunities for guided practice and feedback with one set of strategies (e.g., visualizing for comprehension) did not influence children's literacy development. These findings are consistent with St. Clair and Jackson (2006) who found no difference in children's letter and word recognition, verbal reasoning, and writing based on parents' rates of program participation. Like the null findings for the workshop group, these findings could be explained by caregivers' needing exposure to these strategies over a prolonged period, which may increase the likelihood of incorporating these strategies into their practices and lead to changes in children's knowledge and skills.

Caution should be exercised when interpreting the results of this study. Although there were no differences on baseline characteristics among caregivers and children across groups who participated fully in the study, a limitation is that a large proportion of families attrited. This attrition resulted in baseline imbalances for caregivers and children. Notably, the rates of attrition were similar across the control and workshop groups. In addition, most families attended the first three sessions, which suggests the program impacts likely reflect their participation in part of—rather than the complete—workshop series. Another threat to internal validity was the lack of robustness for the main impact of workshop attendance on caregiver's self-efficacy. The external validity of the present study is limited in that it was based solely on a sample of low-income African American families. As such, the workshop series may differentially impact a sample of families from other racial/ethnic backgrounds, or African American families from higher income

backgrounds. Although families were randomly assigned to either the workshop or control condition, the overall sample of families opted into the study, which limits the external validity to groups of families who are interested in participating in the literacy workshop series. In this case, these findings may not accurately represent the remaining 74% of eligible African American families who chose not to or were unable to participate (e.g., time commitment).

As mentioned previously, the amount of attrition from the study was higher than desired. Forty-six percent of families attrited from the study. It may be that additional strategies are needed to ensure caregivers participate in the study for the full duration. For example, other interventions that situated literacy within a familiar social or cultural context employed home visits (e.g., Hammer & Sawyer, 2016) and held sessions in less institutional, non-school venues (e.g., Hirst et al., 2010). Given that families received information about the project primarily through the schools, it is likely that caregivers' participation with the study is based on their relationship with their child's school. For example, families' involvement with the program could be negatively influenced if a strained relationship with the school or their child's classroom teacher—which could extend from previous outreach efforts targeting harder-to-reach families—existed. In addition, caregivers' *own* schooling experience could have impacted the ways in which they engage with the present family-based educational programs, which is particularly the case for families from low-income communities and families of color (Mapp & Hong, 2010). Other interventions serving families, particularly racially/ethnically minoritized families, should incorporate rapport building events that foster relationships with families

and establish a strong sense of trust (e.g., Coard et al., 2007) *prior* to the onset of data collections and workshops.

Despite these limitations, this study provides preliminary evidence that a series of family literacy workshops that capitalizes on social and cultural aspects of African American families' home life is beneficial for caregivers and their elementary-aged children. Future studies should seek to determine which components within the workshop programming are more efficacious for caregivers and children. For example, might additional components, such as explicit daily assignments for home literacy engagement, be more influential than the components included in the present study? Exploring the role of each element within the entire workshop series may provide more insights into the specific features of the workshop sessions that are salient for positive literacy engagement. The present study adds to the few empirically tested culturally responsive interventions designed to promote family literacy engagement and children's literacy development. Strengths-based intervention programs that honor and extend the existing knowledge and skills of marginalized families may support self-efficacy beliefs in their own abilities on the part of participating families and improve child literacy engagement.

References

Anderson, J., Anderson, A., Friedrich, N., & Kim, J. E. (2010). Taking stock of family literacy: Some contemporary perspectives. *Journal of Early Childhood Literacy*, *10*(1), 33–53. doi:10.1177/1468798409357387

Ardelt, M., & Eccles, J. S. (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family Issues*, *22*(8), 944–972. doi:10.1177/019251301022008001

Auerbach, E. (1995). Deconstructing the discourse of strengths in family literacy. *Journal of Reading Behavior, 27*(4), 643–661. doi:10.1080/10862969509547903

Auerbach, E. (1989). Toward a social-contextual approach to family literacy. *Harvard Educational Review*, *59*(2), 165–181.

Bailey, C., & Boykin, A. W. (2001). The role of task variability and home contextual factors in the academic performance and task motivation of African American elementary school children. *Journal of Negro Education*, *70*(1, 2), 84–95.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development*, *67*(3), 1206–1222.

Bell, Y., & Clark, T. (1998). Culturally relevant reading material as related to comprehension and recall in African-American children. *Journal of Black Psychology*, *24*(4), 455–475.

Bennett-Armistead, V. S., Duke, N. K., & Moses, A. M. (2013). *Beyond bedtime stories: A parent's guide to promoting reading, writing, and other literacy skills from birth to 5* (2nd ed.). New York, NY: Scholastic.

Bitter, C., O'Day, J., Gubbins, P., & Socias, M. (2009). What works to improve student literacy achievement? An examination of instructional practices in a balanced literacy approach. *Journal of Education for Students Placed at Risk, 14*(1), 17–44.

Bloom, H. (1984). Accounting for no-shows in experimental evaluation designs. *Evaluation Review* 8(2), 225–246.

Boykin, A. W. (1983). The academic performance of Afro-American children. In J. Spence (Ed.), *Achievement and achievement motives* (pp. 321–371). San Francisco, CA: Freeman.

Boykin, A. W., & Allen, B. A. (2003). Cultural integrity and schooling outcomes of African American schoolchildren from low-income backgrounds. In P. Pufall &

R. Undsworth (Eds.), *Childhood revisited* (pp. 104–120). New Brunswick, NJ: Rutgers University Press.

Boykin, A. W., & Cunningham, R. T. (2001). The effects of movement expressiveness in story content and learning context on the analogical reasoning performance of African American children. *Journal of Negro Education, 70*, (1/2) 72–83.

Boykin, A. W., Tyler, K. M., Miller, O. (2005). In search of cultural themes and their expression in the dynamics of classroom life. *Urban Education, 40*(5), 521–549. doi:10.1177/0042085905278179

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Theoretical models of human development* (pp. 993–1028). Hoboken, NJ: John Wiley.

Burgess, S. R., Hecht, S. A., & Lonigan, C. J. (2002). Relations of the home literacy environment (HLE) to the development of reading-related abilities: A one-year longitudinal study. *Reading Research Quarterly*, *37*(4), 408–426. doi:10.1598/RRQ.37.4.4

Champion, T. B., Hyter, Y. D., McCabe, A., & Bland-Stewart, L. M. (2003). "A Matter of Vocabulary" Performances of Low-Income African American Head Start Children on the Peabody Picture Vocabulary Test—III. *Communication Disorders Quarterly*, *24*(3), 121–127.

Coard, S. I., Foy-Watson, S., Zimmer, C., & Wallace, A. (2007). Considering culturally relevant parenting practices in intervention development and adaptation: A randomized controlled trial of the Black Parenting Strengths and Strategies (BPSS) program. *The Counseling Psychologist*, *35*(6), 797–820. doi:10.1177/0011000007304592

Compton-Lily, C., Rogers, R., & Lewis, T. (2012). Analyzing epistemological considerations related to diversity: An integrative critical literature review of family literacy scholarship. *Reading Research Quarterly, 47*(1), 33–60.

Craig, H. K., & Washington, J. A. (2004). Grade-related changes in the production of African American English. *Journal of Speech, Language, and Hearing Research*, *47*(2), 450–463.

Cunningham, J. W., Erickson, K. A., Spadorcia, S. A., Koppenhaver, D. A., Cunningham, P. M., Yoder, D. E., & McKenna, M. C. (1999). Assessing decoding from an onset-rime perspective. *Journal of Literacy Research, 31*(4), 391–414.

Daniels, J. (2012). Home literacy environment of African American head start children. *Journal of Education and Learning (EduLearn), 6*(3), 133–146.

DeBaryshe, B. D., & Gorecki, D. M. (2007). An experimental validation of a preschool emergent literacy curriculum. *Early Education and Development, 18*(1), 93–110.

Dickinson, D. K., McCabe, A., Anastasopoulos, L., Peisner-Feinberg, E. S., & Poe, M. D. (2003). The comprehensive language approach to early literacy: The interrelationships among vocabulary, phonological sensitivity, and print knowledge among preschool-aged children. *Journal of Educational Psychology*, *95*(3), 465–481. doi:10.1037/0022-0663.95.3.465

Duncan, G. J., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., Klebanov, P., ... Japel, C. (2007). School readiness and later achievement. *Developmental Psychology*, *43*(6), 1428–1446.

Duppong-Hurley, K., Hoffman, S., Barnes, B., & Oats, R. (2015). Perspective on engagement barriers and alternative delivery formats from non-completers of a community-run parenting program. *Journal of Child and Family Studies, 25*, 545–552. doi:10.1007/s10826-015-0253-0.

Faircloth, S. C., & Thompson, N. L. (2012). Meeting the needs of American Indian and Alaska Native families. In B. H. Wasik (Ed.), *Handbook of family literacy* (2nd ed., pp. 255–270). New York, NY: Routledge.

Fiese, B. H., Tomcho, T. J., Douglas, M., Josephs, K., Poltrock, S., & Baker, T. (2002). A review of 50 years of research on naturally occurring family routines and rituals: Cause for celebration? *Journal of Family Psychology, 16*(4), 381–390.

Fulmer, S. M., & Frijters, J. C. (2011). Motivation during an excessively challenging reading task: The buffering role of relative topic interest. *The Journal of Experimental Education, 79*(2), 185–208.

Gadsden, V. (1995). Representations of literacy: Parents' images in two cultural communities. In L. Morrow (Ed.*), Family literacy connections in schools and communities* (pp. 287–303). Newark, NJ: IRA

Gadsden, V. L. (2004). Family literacy and culture. In B. H. Wasik (Ed.), *Handbook of family literacy* (pp. 401–425). Mahwah, NJ: Erlbaum.

Garcia Coll, C. G., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., Garcia, H. V., & McAdoo, H. P. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development*, *67*(5), 1891–1914.

Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology, 60*, 549–576.

Gregory, E., Arju, T., Jessel, J., Kenner, C., & Ruby, M. (2007). Snow White in different guises: Interlingual and intercultural exchanges between grandparents and young children at home in East London. *Journal of Early Childhood Literacy, 7*(1), 5–25.

Griffin, E. A., & Morrison, F. J. (1997). The unique contribution of home literacy environment to differences in early literacy skills. *Early Child Development and Care*, *127*(1), 233–243. doi:10.1080/0300443971270119

Gutiérrez, K. D., Morales, P. Z., & Martinez, D. C. (2009). Re-mediating literacy: Culture, difference, and learning for students from nondominant communities. *Review of Research in Education, 33*(1), 212–245.

Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher, 32*(5), 19–25.

Hammer, C. S. (2000). "Come sit down and let mama read": Book reading interactions between African American mothers and their infants, in J. Harris, K. Pollock, & A. Kamhi (Eds.) *Literacy in African American communities* (pp. 21–44). Hillsdale, NJ: Erlbaum.

Hammer, C. S., Nimmo, D., Cohen, R., Draheim, H. C., & Johnson, A. A. (2005). Book reading interactions between African American and Puerto Rican Head Start children and their mothers. *Journal of Early Childhood Literacy*, *5*(3), 195–227.

Hammer, C. S., & Sawyer, B. (2016). Effects of a culturally responsive interactive book-reading intervention on the language abilities of preschool dual language learners: A pilot study. *Dialog*, *18*(4), 59–79.

Harris, V. J. (1992). African-American conceptions of literacy: A historical perspective. *Theory into Practice*, *31*(4), 276–286.

Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms.* Cambridge, MA: Cambridge University Press.

Henk, W. A., Marinak, B. A., & Melnick, S. A. (2012). Measuring the Reader Self-Perceptions of Adolescents: Introducing the RSPS2. *Journal of Adolescent & Adult Literacy*, *56*(4), 311–320. doi:10.1002/JAAL.00144

Hiatt-Michael, D. B. (2006). Reflections and directions on research related to family-community involvement in schooling. *School Community Journal*, *16*(1), 7–30.

Hilberg, R. S., & Tharp, R. G. (2002). *Theoretical perspectives, research findings, and classroom implications of the learning styles of American Indian and Alaska Native students.* Charleston, WV: ERIC Clearinghouse on Rural Education and

Small Schools. Retrieved from https://files-eric-ed-gov.proxy.lib.umich.edu/fulltext/ED468000.pdf

Hirst, K., Hannon, P., & Nutbrown, C. (2010). Effects of a preschool bilingual family literacy programme. *Journal of Early Childhood Literacy, 10*(2), 183–208.

Ho, D., Imai, K., King, G., & Stuart, E. A. (2007). Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference. *Political Analysis, 15*(3), 199–236.

Hoover-Dempsey, K. V., & Sandler, H. M. (2005, March). *Final performance report for OERI Grant #R305T010673: The social context of parental involvement: A path to enhanced achievement.* Presented to Project Monitor, Institute of Education Sciences, U.S. Department of Education.

Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Ready to learn? Children's pre-academic achievement in pre-kindergarten programs. *Early Childhood Research Quarterly, 23*(1), 27–50.

Huennekens, M. E., & Xu, Y. (2010). Effects of a cross-linguistic storybook intervention on the second language development of two preschool English language learners. *Early Childhood Education Journal, 38*(1), 19–26.

Janes, H., & Kermani, H. (2001). Caregivers' story reading to young children in family literacy programs: Pleasure or punishment? *Journal of Adolescent & Adult Literacy, 44*(5), 458–466.

Jarrett, R. L., & Coba-Rodriguez, S. (2017). "We keep the education goin' at home all the time": Family literacy in low-income African American families of preschoolers. *Journal of Education for Students Placed at Risk (JESPAR), 22*(2), 57–76.

Jordan, G. E., Snow, C. E., & Porche, M. V. (2000). Project EASE: The effect of a family literacy project on Kindergarten students' early literacy skills. *Reading Research Quarterly, 35*(4), 524–546. doi:10.1598/RRQ.35.4.5

Kear, D. J., Coffman, G. A., McKenna, M. C., & Ambrosio, A. L. (2000). Measuring attitude toward writing: A new tool for teachers. *The Reading Teacher, 54*(1), 10–23.

Kendeou, P., Van den Broek, P., White, M. J., & Lynch, J. S. (2009). Predicting reading comprehension in early elementary school: The independent contributions of oral language and decoding skills. *Journal of Educational Psychology, 101*(4), 765–778. doi:10.1037/a0015956

Kikas, E., & Mägi, K. (2015). Transactional development of parental beliefs and academic skills in primary school. *Early Child Development and Care*, *185*(7), 1148–1165.

Kim, J. S., & Guryan, J. (2010). The efficacy of a voluntary summer book reading intervention for low-income Latino children from language minority families. *Journal of Educational Psychology, 102*(1), 20–31. doi:10.1037/a0017270

Leyva, D., & Skorb, L. (2017). Food for thought: Family food routines and literacy in Latino kindergarteners. *Journal of Applied Developmental Psychology*, *52*, 80–90. doi:10.1016/j.appdev.2017.07.001

Manz, P. H., Hughes, C., Barnabas, E., Bracaliello, C., & Ginsburg-Block, M. (2010). A descriptive review and meta-analysis of family-based emergent literacy interventions: To what extent is the research applicable to low-income, ethnic-minority or linguistically-diverse young children? *Early Childhood Research Quarterly*, *25*(4), 409–431.

Mapp, K. L. & Hong, S. (2010). Debunking the myth of the hard-to-reach parent. In S. L. Christenson, & A. L. Reschly (Eds.), *Handbook of school-family partnerships* (pp. 345–361), New York, NY: Routledge.

McElvany, N., & Artelt, C. (2009). Systematic reading training in the family: Development, implementation, and initial evaluation of the Berlin Parent–Child Reading Program. *Learning and Instruction, 19(*1), 79–95. doi:10.1016/j.learninstruc.2008.02.002

McKenna, M. C., & Kear, D. J. (1990). Measuring attitude toward reading: A new tool for teachers. *The Reading Teacher*, *43*(9), 626–639.

McKenna, M. C., Kear, D. J., & Ellsworth, R. A. (1995). Children's attitudes toward reading: A national survey. *Reading Research Quarterly*, 30(4), 934–956.

Meoli, P. L. (2001). Family stories night: Celebrating culture and community. *The Reading Teacher, 54*(8), 746–747.

Mol, S. E., & Bus, A. G. (2011). To read or not to read: a meta-analysis of print exposure from infancy to early adulthood. *Psychological Bulletin, 137*(2), 267–296.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice*, *31*(2), 132–141.

Morrow, L. M. (1992). The impact of a literature-based program on literacy achievement, use of literature, and attitudes of children from minority backgrounds. *Reading Research Quarterly, 27*(3), 250–275. doi:10.2307/747794

Morrow, L. M., Paratore, J., Gaber, D., Harrison, C., & Tracey, D. (1993). Family literacy: Perspective and practices. *The Reading Teacher*, *47*(3), 194–200.

Morrow, L. M., & Young, J. (1997). A family literacy program connecting school and home: Effects on attitude, motivation, and literacy achievement. *Journal of Educational Psychology*, *89*(4), 736–742.

Mui, S., & Anderson, J. (2008). At home with the Johars: Another look at family literacy. *The Reading Teacher*, *62*(3), 234–243.

Murnane, R. J., & Willett, J. B. (2011). *Methods matter: Improving causal inference in educational and social science research*. New York, NY: Oxford University Press.

Muter, V., Hulme, C., Snowling, M. J., & Stevenson, J. (2004). Phonemes, rimes, vocabulary, and grammatical skills as foundations of early reading development: evidence from a longitudinal study. *Developmental Psychology*, *40*(5), 665–681. doi:10.1037/0012-1649.40.5.665

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). *Common Core State Standards for English language arts and literacy in history/social studies, science, and technical subjects*. Washington, DC: Authors.

Nievar, M. A., Jacobson, A., Chen, Q., Johnson, U., & Dier, S. (2011). Impact of HIPPY on home learning environments of Latino families. *Early Childhood Research Quarterly*, *26*(3), 268–277.

O'Brien, L. M., Paratore, J. R., Leighton, C. M., Cassano, C. M., Krol-Sinclair, B., & Green, J. G. (2014). Examining differential effects of a family literacy program on language and literacy growth of English language learners with varying vocabularies. *Journal of Literacy Research*, 46(3), 383–415. doi:10.1177/1086296X14552180

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*(1), 3–72.

Petscher, Y. (2010). A meta-analysis of the relationship between student attitudes towards reading and achievement in reading. *Journal of Research in Reading*, *33*(4), 335–355.

Powell-Smith, K. A., Shinn, M. R., Stoner, G., & Good, R. H. (2000). Parent tutoring in reading using literature and curriculum materials: Impact on student reading achievement. *School Psychology Review, 29*(1), 5–27.

Purcell-Gates, V. (1996). Stories, coupons, and the TV Guide: Relationships between home literacy experiences and emergent literacy knowledge. *Reading Research Quarterly, 31*(4), 406–428. doi:10.1598/RRQ.31.4.4

Purcell-Gates, V., Anderson, J., Gagne, M., Jang, K., Lenters, K. A., & McTavish, M. (2012). Measuring situated literacy activity: Challenges and promises. *Journal of Literacy Research*, 44(4), 396–425. doi:10.1177/1086296X12457167'

Leslie, L., & Caldwell, J. S. (2017). *Qualitative reading inventory* (6th ed.). London, UK: Pearson.

Rasinski, T., & Stevenson, B. (2005). The effects of Fast Start Reading: A fluency based home involvement reading program, on the reading achievement of beginning readers. *Reading Psychology*, *26*, 109–125. doi:10.1080/02702710590930483

Rie, S., Steensel, R. C. M., & Gelderen, A. J. S. (2017). Implementation quality of family literacy programmes: A review of literature. *Review of Education*, *5*(1), 91–118. doi:10.1002/rev3.3081

Reutzel, D. R., Fawson, P. C., & Smith, J. A. (2005). Words to Go! Evaluating a first-grade parent involvement program for "making" words at home. *Reading Research and Instruction, 45*(2), 119–159. doi:10.1080/19388070609558445

Reyes, L. V., & Torres, M. N. (2007). Decolonizing family literacy in a culture circle: Reinventing the family literacy educator's role. *Journal of Early Childhood Literacy*, *7*(1), 73–94.

Rolla San Francisco, A., Arias, M., Villers, R., & Snow, C. (2006). Evaluating the impact of different early literacy interventions on low-income Costa Rican kindergartners. *International Journal of Educational Research, 45*, 188–201. doi:10.1016/j.ijer.2006.11.002

Roberts, K. L. (2013). Comprehension strategy instruction during parent–child shared reading: An intervention study. *Literacy Research and Instruction*, *52*(2), 106–129. doi:0.1080/19388071.2012.754521

Roberts, K. L., Jordan, G. E., & Duke, N. K. (2014). *Engaging families in children's literacy development: A complete workshop series* [DVD and book]. New York: Scholastic.

Roberts, K. L., Duke, N. K., & Rochester, S. E. (2015). *Engaging families in children's literacy development: Results of a literacy-based workshops series for preschoolers and their families.* Manuscript in preparation.

Rochester, S. E. (2017). *(re)Storying literacy experiences and practices of African American families through narrative inquiry.* Manuscript in preparation.

Rodríguez-Brown, F. V. (2004). Project FLAME: A parent support family literacy model. In B. H. Wasik (Ed.), *Handbook of family literacy* (pp. 213–229). Mahwah, NJ: Lawrence Erlbaum Associates.

Saint-Laurent, L., & Giasson, J. (2005). Effects of a family literacy program adapting parental intervention to first graders' evolution of reading and writing abilities. *Journal of Early Childhood Literacy, 5*(3), 253–278. doi:10.1177/1468798405058688

Schunk, D. H. (2003). Self-efficacy for reading and writing: Influence of modeling, goal setting, and self-evaluation. *Reading & Writing Quarterly, 19*(2), 159–172.

Scott, K. M., Brown, J. M., Jean-Baptiste, E., & Barbarin, O. A. (2012). A socio-cultural conception of literacy practices in African American families. In B. H. Wasik (Ed.), *Handbook of family literacy* (2nd ed., pp. 239–252). New York, NY: Routledge.

Sénéchal, M., & Young, L. (2008). The effect of family literacy interventions on children's acquisition of reading from kindergarten to grade 3: A meta-analytic review. *Review of Educational Research, 78*(4), 880–907. doi:10.3102/0034654308320319

Sidhu, M. S., Gale, N. K., Gill, P., Marshall, T., & Jolly, K. (2015). A critique of the design, implementation, and delivery of a culturally tailored self-management education intervention: A qualitative evaluation. *BMC Health Services Research, 15*, 54–64.

Sparks, R. L., Patton, J., & Murdoch, A. (2014). Early reading success and its relationship to reading achievement and reading volume: Replication of '10 years later'. *Reading and Writing, 27*(1), 189–211.

Snow, C.E., Burns, M., & Griffin, P. (Eds.) (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Spielman, J. (2001). The Family Photography Project:" We will just read what the pictures tell us". *The Reading Teacher, 54*(8), 762–770.

St. Clair, L., & Jackson, B. (2006). Effect of family involvement training on the language skills of young elementary children from migrant families. *School Community Journal, 16*(1), 31–41.

St. Clair, L., Jackson, B., & Zweiback, R. (2012). Six years later: Effect of family involvement training on the language skills of children from migrant families. *School Community Journal, 22*(1), 9–20.

Sylva, K., Scott, S., Totsika, V., Ereky-Stevens, K., & Crook, C. (2008). Training parents to help their children read: A randomized control trial. *British Journal of Educational Psychology, 78*(3), 435–455. doi:10.1348/000709907X255718

Tatum, A. W., & Muhammad, G. E. (2012). African American males and literacy development in contexts that are characteristically urban. *Urban Education, 47(2),* 434–463. doi:10.1177/0042085911429471

Taylor, B. M., Pearson, P. D., Peterson, D. S., & Rodriguez, M. C. (2003). Reading growth in high-poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. *Elementary School Journal, 104*(1), 3–28.

Taylor, L. C., Clayton, J. D., & Rowley, S. J. (2004). Academic socialization: Understanding parental influences on children's school-related development in the early years. *Review of General Psychology, 8*(3), 163–178. doi:10.1037/1089-2680.8.3.163

Taylor, D., & Dorsey-Gaines, C. (1988). *Growing up literate: Learning from inner-city families*. Portsmouth, NH: Heinemann.

Tett, L., & Clair, R. S. (1997). Family literacy in the educational marketplace: A cultural perspective. *International Journal of Lifelong Education*, *16*(2), 109–120.

The Education Trust. (2015). *Scale scores 2015: NAEP grade 4 reading performance – students overall and by family income.* Retrieved from https://1k9gl1yevnfp2lpq1dhrqe17-wpengine.netdna-ssl.com/wp-content/uploads/2014/09/Grade-4-Reading.pdf

Thompson, C. A., Craig, H. K., & Washington, J. A. (2004). Variable production of African American English across oracy and literacy contexts. *Language, Speech, and Hearing Services in Schools*, *35*(3), 269–282.

Tyler, K. M., Boykin, A. W., Miller, O., & Hurley, E. (2006). Cultural values in the home and school experiences of low-income African-American students. *Social Psychology of Education, 9*(4), 363–380.

Tyler, K. M., Boykin, A. W., Boelter, C. M., & Dillihunt, M. L. (2005). Examining mainstream and Afrocultural value socialization in African American households. *Journal of Black Psychology, 31,* 291–311.

Tyler, K. M., Uqdah, A. L., Dillihunt, M. L., Beatty-Hazelbaker, R., Conner, T., Gadson, N., ... & Roan-Belle, C. (2008). Cultural discontinuity: Toward a quantitative investigation of a major hypothesis in education. *Educational Researcher, 37*(5), 280–297.

Van Steensel, R., McElvany, N., Kurvers, J., & Herppich, S. (2011). How effective are family literacy programs? Results of a meta-analysis. *Review of Educational Research, 81*(1), 69–96. doi:0.3102/0034654310388819

Wagner, M., Spiker, D., & Linn, M. I. (2002). The effectiveness of the Parents as Teachers program with low-income parents and children. *Topics in Early Childhood Special Education, 22*(2), 67–81.

Wasik, B. H., & Herrmann, S. (2004). Family literacy: History, concepts, services. In B. H. Wasik (Ed.), *Handbook of family literacy* (pp. 3–22). Mahwah, NJ: Lawrence Erlbaum Associates.

What Works Clearinghouse (n.d.). *Procedures and standards handbook version 3.0.* Retrieved from https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_procedures_v3_0_standards_handbook.pdf

Wise, C., & Duke, N. K. (2018). *Measuring sentence-level vocabulary knowledge of first- and second-grade children* (Unpublished manuscript). University of Michigan, Ann Arbor.

York, B. N. & Loeb, S. (2014). *One step at a time: The effects of an early literacy text messaging program for parents of preschoolers* (Working Paper No. 20659). Retrieved from National Bureau of Educational Research website: http://www.nber.org/papers/w20659

Table 1.1

Children in Each Randomization Group by Experimental Group and Site

	Site One		Site Two	
Group	Workshop	Control	Workshop	Control
First-grade girls	10	9	4	3
First-grade boys	13	11	4	3
Second-grade girls	1	2	6	7
Second-grade boys	3	3	9	6
N children	27	25	23	19

Note. Children were randomized by gender and grade. A list was generated for each of the following categories for a total of four lists: first-grade boys, first-grade girls, second-grade boys, and second-grade girls. Children were then randomly assigned to either workshop or control group within each site.

Table 1.2

Baseline Equivalence for Caregivers in the Non-attritor Sample

Caregiver characteristic	Workshop *M*	Workshop *SD*	Control *M*	Control *SD*	Diff.	*p*-value	ES	*N*	% missing
At least high school diploma (%)	67%	-	70%	-	-3%	.881	-0.02	47	4.08
Age	35.68	11.70	29.50	5.08	6.18*	.029	0.32	42	14.29
Baseline caregiver literacy scores									
Home literacy engagement	60.93	13.04	60.47	10.92	0.46	.919	0.02	40	18.37
Self-efficacy in supporting child	39.48	5.57	40.98	7.03	-1.50	.465	-0.12	38	22.45
N caregivers	25		24						

Note. Diff. = Difference between the value for the workshop and control group for each characteristic. Self-efficacy in supporting child = Self-efficacy in providing reading and writing support. All regression models control for randomization blocks. In the workshop analytic sample, one caregiver (4%) was missing education information, three caregivers (13%) were missing age information, four caregivers (17%) were missing home literacy engagement scores, and six caregivers (25%) were missing self-efficacy in providing reading and writing support scores. In the control analytic sample, one caregiver (4%) was missing education information, four caregivers (17%) were missing age information, five caregivers (22%) were missing home literacy engagement scores, and five caregivers (22%) were missing self-efficacy in providing reading and writing support scores.

* $p < .05$

Table 1.3

Baseline Equivalence for Children in the Non-attritor Sample

Child characteristic	Workshop *M*	Workshop *SD*	Control *M*	Control *SD*	Diff.	*p*-value	ES	*N*	% missing
Female (%)	50%	-	60%	-	-10%	.382	-0.11	51	0.00
First grade (%)	65%	-	64%	-	1%	.922	-0.01	51	0.00
Age in months	85.39	7.80	82.09	7.88	3.30	.139	0.18	50	1.96
Literacy knowledge and skills									
Letter and word recognition	27.29	10.51	27.67	10.90	-0.38	.724	0.05	36	29.41
Decoding skills	14.84	14.21	20.62	12.63	-5.78	.325	-0.15	38	25.49
Vocabulary	8.87	4.45	9.46	3.13	-0.59	.785	-0.04	36	29.41
Listening comprehension	2.63	1.72	4.00	1.96	-1.37*	.027	-0.36	38	25.49
Writing fluency	16.96	18.07	16.48	14.96	0.48	.941	0.01	47	7.84
Literacy attitudes and self-efficacy									
Academic reading attitudes	28.58	7.70	27.70	8.12	0.88	.697	0.06	49	3.92
Recreational reading attitudes	28.85	7.09	28.39	7.22	0.46	.821	0.03	49	3.92
Writing attitudes	84.16	15.35	76.21	20.75	7.95	.125	0.22	49	3.92
Reading and writing self-efficacy	19.96	4.48	18.77	5.51	1.19	.415	0.12	47	7.84
N children	26		25						

Note. Diff. = Difference between the value for the workshop and control group for each characteristic. Literacy attitudes and self-efficacy = Attitudes toward and self-efficacy in reading and writing; Literacy self-efficacy = Self-efficacy in reading and writing. All regression models control for randomization blocks. In the workshop sample, there was a small amount of missing data on child age and pre-workshop measures: two children (8%) were missing letter and word recognition scores, one child (4%) was missing decoding skills scores, three children (12%) were missing vocabulary scores, one child (4%) was missing listening comprehension scores, and one child (4%) was missing and reading and writing self-efficacy scores. In the control sample, one child (4%) was missing

age information, 13 children (52%) were missing letter and word recognition scores, one child (4%) was missing decoding skills scores, 12 children (48%) were missing vocabulary scores, 12 children (48%) were missing listening comprehension scores, four children (16%) were missing writing fluency scores, two children (8%) were missing academic reading scores, two children (8%) were missing recreational reading scores, two children (8%) were missing writing attitudes scores, and three children (12%) were missing reading and writing self-efficacy scores.
* $p < .05$

Table 1.4

Impact of Group Assignment and Session Attendance on Caregiver Outcomes (N = 41)

	RQ 1 (ITT): Workshop group			RQ 1 (TOT): Attended 1+ sessions	
Caregiver outcome	β	*SE*	ES	Estimate	ES
Home literacy engagement	-2.85	(3.91)	-0.13	-3.39	-0.15
Self-efficacy in supporting child	3.94~	(2.41)	0.31~	4.69~	0.37~

Note. Self-efficacy in supporting child = Self-efficacy in providing reading and writing support. This table shows the results from two different regression models, where workshop group status (workshop vs. control) was regressed onto each caregiver outcome. TOT estimates were calculated by dividing the ITT estimate by the percent of non-attriting, workshop group caregivers who attended at least one session. Models include dichotomous indicators for each randomization group (e.g., Site One second-grade boy, Site One second-grade girl), caregiver education, and caregiver age. The caregiver self-efficacy model also included caregiver's baseline self-efficacy score as a covariate. Models are also adjusted for the clustering of families within schools. Robust standard errors are in parentheses.

~ $p < .10$

Table 1.5

Impact of Group Assignment on Child Outcomes and Associations between Session Attendance and Child Outcomes (N = 51)

	RQ 1 (ITT): Workshop Group			RQ 1 (TOT): Attended 1+ sessions		RQ 2 (Dosage): Attended 3+ sessions		
Child outcome	β	*SE*	ES	Estimate	ES	β	*SE*	ES
Literacy knowledge and skills								
Letter and word recognition	3.03	(2.23)	0.15	3.74	0.18	-3.16	(4.14)	-0.15
Decoding skills	1.15	(2.72)	0.04	1.41	0.05	-0.16	(6.41)	-0.01
Vocabulary	-0.14	(0.79)	-0.01	-0.17	-0.01	0.52	(1.86)	0.03
Listening comprehension	0.84	(0.56)	0.22	1.04	0.28	-0.09	(0.97)	-0.02
Writing fluency	4.14	(3.76)	0.13	5.11	0.16	-10.35	(8.96)	-0.32
Literacy attitudes and self-efficacy								
Academic reading attitudes	2.04	(2.37)	0.13	2.52	0.16	5.84*	(2.97)	0.38*
Recreational reading attitudes	0.76	(2.36)	0.05	0.94	0.07	5.28	(3.82)	0.38
Writing attitudes	3.93	(4.94)	0.11	4.85	0.13	-7.86	(6.12)	-0.22
Literacy self-efficacy	0.46	(1.42)	0.05	0.57	0.06	6.32*	(2.91)	0.69*

Note. Literacy attitudes and self-efficacy = Attitudes toward and self-efficacy in reading and writing; Literacy self-efficacy = Self-efficacy in reading and writing. This table shows the results from 16 different regression models, where workshop group status (workshop vs. control) and workshop dosage (attended one or two sessions vs. attended three or more sessions) were regressed onto each child outcome. TOT estimates were calculated by dividing the ITT estimate by the percent of non-attriting, workshop group children who attended at least one session. Models include dichotomous indicators for each randomization group (e.g., Site One second-grade boy, Site One second-grade girl), the pre-workshop child score, the pre-workshop listening comprehension score, and child age. Models are also adjusted for the clustering of children within schools. Robust standard errors are in parentheses.

* $p < .05$

CHAPTER 2: A SYNTHESIS OF RESEARCH ON K-3 FAMILY- AND PARENT-BASED INITIATIVES THAT AIM TO BE CULTURALLY RESPONSIVE

Abstract

Over the last few decades, scholars have noted the importance of designing programs that meet the needs of families from racially/ethnically minoritized backgrounds. Although many programs target families from specific cultural groups, the ways in which these programs are aligned with theories of culture in teaching and learning and incorporate cultural knowledge across programmatic dimensions remain underexplored. Drawing on conceptualizations of culturally responsive teaching, this review synthesizes the ways in which K-3 family/parent programs that aim to be culturally responsive attend to aspects of racially/ethnically minoritized families' cultural backgrounds. The data were drawn from a systematic search of articles from several sources, which yielded 21 articles for review. Articles were analyzed using thematic coding. The analysis revealed that programs varied widely across domains in how they attended to families' racial/ethnic background. Family engagement programs in language and literacy allowed families to actively participate in their own learning and connected learning to aspects of families' lived experiences. Parent involvement programs in math and science demonstrated schools' commitment to including families from traditionally marginalized backgrounds in school-based learning activities. Parent training programs in social and behavior learning used features of families' racial/ethnic background as a mechanism to teach effective parenting practices. A subset of articles (N = 11) describing program

effectiveness revealed that programs were found to be effective when compared to business-as-usual control groups and in single group pretest-posttest designs, but not when compared to traditional programs. The review highlights implications of these approaches to cultural responsivity for program development.

A Synthesis of Literature on K-3 Family- and Parent-Based Initiatives that Aim to be Culturally Responsive

Parents and families have long been recognized for the important role they play in supporting children's development. Many educational settings seek to maximize parents' involvement in their child's learning by integrating parent involvement within school-based learning initiatives (e.g., Head Start) and providing materials and training to help parents work with their children at home. Regardless of the type of support provided, educators often design these programs with the same outcome in mind: to promote high academic achievement. Many parent involvement programs have targeted individuals from non-dominant backgrounds (e.g., low socioeconomic status, racially/ethnically minoritized, limited English proficiency; Powell, 2007).

More recently, there has been an intentional focus on how schools *engage families*—rather than just *involve parents*—to support academic learning (e.g., Baquedano-Lopez, Alexander, & Hernandez, 2013; Cooper, 2009; Mapp, 2012). The *Dual Capacity-Building Framework for Family-School Partnerships* is a federal framework that serves as a practical guide for educators developing effective family engagement efforts (Grant & Ray, 2016; Mapp & Kuttner, 2013). In the framework's discussion of building the capacities of school staff and families to support program development, it asserts that 1) educators need to be knowledgeable of families' cultural knowledge and funds of knowledge, 2) families and educators need to access social capital built on trusting relationships, 3) staff and families need to feel confident in their ability to partner with each other across cultural differences, and 4) staff need to remain committed to serving as equal partners with families to improve student learning.

Attempts to support the needs of an increasingly racially and ethnically diverse population of U.S. children have prompted some educators to adopt more family-centric approaches to better understand how children's home learning contexts can serve as sites to bolster classroom learning. Although there is some evidence to suggest that engaging in culturally responsive practices consistent with theory can lead to positive outcomes for students (Aronson & Laughter, 2016; Dover, 2013; Morrison, Robbins, & Rose, 2008), the ways in which family engagement initiatives aiming to attend to families' cultural background are aligned with culturally responsive frameworks and support children's academic development remains unclear. Such alignment could provide a better understanding of how cultural responsiveness is taken up in practice with families and could guide practitioners in the tailoring of educational programs to be more inclusive of families from traditionally minoritized backgrounds. The present synthesis builds on extant reviews of family engagement programs designed to support racially/ethnically minoritized families (e.g., Butler & Titus, 2015; Gorman & Baiter, 1997; Kumpfer, Alvarado, Smith, & Bellamy, 2002; van Mourik, Crone, Wolff, & Reis, 2017) by synthesizing a subset of research on programs that aim to be culturally responsive from kindergarten through third grade—when children are transitioning to the first few years of formal schooling—across children's academic and prosocial development.

Guidelines for Attending to Culture within Family Engagement Programs

To assist in the development of programs for racially/ethnically minoritized families, professional organizations in education and psychology, such as the National Association for the Education of Young Children (NAEYC) and the American Psychological Association (APA), have adopted standards for family engagement.

NAEYC (2011) outlines in their ethical responsibility to families that programs should "respect the dignity and preferences of each family and . . . make an effort to learn about its structure, culture, language, customs, and beliefs" (p. 4). The APA (2003), whose guidelines approach family engagement from a more clinical perspective, encourage psychologists to "recognize the importance of multicultural sensitivity/responsiveness to, knowledge of, and understanding about ethnically and racially different individuals" (p. 385). Although these guidelines provide thoughtful recommendations for designing programs for children and families, there remains considerable variation in *how* programs address aspects of individual's culture within programmatic features, which may have implications for the types of experiences families have in the programs and the programs' effectiveness.

Existing Approaches to Examining Cultural Responsivity in Programs

There have been some attempts to approximate the ways in which programs attend to culture within specific disciplines. In public health, Resnicow, Baranowski, Ahluwalia, and Braithwaite (1999) use the term "cultural sensitivity" and define it as

> the extent to which ethnic/cultural characteristics, experiences, norms, values, behavioral patterns and beliefs of a target population as well as relevant historical, environmental, and social forces are incorporated in the design, delivery, and evaluation of targeted health promotion materials and program. (p. 11)

Borrowing from sociology and linguistics, they operationalize cultural sensitivity along two dimensions: surface structure and deep structure. Surface structure involves including visible aspects of programming that resemble characteristics of the population of interest, such as translated program materials and employing racially/ethnically matched facilitators. Deep structure sensitivity, on the other hand, involves understanding

the multiple contexts (e.g., cultural, social, historical) that influence individuals' behavior. Deep structure considerations also acknowledge common cultural values (e.g., communalism in the African American community) and stressors (e.g., racism) that individuals from a shared racial/ethnic background often experience.

Although classifying cultural sensitivity in this way is practical, it alone does not capture the nuances in how programs may integrate similar considerations of individuals' racial/ethnic background across features of the learning context differently. For example, two literacy programs could both be classified as having deep considerations if they highlight the cultural value of *respecto* with Latin American mothers. This cultural value could manifest as the inclusion of texts in which the characters respect older family members in one program, while the other program could model respect in their interactions with participating families and invite extended members of the child's family to participate in program activities. Identifying how programs take up aspects of families' racial/ethnic background within and across program features (e.g., materials, activities, context) could support the development of future programs and extend the repertoire of school and district personnel in maintaining mutually beneficial engagement initiatives for a wider range of families.

More recently, Bal and Trainor (2016) developed a three-point rubric to determine the cultural responsiveness—a common term used in education to describe classroom practice—of special education intervention studies along 15 dimensions. Although most of the dimensions address features of empirical studies outside of the intervention, such as the justification of the theoretical framework and the presentation of the findings, the authors group intervention designs into three categories. Designs are considered culture-

free, in which programs do not consider aspects of cultural and linguistic diversity; culturally sensitive, in which programs integrate within-group and individual diversity (e.g., translated materials, training facilitators to work with individuals from specific cultural groups, applicability of program to participants' lives); and culturally relevant, in which programs address diversity and meet all three criteria for cultural responsive interventions, which they identify as improving academic achievement, affirming cultural group and personal identities, facilitating participants' critical perspectives.

Although this three-point scale concisely accounts for the ways in which intervention designs account for individual's cultural background, there are also several limitations to categorizing intervention programs in this way. Bal and Trainor (2016) use the terms *culturally responsive* and *culturally relevant* interchangeably; and although both terms emphasize the importance of using classroom instruction to bring about social change, *culturally responsive* refers to the specific methods teachers (in this case program developers) use to attend to individuals' racial/ethnic background and *culturally relevant* refers to the attitudes and dispositions program developers and facilitators embody in ways that inform planning, instruction, and assessment (Aronson & Laughter, 2016; Gay, 2010; Ladson-Billings, 1995). In addition, regarding programs as culturally responsive only when they meet all three tenets of culturally relevant pedagogy that the author identified overlooks programs that, in some way, may invoke a culturally relevant approach above and beyond ensuring the availability of translated materials. Taken together, these classifications demonstrate the need for a more comprehensive understanding of how programs are attempting to and are successful in attending to the

racial/ethnic backgrounds of specific cultural groups in service of supporting child academic and social development.

Extant Reviews of Engagement Programs for Racially/Ethnically Minoritized Families

To date, few reviews describe programs designed specifically for families from particular cultural groups; and, of those that do, most use Resnicow and colleagues' classification to categorize studies. A review that focused on parent training in childrearing between 1970 and the late 1990s compared the effect sizes of two programs, one for African American parents and one for Hispanic parents (Gorman & Baiter, 1997). The limited number of "culturally sensitive" parent education programs and absence of quantitative studies of programs for Native American and Asian American parents prohibited a meta-analytic approach for these programs or groups. Among the remainder of the studies, the authors found a large range in effect sizes for a variety of child outcomes (-0.02 to 0.68), such as language skills, attitudes, and general intelligence.

A more recent review investigated racially/ethnically minoritized families' engagement, operationalized as enrollment, attendance, and attrition, in culturally-adapted parent training programs (Butler & Titus, 2015). The authors used Resnicow and colleagues' (1999) dimensions of surface versus deep cultural considerations to describe the types of cultural adaptations used in the sample of experimental and quasi-experimental studies. Rather than compare and synthesize the common cultural considerations across studies, the review provided a summary of how each study attended to families' racial/ethnic background individually. Achieving specificity in the ways in which programs attend to families' racial/ethnic background may provide a richer

understanding of responsive programs than does a binary coding of surface and deep cultural considerations. It is also noteworthy that these programs had high participation and retention among participating families. Also making use of the characterization of programs as having surface versus deep cultural adaptations, van Mourik, Crone, Molff, and Reis (2017) conducted a meta-analysis of parenting programs to support child emotional and behavioral adjustment and tested the moderating effect of program's level of cultural sensitivity on overall program effectiveness. The synthesis, which included experimental studies with large samples of racially/ethnically minoritized families, found that parents and children in programs with deep structural sensitivity had more improvement in parenting behavior and child disruptive behavior, respectively, than families in programs with no or surface structure sensitivity adaptations.

Previous reviews of family engagement programs demonstrate benefits of culturally responsive programs for improving parenting practices and reducing children's disruptive behavior. Although these findings are promising, there have been no reviews I am aware of that examine family engagement programs designed to support the academic development of families from racially/ethnically minoritized backgrounds. In addition, extant reviews include only studies that use experimental or quasi-experimental designs, which may miss programs seeking to meet the needs of racially/ethnically minoritized families. Current work in culturally responsive family engagement is often siloed into distinct disciplines and research areas (e.g., literacy, early childhood, parenting behavior, parent training, teacher education) in ways that make it difficult to identify similarities and differences across approaches. Finally, reviews to date have yet to consider how family engagement programs may translate and extend theoretical frameworks designed

to use children's cultural knowledge and experiences as the foundation of teaching and learning. The present review seeks to fill these gaps in the research literature.

Culturally Responsive Teaching

One approach to examining cultural responsiveness that is more nuanced than surface versus deep level is Gay's (2010) framework of culturally responsive teaching (CResT). CResT is a strand of culturally responsive education focused on teacher practice and curriculum (Sleeter, 2012). Gay (2010) defines CResT as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them" (p. 31), and identifies six tenets of culturally responsive teaching: (1) affirming children's cultural heritage as valid and bridging children's home and school experiences; (2) developing comprehensive social, emotional, and political knowledge to teach the whole child; (3) engaging children's cultural knowledge, experiences, practices and perspectives; (4) empowering children by setting high expectations; (5) identifying and leveraging children's strengths to drive teaching and learning; and (6) critiquing normative schooling practices, content, and assessments.

Current Review

The purpose of this review is to synthesize articles of programs that aim to be culturally responsive and describe how family engagement and parent training programs attend to racially/ethnically minoritized families' culture background. I included articles that addressed academic and prosocial development among young children (kindergarten through third grade). To achieve this goal, the literature review was guided by the following questions: (a) Are family engagement programs that aim to be culturally

responsive guided by theory? (b) In what ways do programs—in their design and implementation—address the six tenets of culturally responsive teaching (CResT)? (c) How effective are family engagement programs that aim to be culturally responsive? In the following section, I describe how I used CResT to examine the programmatic features of family engagement and parent training programs designed to attend to aspects of families' cultural background.

Method

Inclusion Criteria and Literature Search Procedures

The articles included in the review met four inclusion criteria. Publications had to report the results of articles that (a) described or evaluated family or parent training behavioral or educational program in the United States or Canada; (b) included children who were in kindergarten to third grade prior to enrolling in the program; (c) included at least 50% of participants who come from racially/ethnically minoritized backgrounds, such as African American, Asian American, Latinx[5], and Native American; and (d) demonstrated, in at least one way, how program characteristics (e.g., language, staff, methods) utilized a culturally responsive approach (as described in the introduction).

I used CResT as an interpretive framework for the articles included in the present review. To apply the CResT framework to family engagement and parent training programs, I considered program features, such as language, materials, activities, staff, and context (Bernal, Bonilla, & Bellido, 1995; see Appendix H). I also considered

[5] The term "Latinx" describes individuals of Latin American descent, including those who have been referred to as Hispanic, Latino, and Latina. In describing family engagement programs designed for Latinx families, I used the term (e.g., Latino, Hispanic) adopted by the study author(s).

whether programs attended to the needs of families and parents, rather than only the needs of the child.

To identify articles, I searched (1) electronic databases, (2) reviews of research on culturally adapted programs for families or parents, (3) articles written by prominent scholars in family research, and (4) the reference sections of the articles selected in Steps 1, 2, and 3. Because Ladson-Billings' (1995) seminal culturally relevant pedagogy theoretical paper and the first NAEYC position statement was published in 1995, I searched for articles published after 1995.

Electronic databases. A computer-assisted search was made of three electronic databases—PsycINFO, MLA Bibliography, and ERIC—published up to November 2017. The search contained two sets of keywords or phrases; the first set was designed to identify the culturally responsive programmatic inclusion criterion (*culturally responsive, culturally relevant, culturally sensitive, culturally competent*), and the second set was designed to delineate articles that met the programmatic inclusion criterion (*family-school partnership, family engagement, family, parent, grandparent, mother, father, family structure, family environment, parental involvement*).

The search terms were linked within each set using the operator *or*; and the two sets of terms were linked with the operator *and*. These searches yielded 3,119 results, which were exported to EndNote for review. A preliminary screening led to the elimination of 229 duplicate articles, which resulted in 2,890 unique articles. Article selection was based on the review of titles and abstracts for whether they described a parent training or educational program that reported attending to families' cultural backgrounds. Review was conducted by a trained doctoral student and me. Eighty-nine

articles met the initial inclusion criteria based on their titles and abstracts. Each article was downloaded and assessed by reading the Method section to determine whether children involved were within the target Kindergarten to third grade age range and whether the program was described in enough detail to determine the ways in which it attended to families' racial/ethnic backgrounds. Articles that described best practices for culturally responsive family engagement but did not report on a program that could be implemented were excluded. In the end, 10 articles were retained in Step 1.

Review articles. I read the title and abstracts of studies included in the Reference sections of three review articles on culturally adapted parenting programs with studies published after 1995 (Butler & Titus, 2015; Kumpfer, Alvarado, Smith, & Bellamy, 2002; van Mourik, Crone, Wolff, & Reis, 2017) for articles that met the four criteria listed earlier in this section and that were not found in electronic databases. The application of these procedures resulted in the selection of 4 additional articles on cultural responsive family initiatives.

Family research experts. I consulted two experts in the field who were knowledgeable about culturally responsive family engagement programs. One expert suggested I review the work of several expert family scholars who were a part of a collaborative of community leaders, educators, and researchers across the United States whose work addresses issues of racial equity in family engagement. I searched a curated list of collaborative members' publications related to family engagement. The other expert suggested the work of a colleague who recently published research on a culturally responsive family literacy program. This search resulted in 1 additional article.

Reference sections. The Reference sections of 15 articles identified to that point were hand searched for additional articles that might have been missed in Steps 1, 2, and 3. The application of this procedure resulted in 6 additional articles.

This systematic review included 21 articles[6] published in peer-reviewed journals. Four of the 21 peer-reviewed articles (Domenech Rodríguez, Baumann, & Schwartz, 2011; Larrotta & Gainer, 2008; McCabe, Yeh, Garland, Lau, & Chavez, 2005; Parra-Cardona et al., 2017) provided extensive explanations of the cultural adaptation process or materials for programs used in empirical studies. In the cases in which the description provided program details outside of those provided in the report of the empirical study, I reviewed these articles in combination with their empirical counterparts to more accurately assess the ways in which these programs attended to aspects of families' racial/ethnic background. As a result, descriptions of some culturally responsive family engagement program features described in the present synthesis draw from the empirical study and a published article that described the program.

Coding Articles

I used Thomas and Harden's (2008) method of thematic synthesis for systematic reviews to analyze the 21 articles. Thematic synthesis is a technique that is appropriate for analyzing multidisciplinary sets of data and involves applying both pre-specified and inductively generated codes to the data (Thomas, Harden, & Newman, 2012). Thematic synthesis is described as a three-stage process that includes line-by-line coding of texts,

[6] Throughout this synthesis, I use three terms to refer to the literature reviewed: "articles", which refers to the 21 peer-reviewed documents; "studies", which refers to 17 articles that collected data to answer a specific research question; and "programs", which refers to the 15 sets of organized activities and training in which families were engaged.

developing descriptive themes, and generating analytic themes (Thomas & Harden, 2008).

In the first stage of coding, I read through each article and highlighted aspects of the article that described program features and aspects of families' culture. Next, I compiled a list of the highlighted text within each article and associated the descriptions with one or more of tenets of culturally responsive teaching, which served as pre-specified codes. To determine the ways in which programs were culturally responsive, I coded each article using a three-point scale across all six tenets of CResT. In other words, each article received six scores (ranging from 0 to 2) that indicated the degree to which they built bridges between families' home and out-of-home experiences, taught the whole family, engaged and applied families' cultural knowledge across multiple dimensions of the learning context, maintained high expectations and support, recognized and leveraged families' strengths, and allowed families to critique normative educational practices (see Appendix H). I synthesized these results by CResT tenet within each domain (i.e., language/literacy, math and science, social and behavioral learning). In the last stage of thematic synthesis, I generated analytic themes within each domain that emerged from my interpretation of the articles.

To capture other important article details, I coded each article for general descriptive information, such as the target skills, target audience, and program type (see Appendix I). I used these codes to generate article descriptions and connect the program to child and parent/family outcomes, which are presented in Table 2.1.

Inter-rater Agreement

I coded all articles. A trained graduate student coded a random sample of 5 of the 21 articles. We maintained 89% adjacent agreement (agreement within one point) across the six tenets of culturally responsive family engagement on the five studies. I calculated inter-rater agreement by dividing the number of exact matches on the six tenets of cultural responsive teaching by the total number of exact matches and disagreements. This resulted in a reliability score of 70%. Next, we reviewed instances of disagreement, returned to the original text for clarification, and negotiated the rationale for our scoring choices until we reached 100% agreement.

Results

The results begin with an overview of how family engagement initiatives that aim to attend to racially/ethnically minoritized families' cultural background invoke theory in their conceptualization of culturally responsive programming. These findings can reveal whether (and how) program developers are drawing connections from theory to practice. I then present the synthesis in sections organized by program domains: language and literacy, math and science, and social and behavioral learning. To synthesize the articles in each domain, I examined the patterns of codes assigned to each program across the six tenets of culturally responsive teaching. During this process, I grouped and regrouped programs into various categories based on the ways in which they attended to families' racial/ethnic background along each tenet.

Within each domain section, I begin with an integrated summary the article samples. I then describe the ways in which programs attended to the racial/ethnic background of families from specific cultural groups. Rather than describe the purpose

and methodology of the articles individually, I synthesize aspects of the programs across articles as they relate to the six tenets of CResT (Gay, 2010) and present specific dimensions of interventions (Bernal, Bonilla, & Bellido, 1995) as evidence of programs that occasionally or consistently attended to families' racial/ethnic backgrounds. Each section of the synthesis is organized by the ways in which most programs in the domain address a given tenet of CResT. I first present tenet(s) addressed by most programs, followed by tenet(s) addressed by some programs, and conclude with the tenet(s) addressed by few programs. As such, the order in which tenets of CResT are discussed across domains varies. Finally, I close the results section with a general discussion about a subset of the articles in the present review that evaluate the effectiveness of the family engagement program, which can provide insight into whether and to what degree there are benefits of adopting a more culturally responsive approach.

Theoretical Considerations

Across all 15 programs, approximately half (N = 7) discussed a theoretical framework that explicitly addressed aspects of cultural responsiveness (Gear, 2012; Larrotta & Yammamura, 2011; Ramirez, McCollough, & Diaz, 2016); acknowledged potentially challenging factors (e.g., acculturation conflict) that can often inform the experiences of families from minoritized backgrounds (Kim et al., 2014); or acknowledged general social factors that contribute to children's learning (e.g., Vygotsky; Coard, Foy-Watson, Zimmer, & Wallace, 2007; Jiménez, Filippini, & Gerber, 2006; Morrow & Young, 1997). The 7 programs that used a guiding theoretical framework represented each of the three domains at similar rates: language and literacy (N = 3), math and science (N = 2), and social and behavioral learning (N = 2).

In some ways, how authors situate the program in a broader conversation seems to have ramifications for how the need for the program is conceptualized and addressed. For example, Larrotta and Yammamura (2011) drew upon Freire's (1970) emancipatory learning theory and Yosso's (2005) community cultural wealth in the development of their literacy program for Latino families. The program was designed to introduce immigrant Latino parents to the U.S. education system and allow parents to apply comprehension strategies to texts that affirmed their cultural knowledge (e.g., immigration) in ways that they could use to model similar strategies to shared reading sessions with their children. The authors used the two theories as interpretative frameworks when discussing how Latino families described their participation in a family literacy program, such as making connections between the immigration texts and their own experiences, discussing personal immigration experiences with their children, and building social capital by sharing resources (e.g., ESL classes) with other participating families. Kim and colleagues (2014), on the other hand, used the acculturative family distancing theory—which posits that acculturation conflicts family members experience can have a negative influence on their mental health—to frame their parent training program for Korean American immigrant mothers. As a result, their program included two aspects of families' cultural knowledge: aspects that reflect what Alim and Paris (2014) would consider heritage practices, or historically rooted aspects of cultural knowledge (i.e., Confucianism, Korean parenting virtues); and community practices, which reflect more contemporary practices that are informed by both mainstream and heritage practices (i.e., Christianity). Taken together, considering the theories used to

frame family engagement programs that aim to be culturally responsive can provide insights about a program's function and purpose.

Cultural Responsiveness in Language and Literacy

This section addresses cultural responsiveness in connection to programs designed to engage families in supporting children's language and literacy development through a synthesis of seven articles. Five articles included samples of only Latino/Hispanic families (Jiménez, Filippini, & Gerber, 2006; Larrotta & Gainer, 2008; Larrotta & Yamamura, 2011; Leyva & Skorb, 2017; Saracho, 2010), one article included both Hispanic and African American families (Morrow & Young, 1997), and one article included three Navajo families (Lockard, 1999). Most programs focused on families whose children attended schools classified as "at risk" (Morrow & Young, 1997) or served many children from low-income communities (Jiménez, Filippini, & Gerber, 2006; Larrotta & Gainer, 2008; Larrotta & Yamamura, 2011; Lockard, 1999). All programs either taught families specific literacy strategies (e.g., comprehension, sounding out words), or provided opportunities for parents to demonstrate how they integrated their knowledge of program activities to support their child's language and literacy development at home. The patterns of codes assigned to each language and literacy program across the six tenets of culturally responsive teaching are presented in Table 2.2.

Bolstering Home-School Connections through Content and Expectations.

Language and literacy programs often bridge families' home and school context by delivering program materials and content in the families' home language (e.g., Larrotta & Gainer, 2008; Larrotta & Yamamura, 2011; Lockard, 1999; Jiménez, Filippini, & Gerber, 2006). Other programs acknowledge literacy practices common among families from

particular racial/ethnic groups, such as a high value of narratives in Latino and African American families, and embedded literacy learning within the oral tradition using activities such as storytelling, story dictation, and shared reading, to complement the learning that takes place in school (Leyva & Skorb, 2017; Morrow & Young, 1997). Facilitators in one program received over 100 hours of training over five months in which they learned strategies to support children's language and literacy development, how to use Hispanic children's language and culture to promote literacy development, and strategies to support literacy development in the home and family context. This training, which was over the same number of months as the actual literacy program, was used to develop lesson plans that were to be used to deliver session content. These differences in approaches to affirming cultural heritage reveal complementary ways to connect families' experiences with their literacy learning.

These programs also maintain high expectations for families. About half of the programs encouraged families to engage in consistent (Jiménez et al., 2006) and diverse literacy activities at home (Morrow & Young, 1997) and incorporate literacy into everyday interactions (Leyva & Skorb, 2017). Other programs maintained high expectations for in-person engagement. In a program for Navajo children and members of their family, parents spent nine weeks studying the Navajo writing system and nine weeks writing and illustrating books for their children in Navajo (Lockard, 1999). This activity served to preserve and revitalize the Navajo language, an important aspect of tribal educational sovereignty (McCarty & Lee, 2014). The article did not provide details about how program staff supported parents' skill development in ways that allowed them to write these books; however, allotting over four months to build parents, knowledge,

skills, and confidence and expecting families to have completed books at the end of the program demonstrates the programs' investment in the success of participating parents.

Other programs conveyed their high expectations for families by asking parents to present how they integrated program strategies and themes into their everyday lives to other families and program staff. In a five-month literacy workshop series designed for Latino fathers of Kindergarten children, fathers' experiences in the program culminated in constructing literacy demonstrations (Saracho, 2010). These demonstrations gave fathers a chance to showcase their individualized approaches to implementing literacy skills within interactions with their children. In one presentation, a father-child dyad shared an extended version of a book they read together and discussed how they carried out the activities in the story (i.e., planting a tree) at home. Interestingly, fathers "employed their own language, personal style, and interests to share with others what they had learned" (p. 287) within their presentations and altered session strategies and activities to meet their family's language, situations, and environment (Saracho, 2010).

In contrast to using presentations to showcase completed activities, Larrotta and colleagues (2008, 2011) asked parents to connect story themes to their daily routines during the latter part of a 12-session program. The program instructor selected texts she thought would be interesting to Latino immigrant parents from low-income communities and scaffolded parents' use of comprehension strategies in adult texts that parents would subsequently use to teach their child while interactively reading developmentally-appropriate texts. For the parent reading portion of the program, parents built graphic organizers in which they highlighted how they applied the main ideas of the reading to their personal plan to save money. Encouraging families to create presentations illustrates

the level of program commitment to each families' learning by allowing families to take up aspects of the program in ways that felt comfortable to and appropriate for them.

Personalizing Program Activities to Promote Home Interactions. The second theme that emerged from the language and literacy programs is the importance of allowing families to personalize their program experiences. Rather than constrain families' experiences, all language and literacy programs gave families authority over some aspects of their own learning. Although these programs did not fully reach the point of encouraging families to critique normative school practices and to "consider the critical perspectives on policies and practices that may have a direct impact on their lives and communities" (Ladson-Billings, 2014, p. 78), they did allow families choice in the types of texts and materials they utilize in their literacy interactions with their children. This choice, although varied from program to program, invited families to co-construct portions of their learning experience in ways that acknowledged multiple, valid approaches to teaching and learning literacy skills. Choice provided through these programs also allowed families to serve as experts in the own learning and bring their existing cultural knowledge to bear when participating in language and literacy activities with their children.

Most programs—although providing many of the materials families used—allowed families to use books of their own choosing and determine the topics of the stories they wrote with their children during at-home literacy activities (Jiménez et al., 2006; Morrow & Young, 1997; Saracho, 2010). Other programs gave families control over the topics during the in-person (Lockard, 1999) or in-person *and* home-based literacy engagement (Leyva & Skorb, 2017), such as allowing families to apply literacy

strategies learned during session activities to children's favorite topics or events. During a session discussion about a featured text, parents in the school-based literacy program took it upon themselves to challenge the author's assumptions about the seven strategies offered to support their economic needs (Larrotta & Gainer, 2008; Larrotta & Yamamura, 2011). In sum, these programs reveal how programs negotiate aspects of session content in favor of family preferences.

Many of the language and literacy programs recognized family strengths by using aspects of families' culture within program features. Staff invited community members to discuss the importance of traditional Navajo teaching in an intergenerational program for young children and their families (Lockard, 1999). In the literacy program for Latino kindergarten children and their fathers, for example, program teachers intentionally used home and community materials easily accessible to families, such as paper grocery bags and comic strips, within session activities to promote creative literacy engagement after shared book reading (Saracho, 2010).

Other programs not only respected families' strengths, but extended families' strengths in meaningful ways, such as making explicit connections between their everyday interactions and opportunities for literacy learning and using texts that reflect their own cultural knowledge as sites for rich parent-child discussions (e.g., Larrotta & Yamamura, 2011). According to Leyva and Skorb (2017), there is a disconnect between the purpose and function of written language in schools and in out-of-school spaces for some Latin American families. As such, many immigrant parents from Latin American countries believe that reading is related to learning how to sound out words, and writing is about tracing letters. Their program, which sought to place literacy learning and

writing within authentic routines (e.g., preparing a meal), "offered culturally sensitive and nontraditional ways for [Latino immigrant] parents to support their children's literacy" (p. 82). These features show how programs can be used to inform the meaning families ascribe to certain literacy practices in ways that transform their literacy knowledge.

Cultural Responsiveness in Math and Science

This section addresses cultural responsiveness in connection to children's math and science learning through a synthesis of three articles. Two articles described math and science nights which included culturally responsive activities developed by preservice teachers for Hispanic parents of K-12 students (McCollough & Ramirez, 2010; Ramirez, McCollough, & Diaz, 2016), and the other described a classroom-based program for Haida (Native American group in Canada) and non-Haida Kindergarten families (Gear, 2012). The patterns of codes assigned to each math and science program across the six tenets of culturally responsive teaching are presented in Table 2.3.

Bolstering Home-School Connections through Familiar Events. A common finding across both programs is that they built bridges between the home and school context by inviting families to their child's school (McCollough & Ramirez, 2010; Ramirez, McCollough, & Diaz, 2016) or classroom (Gear, 2012) to accompany their children through center-based activities. They also engaged families in multiple domains of their child's math and science learning. In one program, teachers invited families of Haida and non-Haida children to participate in several activities that used familiar manipulatives (e.g., feathers, shells) aligned with the Haida heritage of respecting land and sea to teach children math concepts, such as counting, grouping, and patterns (Gear,

2012). Weavers from the community facilitated one center activity and showed families how to construct the base of a traditional cedar basket, woven out of intersecting strands. Another session required children and their family members to estimate how many children could fit into a fabric clamshell and test their predictions.

To develop the content for a combined math and science night for families of Latino children in low-income communities, preservice teachers (PST) researched the history of "culturally related" (p. 47) math and science topics and engaged in discussions about parental involvement, culturally relevant math, and culturally relevant science (McCollough & Ramirez, 2010; Ramirez et al., 2016). Session activities centered on a series of themes, including diabetes, which was prevalent where the program was held, Latino social events (e.g., Quinceañera), commonly consumed foods in Latin American countries (i.e., beans, corn), and Mexican embroidery and pottery. One father mentioned the following when asked to reflect on his participation in the program: "By attending this event...I can see how using things from our culture like la lotería and Quinceañera can be used to teach math" (p. 51; Ramirez et al., 2016). Like Gear (2012), PST designed all activities to include familiar materials—in this case, common household items—as manipulatives.

While neither of the two programs addressed the culturally responsive tenet of having high expectations and support for families and allowing families to critique normative schooling practices, these school-based family engagement programs focused their attention on ensuring that program themes and materials reflected families' racial/ethnic backgrounds in ways that made activities resemble familiar experiences. The benefit of such an approach to cultural responsiveness is that families likely feel

welcome at school and have a chance to interact with members of their child's learning community (e.g., principal, teachers, staff). These programs show the commitment educators have to ensuring that families remained involved their child's school-based learning.

Cultural Responsiveness in Social and Behavioral Learning

This section addresses cultural responsiveness in connection to children's prosocial behaviors and positive parenting through a synthesis of 11 articles. Most articles included samples of Latino families (Barrera et al., 2002; Domenech Rodríguez, Baumann, & Schwartz, 2011; McCabe & Yeh, 2009; McCabe, Yeh, Garland, Lau, & Chavez, 2005; Parra-Cardona et al., 2012; Parra-Cardona et al., 2015; Parra-Cardona et al., 2017); three included Asian American families (Lau, Fung, Ho, Lui, & Gudiño, 2011; Kim et al., 2014; Kim, Cain, & Webster-Stratton, 2008); and one included African American families (Coard et al., 2007). Families in all programs except Coard and colleagues (2007) spoke a primary language other than English (i.e., Cantonese, Korean, Spanish). All programs worked exclusively with parents with the intent that they would implement more effective behavior management and parenting strategies at home with their young children. The patterns of codes assigned to each social and behavioral learning program across the six tenets of culturally responsive teaching presented in Table 2.4.

All behavior programs maintained high expectations of families to some extent by assigning parents homework to complete in between sessions, and provided support for skill development through coaching, role-play of behavior modeling, and discussions during in-person trainings. Programs also used language adaptations of materials and

bilingual staff to bridge program content with the existing knowledge of families of color. For example, in their parenting program that used a combination of parent training, classroom-based behavior management, and school-based supplemental reading instruction to reduce kindergarten through third-grade students' conduct problems, most of whom were Hispanic, Barrera et al. (2002) created Spanish-language intervention materials, trained bilingual-bicultural staff, and translated all study assessment measures. McCabe and Yeh (2009) translated program materials to Spanish and simplified the language used in program materials to accommodate families with lower levels of education.

In addition to language adaptations and/or bicultural staff, some programs affirmed families' cultural heritage by incorporating families' racial/ethnic culture into program content through session activities. Lau et al. (2011), in their cultural adaptation of the *Incredible Years* program, allotted time during each session meeting for parents to discuss the benefits and potential cultural and practical barriers to implementing effective parenting strategies at home. Other programs made substantive changes to program content informed by conversations with various stakeholders, such as families (i.e., program families, families in the community) and community leaders, and applied cultural knowledge across various domains of learning. Coard and colleagues (2007), Parra-Cardona et al. (2012) and Parra-Cardona et al. (2015) based their studies in part on information gleaned from qualitative interviews with samples of families whose racial/ethnic backgrounds matched the families target in their programs. McCabe and colleagues (2005, 2009) based aspects of their culturally modified program on responses to questionnaires given to *participating families* before the start of the program. Families'

responses were used to tailor the program to families' beliefs and values, such as including additional time for rapport building with Mexican families (*personalismo*) and addressing misconceptions about behavior problems.

Addressing Social Challenges by Strengthening Cultural Ties. Parra-Cardona et al. (2012) and Para-Cardona et al. (2015) sought to learn about families' "most relevant life experiences" (p. 60) to informed adaptations to sessions of the *Parent Management Training, the Oregon Model* (PMTO) program. Through interviews, they learned that families experienced high levels of stress associated with being immigrants (e.g., economic difficulties, racial discrimination) and balancing their cultural values and traditions from their home countries and the U.S. cultural context. To address families' concerns, their adaptation of the PMTO program included two culture-specific sessions, "*being a Latino/immigrant parent*" and "*parenting between two cultures*," at the beginning and end of the 12-session program. During these sessions, facilitators prompted parents to reflect and discuss immigration and biculturalism issues. Within each of the remaining 10 sessions, parents briefly reflected on the cultural relevant the core PMTO topic.

Although the PMTO culture-specific program did not evenly distribute families' unique experiences as Latino immigrants throughout the sessions (i.e., full session at the beginning and end, brief reflections in the middle), they used the program to address elements of parents' social context (e.g., acculturative stress) and provided tailored support for multiple aspects of parenting. Not only did they recognize families' lived experiences as worthwhile topics to include in session programming, they moved families to consider how salient aspects of their identity as Latino immigrants influenced their

parenting practices. In addition, it was clear that families appreciated these discussions and were eager to learn ways to support their children as they transitioned to U.S. schools. When reflecting on what she learned from the program, one mother stated:

> I need to get into my child's culture that is outside of our home, the American culture. I need help so I can understand it better. For example, my kid goes to school with many American children and sometimes he comes home with questions about the Americans that my husband and I don't know how to respond [*sic*]. We need to help our kids being [*sic*] in these two cultures [Latino and American cultures]. (p. 68)

For this mother, whose sentiments were shared by other parents who participated in the program with culturally-adapted sessions, parenting and supporting their children's prosocial behavior was inextricably linked to their experiences as immigrants in the United States. The program served a larger purpose than just providing useful strategies to inform parent-children interactions around positive behavior at home: the program served as a means to acknowledge the sociopolitical realities of what it means to navigate two cultures.

The framing of concepts across these eight behavioral articles, or articulation of why the behavioral program is needed, warrants discussion. Consistent with the original goals of parenting programs, some programs took a preventative approach to parent training, and designed the program to offset existing negative parenting practices. Kim, Cain, and Webster-Stratton (2008) mentioned the following in the rationale for their cultural adaptation of the *Incredible Years* program:

> [Balancing two cultures is] derived from the awareness that Korean parenting practices (e.g., withholding affection and harsh discipline) do not fit well with the social context of America (e.g., promoting positive and appropriate discipline). This realization makes parents feel incompetent in parenting (Nah, 1993). Not only does Korean American parenting differ from American parenting but also Korean American children experience more depressive symptoms than European American children (Nahm, 2006). Offering a parenting program that promotes positive and appropriate discipline and decreases harsh discipline would provide parents additional skills that better fit with American social context. (p. 1262)

Here, the study authors frame the problem as needing to change potentially negative parenting practices used in Korean American families, such as harsh discipline, to conform to more accepted forms of parenting, such as positive verbal expressions. Conceptualizing issues of parenting in this way make it difficult, then, for the program to build on families' strengths.

In a later iteration of culturally adapting the *Incredible Years* program, Kim and colleagues (2014), took a more strengths-based approach to parent training. The authors acknowledged the importance of positive aspects of Korean parenting practices (e.g., modeling of respect, high standards); incorporated traditional (i.e., Confucianism) and contemporary (i.e., Christianity) cultural elements within the program; *and* provided supplemental practices that more closely aligned to more socially accepted U.S. forms of discipline. During program sessions, parents engaged in role-plays of common physical punishment practices Korean American families perceived to be effective and openly discussed why these practices may be ineffective. Like Parra-Cardona et al. (2012), Kim et al. (2014) included an introductory session on the impact of dual cultures on parenting. These modifications showed that the authors recognized and built on parenting practices in ways that likely strengthened family connections to Korean culture and community and expanded families' repertoire of effective parenting skills.

Only one program designed to support children's social and emotional development critiqued oppressive/normative schooling practices in any way. Coard et al. (2007) designed a culturally enhanced version of the *Parenting the Strong-Willed Child* program and used discussions and reflections to teach parents evidence-based skills to reduce behavior problems. Like Parra-Cardona et al. (2012, 2015), discussion included

sociocultural realities that families often experienced—in this case, African American families. For example, facilitators dedicated a portion of each session to explicitly address specific challenges, such as how to handle events that commonly happen to group members (e.g., discrimination), how to promote high expectations for children's achievement despite potential barriers (e.g., low teacher expectations), and how to "problem solve with [children] about isolating or potentially volatile interactions that the child may experience with peers (e.g., social exclusion because their skin is "ugly" or "dirty")" (p. 806). Unlike Para-Cardona et al. (2012, 2015), these sessions moved beyond discussions and provided parents with protective strategies to buffer their children against potentially harmful experiences that could lead to, influence, or exacerbate their negative behavior. Such approaches to parent training may foster resilience in families and help parents teach children beneficial strategies that can be used in school and out-of-school contexts.

Describing Program Effectiveness

Nine programs (11 studies) included in this review discussed program effectiveness for participating children and families. Of the 9 programs, 3 focused on the language and literacy domain and the remaining 6 focused on the social and behavioral learning domain. Neither math and science program discussed program effectiveness. Programs varied in whether they compared their culturally responsive program to a control group, a nonculturally-adapted version of the program, or used a single-group design. Programs that used a business-as-usual control group found that children who participated in the culturally responsive program had fewer internalizing and externalizing behavior problems (Barrera et al., 2002; Coard et al., 2007; Kim et al.,

2014; Lau et al., 2011), positive discipline (Kim et al., 2008), and better reading comprehension (Morrow & Young, 1997). The findings from programs that compared their culturally responsive program to a nonculturally-adapted program were less promising, as parent satisfaction and child behavior problems did not differ significantly from each other (McCabe & Yeh, 2009; Parra-Cardona et al., 2012; Parra-Cardona et al., 2015). Both studies that used a single-group design addressed the language and literacy domain and had a positive influence on children's oral language skills (Jiménez et al., 2006; Leyva & Skorb, 2017). Given these findings, it is possible that the function of culturally responsive programs is not to improve children's academic and prosocial skills in ways that extend beyond traditional engagement efforts. It could be the case that culturally responsive programming is an approach to get families in the door and build families' self-efficacy, even if these programs do not appear to be more effective than their non-adapted counterparts.

Discussion

This synthesis of 21 articles has shown how fifteen educational and behavioral programs attended to racially/ethnically minoritized families' cultural backgrounds along six dimensions of culturally responsive teaching. It provides insight into how educators and researchers have taken up cultural responsiveness in practice and their approaches to meeting the needs of a families from particular cultural groups. This review also can serve as a useful tool for researchers, school officials, and policymakers who wish to learn the landscape of some current family engagement initiatives, which could lead to the development of new, or adoption of existing, culturally responsive programs to support child development.

One finding of the current review is that programs within and across domains of learning vary widely. Overall, many articles did not invoke theory, and of those that did, many were in the math and science realm. Interestingly, of the two studies in the math and science domain, neither discussed the effectiveness of the program for child learning. It may not be enough to ensure that programs are aligned with theory, neither is it enough to connect programs to student outcomes. Ensuring that future programs are theoretically supported with a focus on student learning can create a praxis within culturally responsive family engagement programs that extends our understanding of theories like CResT *and* connect programs to student success.

Across all domains, most programs affirmed families' cultural heritage as valid and bridged families' home and out-of-home experiences in meaningful ways, such as creating linguistically adapted program materials or utilizing materials that reflected families' cultural background. Most programs also used families' cultural knowledge—to varying degrees—to bolster multiple aspects of family engagement, such as building parents' self-confidence, improving parent-child interactions, and strengthening children's academic knowledge and skills. Among math and science programs, family engagement often stopped there.

In contrast, most programs in the language and literacy and social and behavioral learning domains also allowed families an opportunity to build relationships with each other and cultivate social supports in their pursuit of fostering their children's development. The programs, at least to some extent, maintained high expectations for families by encouraging families' participation in in-session presentations and homework assignments designed to guide them in incorporating new strategies into their routine

interactions with their children. Although language and literacy family engagement programs sometimes acknowledged families' strengths to some degree by allowing families to individualize their learning experiences, only one social and behavior learning program encouraged families to consider and address the impact of social inequities (e.g., prejudice) on their engagement with their young children.

Recommendations for Practice and Future Programming

Considering the present review's findings across academic and behavioral domains, there are several takeaways that can inform the use and development of programs that attend to the racial/ethnic backgrounds of families from minoritized cultural groups. As evidenced by the varying approaches to cultural responsiveness described above, there is no one-size-fits-all approach to family programming. In fact, many approaches were found to be effective. School districts and program developers should examine whether existing programs could address additional culturally responsive criteria. Perhaps a group of children from families that recently immigrated to the United States need additional support to learn math concepts. Schools can identify a specific set of skills and organize activities that embed math learning in a context that builds on families' cultural knowledge. In addition, programs that invite current immigrant families at the school to share their experiences with recently immigrated families may provide social supports and additional strategies that would otherwise not be shared.

Another takeaway is that programs should periodically check that school programming meet families' needs, rather than designing programs only to meet the needs of the school. Are there existing obstacles that hinder families' from engaging with their child, or useful literacy or behavior strategies that work well for some families and

may help others? Using programming as a way to *learn from* families and to take stock of current social realities—regardless of their racial/ethnic and income background—could build stronger family-school ties and demonstrate a sense of shared responsibility to support students learning. Finally, programs should make sure that families' cultural backgrounds are represented consistently throughout the program. Rather than include responsive content at the beginning or end of a program, for example, respecting families' lived experiences at each session through the types of materials programs use, how program facilitators communicate with families, and the topics facilitators cover, can demonstrate a level of care that may affirm families.

Influence of Culturally Responsive Approaches on Learning and Engagement

One criticism of programs that attend to families' culture is that there is limited evidence of their impact on child outcomes (e.g., Gadsden, 2004; Manz, Hughes, Barnabas, Bracaliello, & Ginsburg-Block, 2010). The unique affordance of randomized controlled trials is that they allow causal inferences; in this case, regarding the relationship between program effects and child and parent/family outcomes. In service of supporting researchers to develop new programs and school districts to adopt appropriate programs for children and families, I intended to discuss the causal findings of studies reviewed in this synthesis whose participants were randomly assigned to control and experimental conditions across domains.

Of the 21 studies in this review (excluding the four published articles that only described a given program), 8 (47%) studies used experimental and quasi-experimental designs with comparison groups, 7 of which were cultural adaptations of existing parent training programs developed to reduce children's problem behaviors. Current reviews of

culturally responsive family programs reflect a similar paucity of scholarship in academic domains to determine the effectiveness of culturally responsive intervention programs on children's academic achievement. Given that the effectiveness of these culturally responsive behavioral studies is detailed elsewhere using rigorous meta-analytic techniques (i.e., van Mourik et al., 2017), a description of their findings would be redundant. Evaluations of future culturally responsive programs designed to engage families in their children's academic development across the domains of language, literacy, math, and science should consider randomly assigning families to treatment and control conditions.

Limitations and Conclusions

A limitation of the current review is that the methods used to identify articles for inclusion yielded a sample of articles published in peer-reviewed journals. A constraint of including only research published in journals is that the review may have a publication bias, as published articles are more likely to present statistically significant findings than unpublished research (Cooper, 2010). As a result, this review does not capture the full range of culturally responsive family engagement programs, such as those reported in books, those reported in research reports from state and local agencies, and those implemented in school and community-based settings without published reports. Given the small number of published articles describing culturally responsive programs in math and science, researchers should consider developing programs in these areas and/or consulting with school officials, parent coordinators, and community agencies to identify locally implemented family programs that incorporate aspects of racial/ethnic background to teach these domains.

In many ways, the implementation of cultural responsiveness in classrooms is out ahead of its implementation in family engagement programs. Ladson-Billings (2014), in a reflection on how culturally relevant teaching is taken up in schools, acknowledges the difficulty of building sociopolitical consciousness, which is represented by the recognizing and leveraging family strengths and critiquing normative school practices tenets of culturally responsive teaching. She argues that while many practitioners claim to translate research to practice, "few have taken up the sociopolitical dimensions of the work, instead dulling its critical edge or omitting it altogether" (Ladson-Billings, 2014; p. 77). In recent reviews of culturally responsive practices in the classroom, 17 (38%) of 45 articles reviewed critiqued discourses of power (Aronson & Laughter, 2016). The present review of found one such article (Coard et al., 2007).

Theories of culture that are accurate, meaningful, and relevant for families as they work toward participating in their young children's learning are at the center of culturally responsive family engagement programs. Culture is an ever-evolving concept that is informed by both traditional and contemporary factors that characterize families' present-day experiences. It is imperative that programs that aim to be culturally responsive acknowledge that families' current needs that are often rooted in contexts that lie outside of an academic domain or the use of a parenting strategy. For culturally responsive programs in particular, program developers are tasked with the deliberate and explicit consideration of the social and cultural influences that likely contribute to (or impede) positive academic and social development. Although the intent of these programs is to improve families' capacity to provide positive academic and prosocial support to supplement in-school learning, the programs have the potential to provide benefits that

extend beyond these valued domains, including strengthening relationships between children and members of their family, improving families' attitudes toward program providers, and building their self-efficacy.

As recognized by previous syntheses of cultural responsive approaches to teaching and learning, the six aspects of cultural responsivity coded in this review "are not mutually exclusive and often exist as corequisites" (Morrison, Robbins, & Rose, 2008; p. 435). The tenets of culturally responsive teaching are also complementary; such that, for example, empowering racially/ethnically minoritized families by having high expectations for their learning can be buttressed by tapping into a wide range of families' cultural knowledge, experiences, and perspectives. Culturally responsive programs that seek to include opportunities for families from racially/ethnically minoritized backgrounds to critique policies and practices can simultaneously, address more basic—yet important—tenets of CResT *and* move toward liberating families from oppressive schooling practices that often hinder their children's academic success.

References

References marked with an asterisk indicate articles included in the synthesis.

American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *The American Psychologist*, *58*(5), 377–402.

Aronson, B., & Laughter, J. (2016). The theory and practice of culturally relevant education: A synthesis of research across content areas. *Review of Educational Research*, *86*(1), 163–206.

Bal, A., & Trainor, A. A. (2016). Culturally responsive experimental intervention studies: The development of a rubric for paradigm expansion. *Review of Educational Research*, *86*(2), 319–359.

Baquedano-Lopez, P., Alexander, R. A., & Hernandez, S. J. (2013). Equity issues in parental and community involvement in schools: What teacher educators need to know. *Review of Research in Education, 37*(1), 149–182.

*Barrera Jr., M., Biglan, A., Taylor, T. K., Gunn, B. K., Smolkowski, K., Black, C., . . . Fowler R. C. (2002). Early elementary school intervention to reduce conduct problems: A randomized trial with Hispanic and non-Hispanic children. *Prevention Science, 3*(2), 83–94.

Bernal, G., Bonilla, J., & Bellido, C. (1995). Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology*, *23*(1), 67–82.

Butler, A. M., & Titus, C. (2015). Systematic review of engagement in culturally adapted parent training for disruptive behavior. *Journal of Early Intervention, 37*(4), 300–318.

*Coard, S. I., Foy-Watson, S., Zimmer, C., & Wallace, A. (2007). Considering culturally relevant parenting practices in intervention development and adaptation: A randomized controlled trial of the Black Parenting Strengths and Strategies (BPSS) program. *Counseling Psychologist, 35*(6), 797–820. doi:10.1177/0011000007304592

Cooper, C. W. (2009). Parent involvement, African American mothers, and the politics of educational care. *Equity & Excellence in Education*, *42*(4), 379–394. doi:10.1080/10665680903228389

Cooper. H. (2010). *Research synthesis and meta-analysis: A step-by-step approach*. Los Angeles, CA: Sage.

*Domenech Rodríguez, M. M., Baumann, A. A., & Schwartz, A. L. (2011). Cultural adaptation of an evidence-based intervention: From theory to practice in a Latino/a community context. *American Journal of Community Psychology, 47*(1-2), 170–186.

Dover, A. G. (2013). Teaching for social justice: From conceptual frameworks to classroom practices. *Multicultural Perspectives*, *15*, 3–11. doi:10.1080/15210960.2013.754285

Gadsden, V. L. (2004). Family literacy and culture. In B. H. Wasik (Ed.), *Handbook of family literacy* (pp. 401–425). Mahwah, NJ: Erlbaum.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). New York, NY: Teachers College Press.

*Gear, A. L. (2012). A cultural introduction to math. *Teaching Children Mathematics, 18*(6), 354–360.

Gorman, J. C., & Baiter, L. (1997). Culturally sensitive parent education: A critical review of quantitative research. *Review of Educational Research, 67*(3), 339–369.

Grant, K. B., & Ray, J. A. (2016). Family engagement and the responsive educator. In K. B. Grant, & J. A. Ray (Eds.), *Home, school, and community collaboration: Culturally responsive family engagement* (3rd ed., pp. 3–30). Los Angeles, CA: Sage.

*Jiménez, T. C, Filippini, A. L., & Gerber, M. M. (2006). Shared reading with Latino families: An analysis of reading interactions and language use. *Bilingual Research Journal,* 30(2), 431–445

*Kim, E., Cain, K., Boutain, D., Chun, J.J., Kim, S., & Im, H. (2014). Pilot study of the Korean Parent Training Program using a partial group randomized experimental study. *Journal of Child and Adolescent Psychiatric Nursing, 27*(3), 121–131.

*Kim, E., Cain, K.C., & Webster-Stratton, C. (2008). The preliminary effect of a parenting program for Korean American mothers: A randomized controlled experimental study. *International Journal of Nursing Studies, 45*(9), 1261–1273.

Kumpfer, K. L., Alvarado, R., Smith, P., & Bellamy, N. (2002). Cultural sensitivity and adaptation in family-based prevention interventions. *Prevention Science, 3*(3), 241–246.

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a. the remix. *Harvard Educational Review*, 84(1), 74–84.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal, 32*(3), 465–491.

*Lau, A. S., Fung, J. J., Ho, L. Y., Liu, L. L., Gudiño, O. G. (2011). Parent training with high-risk immigrant Chinese families: A pilot group randomized trial yielding practice-based evidence. *Behavior Therapy, 42*(3), 413–426. doi:10.1016/j.beth.2010.11.001

*Larrotta, C., & Gainer, J. (2008). Text matters: Mexican immigrant parents reading their world. *Multicultural Education, 16*(2), 45–48.

*Larrotta, C., Yamamura, E. K. (2011). A community cultural wealth approach to Latina/Latino parent involvement: The promise of family literacy. *Adult Basic Education and Literacy Journal, 5*(2), 74–83.

*Leyva, D., & Skorb, L. (2017). Food for thought: Family food routines and literacy in Latino kindergarteners. *Journal of Applied Developmental Psychology, 52,* 80–90. doi:10.1016/j.appdev.2017.07.001

*Lockard, L. (1999). Navajo Language and culture in adult education. *New Directions for Adult and Continuing Education, 82,* 67–78. doi:10.1002/ace.8205

Manz, P. H., Hughes, C., Barnabas, E., Bracaliello, C., & Ginsburg-Block, M. (2010). A descriptive review and meta-analysis of family-based emergent literacy interventions: To what extent is the research applicable to low-income, ethnic-minority or linguistically-diverse young children? *Early Childhood Research Quarterly, 25*(4), 409–431.

Mapp, K. L. (2012). *Title I and parent involvement: Lessons from the past, recommendations for the future.* Retrieved from http://www.americanprogress.org/issues/issues/2012/03/pdf/titleI_parental_invovlement.pdf

Mapp, K. L., & Kuttner, P. J. (2013). *Partners in education: A dual capacity-building framework for family–school partnerships.* Austin, TX: SEDL & U.S. Department of Education. Retrieved from http://www2.ed.gov/documents/family-community/partners-education.pdf

*McCabe, K., & Yeh, M. (2009). Parent-child interaction therapy for Mexican Americans: A randomized clinical trial. *Journal of Clinical Child & Adolescent Psychology, 38,* 753-759. doi:10.1080/15374410903103544

*McCabe, K. M., Yeh, M., Garland, A. F., Lau, A. S., & Chavez, G. (2005). The GANA Program: A tailoring approach to adapting Parent Child Interaction Therapy for MAs. *Education and Treatment of Children, 28*(2), 111–129.

McCarty, T., & Lee, T. (2014). Critical culturally sustaining/revitalizing pedagogy and Indigenous education sovereignty. *Harvard Educational Review, 84*(1), 101–124.

*McCollough, C., & Ramirez, O. (2010). Connecting math and science to home, school and community through pre-service teacher education. *Academic Leadership, 8*(2), 1–14.

Morrison, K. A., Robbins, H. H., & Rose, D. G. (2008). Operationalizing culturally relevant pedagogy: A synthesis of classroom-based research. *Equity & Excellence in Education, 41*, 433–452. doi:10.1080/10665680802400006

*Morrow, L. M., & Young, J. (1997). A family literacy program connecting school and home: Effects on attitude, motivation, and literacy achievement. *Journal of Educational Psychology, 89*(4), 736–742.

Nah, K. (1993). Perceived problems and service delivery for Korean immigrants. *Social Work, 38*(3), 289–296.

Nahm, E.Y. (2006). *A cross-cultural comparison of Korean American and European American parental meta-emotion philosophy and its relationship to parent–child interaction.* Doctoral dissertation, University of Washington, Seattle, unpublished.

NAEYC. (2011). *Code of ethical conduction and statement of commitment.* Retrieved from https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/Ethics%20Position%20Statement2011_09202013update.pdf

*Parra-Cardona, J. R., Domenech Rodríguez, M. M., Forgatch, M. S., Sullivan, C., Bybee, D., Holtrop, K., . . . Bernal, G. (2012). Culturally adapting an evidence-based parenting intervention for Latino immigrants: The need to integrate fidelity and cultural relevance. *Family Process, 51*(1), 56–72.

*Parra-Cardona, J. R., López-Zerón, G., Domenech Rodríguez, M., Escobar-Chew, A. R., Whitehead, M., Sullivan, C., & Bernal, G. (2015). A balancing act: Integrating evidence-based knowledge and cultural relevance in a program of prevention research with Latino/a immigrants. *Family Process, 55*(2), 321–337. doi:10.1111/famp.12190

*Parra-Cardona, J. R., López-Zerón, G., Villa, M., Zamudio, E., Escobar-Chew, A. R., Rodríguez, M. M. (2017). Enhancing parenting practices with Latino/a immigrants: Integrating evidence-based knowledge and culture according to the voices of Latino/a parents. *Clinical Social Work Journal, 45*(1), 88–98. doi:10.1007/s10615-016-0589-y

*Ramirez, O., McCollough, C. A., & Diaz, Z. (2016). Creating a model of acceptance: Preservice teachers interact with non-English-speaking Latino parents using

culturally relevant mathematics and science activities at family learning events. *School Science and Mathematics, 116*(1), 43–54.

Resnicow, K., Baranowski, T., Ahluwalia, J. S., & Braithwaite, R. L. (1999). Cultural sensitivity in public health: Defined and demystified. *Ethnicity & Disease*, *9*(1), 10–21.

*Saracho, O. N. (2010). A culturally responsive literacy program for Hispanic fathers and their children. *Journal of Hispanic Higher Education, 9*(4), 281–293. doi:10.1177/1538192710374234

Sleeter, C. (2012). Confronting the marginalization of culturally responsive pedagogy. *Urban Education, 47*, 562–584. doi:10.1177/0042085911431472

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, *8*(1), 45–55.

Thomas, J., Harden, A., & Newman, M. (2012). Synthesis: Combining results systematically and appropriately. In D. Gough, S. Oliver, & J. Thomas (Eds.), *An introduction to systematic reviews* (pp. 179–226). Los Angeles, CA: Sage.

van Mourik, K., Crone, M. R., De Wolff, M. S., & Reis, R. (2017). Parent training programs for ethnic minorities: A meta-analysis of adaptations and effect. *Prevention Science, 18*(1), 95–105.

Table 2.1

Culturally Responsive Teaching (CResT) Program Features and Connection to Outcomes across Domains

First author	Description of article	CResT tenets	CResT program features		Connections to outcomes
			Design	Implementation	
CResT in language and literacy					
Jiménez (2006)	Study of shared reading program designed to train 16 low-income Latino families in six shared reading strategies: making connections with books, praising and encouraging child's responses, asking quality questions, expanding child's responses, making predictions, and introducing new vocabulary.	BH&C AKAD HE&S CNP	*Persons:* graduate and undergraduate bilingual researchers *Location:* families' homes or local public library	*Program activities:* explanation of strategy; provided with examples of strategy use; support for questions between sessions *Program materials:* families given materials in their preferred language; calendar to track reading handout explaining reading strategies; a bilingual book *Homework:* assignments between sessions; parents given some choice in books to read	Observations revealed parents increased their total reading strategy use and their use of connection, prediction, and quality questions at posttest. No changes in encouragement and praise, expanding children' response, or building vocabulary. Parents also took more turns during reading interactions with their child. Children took significantly more turns, and increased their length of turns, total number of different words and total number of words.
Larrotta (2008); Larrotta (2011)	Study of after-school literacy program for Latin@ ESL immigrant families designed to help parents share experience with school and in life and learn literacy skills.	BH&C* TWF* AKAD HE&S* R&LS* CNP	*Persons:* bilingual facilitator, school administrator, and certified teacher *Content:* familiarize immigrant parents with the educational system; allow mothers to share life histories and experiences to increase social capital	*Program materials:* fiction, nonfiction, and poetry readings that resonated with immigrant families *Program activities:* discussions; parents built a conceptual map/graphic organizer poster to present to parenting group; practiced reading comprehension strategies in groups, pairs, and with child; reflections *Homework:* given assignments	Mothers reported improvements in their communication skills and relationship with children. Mothers also built social capital and shared information about school resources. Books elicited memories of parents' experiences as immigrants, which parents shared with children.

Table 2.1 *(continued)*

First author	Description of article	CResT tenets	CResT program features		Connections to outcomes
			Design	Implementation	
Leyva (2017)	Study of family program that helped 68 Latino families learn to use food routines to support language and literacy development.	BH&C* TWF* AKAD* HE&S* R&LS* CNP	*Content:* Latino families place a high value on narratives *Persons:* conducted sessions in Spanish; led by bilingual facilitators, some Latina *Context:* authentic function of written language contrasts the ways literacy is taught in many Latin American countries	*Program topics:* teach strategies to promote literacy within authentic reading and writing activities (e.g., menu) *Materials:* summary handout of strategies learned; text messages sent between sessions *Program activities:* conducted in Spanish; viewed video clips and received coaching; practice strategies with children and received feedback *Homework:* given weekly assignments tailored to child and family preferences	Session attendance predicted gains in children's vocabulary skills, but no statistically significant changes in children's decoding or early writing skills art posttest.
Lockard (1999)	Description of 18-week intergenerational literacy program for three Navajo families on welfare.	BH&C* TWF AKAD* HE&S R&LS CNP	*Location:* held classes in traditional Navajo structure	*Program activities:* study the Navajo writing system; write and illustrate books for children in Navajo; discuss family values and importance of Navajo teaching; make and sell jewelry; loom weaving	Program adult educator reported that parents felt successful in their ability to share literacy skills with their children.

Table 2.1 *(continued)*

First author	Description of article	CResT tenets	CResT program features		Connections to outcomes
			Design	Implementation	
Morrow (1997)	Experimental study of family literacy program designed to build home-school collaborations and motivate children to read and write voluntarily for pleasure using a sample of 56 "at risk" African American and Latino families.	TWF HE&S CNP	*Content*: storytelling is passed down through oral tradition; parent interviews revealed that parents wanted to know how to help their children succeed in school	*Program activities:* modeled activities; attend one-on-one meeting with program mentor; attended monthly sessions *At-home materials*: *Highlights* magazines; storyboards; felt story characters; notebooks; parent handbook; roll of paper *Homework:* read to and with child often; tell/write stories on topics of families' choosing; write in journal; discuss readings; point out print	Children in the experimental group had higher retelling, story rewriting, and recall scores. No difference in basic skills as compared to control group. Teacher rated experimental children as having better reading and writing abilities. Experimental families reported reading and writing more often with children than control families. Families who attended the program reported being more patient with child and enjoyed helping children.
Saracho (2010)	Study to support 20 Hispanic fathers better understand their children's literacy development.	BH&C* TWF* AKAD* HE&S* R&LS CNP	*Context*: integrate home and school literacy strategies *Persons*: teachers learned how to use Hispanic children's language and culture to promote literacy skills	*Program activities:* learning how to select books from different genres, taught literacy strategies and related them to family/community; creating literacy activities; fathers presented literacy activities they created for their children based on program strategies *Program materials:* visual stimulation (e.g., photos), print materials (e.g., newspapers), and library materials (children's books) *Homework:* discuss books; record read books in journal; encourage children to read more books	Fathers successfully implemented strategies learned in the sessions, and modified them to fit their families' interests and language. Children learned the relationship between oral and written language through writing stories with their father.

Table 2.1 *(continued)*

First author	Description of article	CResT tenets	CResT program features: Design	CResT program features: Implementation	Connection to outcomes
CResT in math and science					
Gear (2012)	Description of Kindergarten classroom-based early math family sessions that incorporate aspects of Haida culture.	BH&C* AKAD*	*Discourse:* acknowledge that meetings are held on traditional Haida territory; used a story that referenced respect, responsibility, reverence, or responsibility to introduce each session's theme	*Program activities:* parent discussions of problem solving; parents and children work together; traditional cedar weaving taught by community weavers; make patterned headbands; sort rocks *Program materials:* manipulatives from the beach, such as shells, rocks, and eagle feathers; cedar strands	Participating family members were excited to learn new skills and share their knowledge with other members of their family.
McCollough (2010); Ramirez (2016)	Case studies of school-based family math and science events for K-12 Hispanic families developed by preservice teachers.	BH&C* TWF AKAD* R&LS	*Content:* Researched the history of a culturally relevant math or science topic *Persons:* Discussed culturally relevant math and science and parent involvement with preservice teaching peers	*Program topics:* diabetes; Mexican embroidery; agricultural crops; Latino games; Latino social events *Program activities:* parents accompanied students from station to station to complete; created a budget for a *Quinceañera*; researched embroidered designs; determine clay vs. other sediment; identify healthy alternatives to favorite foods. *Program materials:* inexpensive and common household items (e.g., paper cups, inexpensive grocery items); take-home pamphlets describing activities	Interviews revealed that participating children were excited to learn about math and science and spend time with their family. Parents appreciated that exhibit posters were written in Spanish and English. Parents also enjoyed spending time with their students in a school setting.

Table 2.1 *(continued)*

First author	Description of article	CResT tenets	CResT program features: Design	CResT program features: Implementation	Connection to outcomes
CResT in social and behavioral learning					
Barrera (2002)	Experimental study of *Incredible Years* parenting program and supplemental reading instruction with 284 Hispanic (59%) and non-Hispanic parents whose children had aggressive behaviors and reading difficulties. Parents learned strategies to manage child's disruptive behaviors (e.g., praise, limit setting, consequences). Children received supplemental classroom reading instruction (e.g., blending).	BH&S TWF HE&S	*Persons:* Trained bilingual-bicultural Persons	*Program activities:* watched videotaped vignettes, discussions, role-plays *Program materials:* created Spanish-language intervention materials. *Homework:* weekly assignments to practice new skills *Program assessments:* translated assessment measures	Program had significant impact on three outcomes in favor of intervention group: end-of-program observations of child negative social behaviors, teacher reports of internalizing behaviors at one-year follow up (significant for non-Hispanic children only), and parent reports of antisocial behavior at year follow up.
Coard (2007)	Experimental study of culturally based adaptation of the *Parenting the Strong-Willed Child* program designed to improve parents' understanding of social and emotional development in African American (AA) children, promote positive parent-child discussions about racial issues, and enhance children's problem-solving skills in a sample of 30 low AA caregivers.	BH&C* TWF* AKAD* HE&S* R&LS* CNP	*Content:* Informed in part by qualitative interviews with AA families *Persons:* Trained in developmental and parenting issues of AA children; AA women facilitators. *Metaphors:* Used AA language expression and African proverbs; emphasis on values of responsibility and interdependence.	*Program activities:* some discussions of challenges for AA children (e.g., promoting achievement despite issues of curriculum bias); reflect on experience as AA people separate from parenting; role-plays; weekly activities and stories. *Homework:* activity assignments	Treatment families reported increase in positive parenting, experiences of racial socialization, and decrease in harsh discipline. Parents reported children to have decrease in externalizing behavior, reduction in cooperation, and increase in responsibility.

Table 2.1 *(continued)*

First author	Description of article	CResT tenets	CResT program features		Connection to outcomes
			Design	Implementation	
Kim (2014)	Experimental study of 48 Korean American immigrant mothers enrolled in parent training program helped to understand the impact of dual cultures, build parent-child intimacy, and learn effective discipline strategies on parenting practices, child behavior problems, and parent-child conflict.	BH&C TWF AKAD HE&S R&LS	*Persons:* Two bilingual and bicultural interventionists; conducted sessions in English or Korean (depending on families' preference) *Location:* program held at Korean American church	*Program topics:* One session (out of 12) on impact of dual cultures, Christian parenting practices, and Korean parenting virtues *Program activities:* Discussions of parenting principles and role-play *Homework:* assignments between sessions	Mother self-reported increased use of effective parenting practices (e.g., warmth, emotional coaching). Observations showed intervention mothers with increase positive praise. Teachers reported decrease in child behavior problems, children reported fewer conflicts.
Kim (2008)	Experimental study of culturally adapted *Incredible Years* parenting program designed to show parents how to praise effectively, play with child, and manage misbehaviors. Tested whether program increased positive discipline and decreased problem behaviors in a sample of 29 Korean American (KA) immigrant families.	TWF HE&S	*Persons:* Sessions co-lead by study author and community member (i.e., KA community counselor, KA translator)	*Program activities:* discuss concepts and vignettes; answer questions, role- plays. *Program materials:* translated English vignettes into Korean; delivered program in Korean *Homework*: assignments between sessions	Parents reported more positive discipline. No group differences in parent reported appropriate discipline, harsh discipline, or parent reported child problem behaviors or social competence.

Table 2.1 *(continued)*

First author	Description of the article	CResT tenets	CResT program features		Connection to outcomes
			Design	Implementation	
Lau (2011)	Experimental study of adaptation of *Incredible Years* program to address child behavior problems, decrease parenting stress, and increase parent acculturation in a sample of 54 immigrant Chinese American families.	BH&C* TWF HE&S	*Persons:* bicultural, bilingual Chinese Americans	*Program activities:* included training to address conflict common in immigrant families through active listening and structured family meetings; videos of parents using strategies and discussions of potential practical and cultural barriers to using skills *Program assessments:* translated assessment measures	Significant posttest differences in parent reported parent involvement, negative discipline, parent-reported child internalizing behaviors, and parent reported child externalizing behavior problems. No effects on parenting stress. Benefits held at six-month follow up.
McCabe (2009); McCabe (2005)	Experimental study comparing effects of a culturally modified version (GANA) of *Parent-Child Interaction Therapy* (PCIT) to original PCIT and control group who were assigned to a therapist in a sample of 58 Mexican American (MA) families whose children had clinical behavior problems.	BH&C* TWF AKAD* HE&S R&LS*	*Content:* initial questionnaire about beliefs, expectations, and attitudes with study families; qualitative interviews with MA parents *Persons:* informed about MA cultural norms *Goals:* provided additional time for rapport building; presented materials in ways consistent with parents' belief systems.	*Program activities:* coaching, families given verbal and written instructions, and 2 videotaped presentations of program phases *Program materials*: translated into Spanish; simplified (e.g., increase visual cues); include pictures of MA families; reviewed by an expert panel of therapists	GANA and PCIT parents reported having significantly less externalizing problems and parent stress than control. Observations showed GANA and PCIT parents with higher labeled praise and lower criticism than control. GANA and PCIT parents reported greater program satisfaction than control. No between-group differences for any outcome.

Table 2.1 *(continued)*

First author	Description of article	CResT tenets	CResT program features		Connections to outcomes
			Design	Implementation	
Parra-Cardona (2012); Domenech Rodríguez (2011)	Mixed-method study of two cultural adaptations of the *Parent Management Training, the Oregon Model* program (PMTO; translation only vs. translation and culture-specific sessions) to promote children's prosocial development, positive parents in supervision strategies and involvement in a sample of 12 low-income Latino immigrant families with children who have mild to moderate behavior problems.	BH&C* TWF* AKAD* HE&S R&LS	*Content:* interviews with Latino immigrant families; meetings with community leaders; inclusion of cultural expressions in role-play scripts *Persons:* researcher and mental health clinician *Location:* trusted local community religious organization	*Program topics:* two sessions (out of 12) on being a Latino immigrant parent and parenting between two cultures. *Program materials:* translated in to Spanish *Program activities:* role-plays; reflections on cultural relevance of program sessions; Persons shared immigration resources	Parent reports satisfaction overall significant in favor of culture-specific group, no difference in satisfaction of specific sessions. Parent reported perceptions of usefulness of assignments, improvements in child behavior, but two programs not significantly different. Interviews with parent in culture-specific program show parent desire to spend more time in aspects of biculturalism and strategies to help children as Latin@ in American culture.
Parra-Cardona (2015); Parra-Cardona (2017)	Interviews of the experience of 103 Lain@ immigrant families participating in training program to promote prosocial development and positive parent involvement. Study assigned families to one of three conditions: a language translation of PMTO, language translation of PMTO and culture-specific (CS) sessions, and a control group.				No difference between session satisfaction of PMTO translated and PMTO CS families; Many families described session strategies as useful and expressed that using role-plays help them to gain empathy for their children and reflect on their parenting practices. PMTO CS families raised challenges about being first-generation immigrants, adopting cultural traditions different from their own, and the importance of helping children navigate two cultures.

Note. An asterisk (*) indicates consistent consideration for the CResT tenet. BH&C = bridging home and context; TWF = teaching the whole family; AKAD = applying knowledge across domains; HE&S = high expectations and support; R&LS = recognize and leverage strengths; CNP = critique normative practices. Four articles reported on the same culturally adapted program (Parra-Cardona et al., 2012; Parra-Cardona et al. 2015; Parra-Cardona et al. 2017; Domenech Rodríguez (2011).

Table 2.2

Coding for Reviewed Family Engagement and Parent Training Articles in Language and Literacy

Tenet of CResT	Jiménez (2006)	Larrotta (2008); Larrotta (2011)	Leyva (2017)	Lockard (1999)	Morrow (1997)	Saracho (2010)	Total (%) 0	1	2
1. Bridging home and context	1	2	2	2	0	2	17	17	66
2. Teaching the whole family	0	2	2	1	1	2	17	33	50
3. Applying knowledge across domains	1	1	2	2	0	2	17	33	50
4. High expectations and support	1	2	2	1	1	2	0	50	50
5. Recognize and leverage strengths	0	2	2	1	0	1	33	33	33
6. Critique normative practices	1	1	1	1	1	1	0	100	0

Note. The last three columns in this table indicate the percent of articles that received a score of 0 (no evidence), 1 (some evidence), or 2 (consistent evidence) for each tenet of CResT. In calculating percentages, I counted explanatory and empirical articles describing the same program as one article.

Table 2.3

Coding for Reviewed Family Engagement and Parent Training Articles in Math and Science

Tenet of CResT	Gear (2012)	McCollough (2010); Ramirez (2016)	Total (%) 0	1	2
1. Bridging home and context	2	2	0	0	100
2. Teaching the whole family	0	1	50	50	0
3. Applying knowledge across domains	2	2	0	0	100
4. High expectations and support	0	0	100	0	0
5. Recognize and leverage strengths	0	1	50	50	0
6. Critique normative practices	0	0	100	0	0

Note. The last three columns in this table indicate the percent of articles that received a score of 0 (no evidence), 1 (some evidence), or 2 (consistent evidence) for each tenet of CResT. In calculating percentages, I counted explanatory and empirical articles describing the same program as one article.

Table 2.4

Coding for Reviewed Family Engagement and Parent Training Articles in Social and Behavioral Learning

Tenet of CResT	Barrera (2002)	Coard (2007)	Kim (2014)	Kim (2008)	Lau (2011)	McCabe (2009); McCabe (2005)	Parra-Cardona (2012); Domenech Rodríguez (2011); Parra-Cardona (2015); Parra-Cardona (2017)	Total (%)		
								0	1	2
1. Bridging home and context	1	2	1	0	2	2	2	14	29	57
2. Teaching the whole family	1	2	1	1	1	1	2	0	71	29
3. Applying knowledge across domains	0	2	1	0	0	2	2	43	14	43
4. High expectations and support	1	2	1	1	1	1	1	0	86	14
5. Recognize and leverage strengths	0	2	1	0	0	2	1	43	29	29
6. Critique normative practices	0	1	0	0	0	0	0	86	14	0

Note. The last three columns in this table indicate the percent of articles that received a score of 0 (no evidence), 1 (some evidence), or 2 (consistent evidence) for each tenet of CResT. In calculating percentages, I counted explanatory and empirical articles describing the same program as one article.

CONCLUSION: DISCUSSION ACROSS PAPERS

In this dissertation I sought to gain further insight into the development, implementation, and evaluation of culturally responsive family engagement initiatives that support young children's academic and prosocial development. The objective of the first study was to understand the effectiveness of a series of literacy workshops I designed and hosted for low-income African American families. Learning about the ways in which programs that aim to be culturally responsive take up families' cultural background to support learning was the main objective of the second study.

My dissertation studies used two complementary methods, a randomized controlled trial design and a systematic research synthesis, to understand how programs can leverage the cultural attributes of racially/ethnically minoritized families within activities designed to improve child learning. This work highlights the importance of attending to families' cultural backgrounds to improve child academic and prosocial development, incorporating various aspects of families' lived experience (e.g., cultural knowledge, funds of knowledge) across multiple features of programming, and considering how existing family educational and parent training programs can be enhanced in ways that include families who are often missed by traditional family engagement efforts.

Strengths from and Reflections on Utilizing an Experimental Approach

In the first study, I randomly chose families to either receive an invitation to participate in the workshop series or not. This randomization increased the likelihood that

families in each condition were equal on individual characteristics (e.g., familial education background, home literacy environment), which is an advantage over quasi-experimental design, in which it is more difficult to establish group equality (Vellutino & Schatschneider, 2011). In other words, all factors among the sampled control and experimental families could be equally distributed as a result of randomization, thus reducing the need for statistical controls or matching. In my sample, even with large rates of attrition, I established baseline equivalence on most caregiver and child pre-workshop scores.

The fundamental assumption of using an experimental approach in this study is that no other possible explanations account for differences in caregiver and child outcomes after the workshop series ended outside of families' random assignment to the treatment or control groups. The control group served as a sort of hypothetical counterfactual group, which approximates what would have happened if the workshop series did not take place. An ethical dilemma of experimental designs is providing some families with a service, in this case the invitation to participate in the workshop series, simply based on their random assignment to a treatment or control group (Mertens, 2010). In my study, I opted to provide families in the control group with a set of books from a series with an African American protagonist so that all study families would potentially benefit from participation in the study. It is possible that including a control group that did not receive books could have resulted in a different set of findings. Staff and time precluded a waitlist-control group design, in which control group families are offered the workshop series at the conclusion of the study (instead of receiving books).

Such a modification would allow for attention to equity without the potential concern of book provisions.

As I consider ways to improve the study design and the workshop series to support a broader range of African American families, I see value in employing a mixed-method design in future iterations of this work. Including a qualitative component to the study in which families share their perspectives on the workshop series could provide insights into how families are experiencing the workshops. Perhaps families' descriptions of the ways in which the program attended to (or failed to attend to) their cultural knowledge, experiences, beliefs, and values during the early sessions could inform modifications to subsequent sessions.

Strengths from and Reflections on a Qualitative Synthesis Approach

The second dissertation study included a sample of systematically gathered research articles published in peer-reviewed journals that described family engagement programs aiming to be culturally responsive. I relied on these descriptions of existing programs to determine how attending to families' cultural backgrounds is taken up in practice and to examine the degree to which the use of culturally responsive family engagement has been shown to be a beneficial way to reach families who are often unsuccessfully reached through traditional involvement efforts, including racially/ethnically minoritized families, families for whom English is not their first language, and families from low-income communities. Through this method, I captured just how heterogeneous existing culturally responsive approaches to family engagement are in service of informing decisions about subsequent programming. As such, I provided a more comprehensive and clearer picture of culturally responsive family engagement

across many studies, which cannot be captured in a single study (Gough, Oliver, & Thomas, 2012). In addition, a narrative synthesis allows for these approaches to cultural responsiveness to be in conversation with each other, examining the similarities and differences in design and implementation.

Implications for Program Development

Utilizing these methodologies allowed me to answer research questions regarding the engagement of families from particular cultural groups. In addition, through conducting Study 2 I noticed previously unrecognized similarities and differences between my culturally responsive workshop series in Study 1 and other culturally responsive family engagement initiatives. As a result, there are findings from Study 2 that can inform future iterations of the family literacy workshop series I designed in Study 1. For example, given the finding in Study 2 that literacy and language interventions tend not to allow families to consider critical consciousness beyond allowing families to personalize the texts they use with their children, I could include texts that encourage families to discuss issues of fairness and equity (i.e., critical literacy) using the research-informed literacy strategies. In addition, to ensure that the literacy workshop series is attending to families' needs, some of which may be unique to African American families (e.g., African American males are often dismissed from classroom for behavior problems), I can allot time to provide families an opportunity to share their personal anecdotes, provide strategies for discussing these issues with their child's school/teacher, and highlight texts featuring African American families and themes that include these topics in developmentally appropriate ways.

Investigating programs that target families from specific cultural backgrounds can help in identifying which aspects of families' cultural knowledge and experiences may be capitalized upon to support them in helping their children. Fortunately, when developing future programs schools can learn about and capitalize on families' cultural backgrounds to improve the recruitment and retention of families that are often missed. Schools can learn a great deal by participating in home visits and/or interviewing families to learn about their funds of knowledge and needs (Hensley, 2005). This would also allow them to learn about the ways in which families already engage in activities or practices that support their child's academic and social development. Once schools have an idea of families' strengths and existing practices, they could consider partnering with families to develop aspects of the program that attend to families' cultural background. Families may be more open to sharing aspects of their cultural background and experiences once they perceive that schools are interested in their (and their child's) general well-being and learning. Perhaps, this could redistribute the power base to one in which families are viewed as equal partners in making decisions about family engagement programs (Mapp & Hong, 2010).

Developing my own workshop series and reviewing programs in article 2 has provided me with a better understanding of potential features of responsive programs and has reiterated for me that the goal of family engagement initiatives should be to design inclusive programming that includes content that reflects children and families from the particular cultural backgrounds the program seeks to support. If seeking to develop richer vocabulary knowledge and comprehension skills, what are the existing ways in which families are already supporting these skills, and which relevant experiences can be

included within family engagement programs for harder-to-reach families? These programs can communicate to families that their ways of being and knowing are valued in the schooling context and school family engagement programs both capitalize on families' cultural values and provide opportunities for families to transmit cultural knowledge and academic skills to their children in new ways. Such programs are moving toward *sustaining* families' cultural knowledge (Alim & Paris, 2017; Ladson-Billings, 2014; Paris, 2012). Families can ground their children in their own cultural knowledge *while* gaining access to the broader school culture. As a result, programs have the potential to build community among schools and families, which can serve as a reminder that it takes a village to raise a child.

References

Alim, H. S. & Paris, D. (2017). What is culturally sustaining pedagogy and why does it matter? In D. Paris, & H. S. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 1–21). New York, NY: Teachers College.

Gough, D., Oliver, S., & Thomas, J. (2012). Introducing systematic reviews. In D. Gough, S. Oliver, & J. Thomas (Eds.), *An introduction to systematic reviews* (1–16). Los Angeles, CA: Sage.

Hensley, M. (2005). Empowering parents of multicultural backgrounds. In N. Gonzáles, L. C. Moll, & C. Amanti (Eds.), *Funds of knowledge: Theorizing practices in households, communities, and classrooms* (pp. 143–151). Mahwah, NJ: Lawrence Erlbaum.

Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: A.k.a the remix. *Harvard Educational Review, 84*(1), 74–84.

Mapp, K. L. & Hong, S. (2010). Debunking the myth of the hard-to-reach parent. In S. L. Christenson, & A. L. Reschly (Eds.), *Handbook of school-family partnerships* (pp. 345–361). New York, NY: Routledge.

Mertens, D. M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (3rd ed.). Los Angeles, CA: Sage.

Paris, D. (2012). Culturally sustaining pedagogy: A needed change in stance, terminology, and practice. *Educational Researcher, 41*(3), 93–97.

Vellutino, F. R., & Schatschneider, C. (2011). Experimental and quasi-experimental design. In N. K. Duke & M. H. Mallette (Eds.), *Literacy research methodologies* (2nd ed., pp. 155–187). New York, NY: Guilford.

APPENDICES

Appendix A: List of Literacy Constructs and Strategies

A. Letter-sound knowledge (all explicit teaching)
    1. Short vowels
    2. CVCe words
    3. Consonant digraphs
    4. Consonant blends
    5. Vowel digraphs
B. Word reading (all cueing and prompting)
    1. Biographies
    2. Menu reading
    3. How-to-texts
    4. Environmental print
    5. Informational texts
C. Vocabulary (explicit teaching of context clues)
    1. Picture
    2. Definition
    3. Synonym
    4. Antonym
    5. Synonym/antonym
D. Comprehension
    1. Developing and answering questions
    2. Visualizing
    3. Developing and answering questions
    4. Visualizing
    5. Developing and answering questions
E. Writing—supporting and providing opportunities for composition
    1. Interview questions
    2. Recipes
    3. Invitations
    4. Letters
    5. Directions
F. Digital and print reading volume
    1. Volume reading of biographies from websites and books
    2. Volume reading of blurbs about popular TV and video game characters
    3. Volume reading of books on topics of high interest
    4. Volume reading of music lyrics while listening to music
    5. Volume reading of books from a series

Appendix B: Sample Workshop Agenda and Activity Directions

Agenda

11:00-11:30am: Registration and Lunch

11:30-11:50am: Welcome and Workshop Overview

- Session Introduction
- Explanation of Activities

11:50-12:50pm: Collaborative Group Activities (~10 minutes/session)

Center A: **Letters and Sounds**

Find that Sound!: Find words that have the *ch*, *sh*, or *wh* letter-sound relationships in local coupons and circulars.

Center B: **Word Reading**

Who are You?: Read biographies of African American men and women and draw pictures.

Center C: **Vocabulary**

Flip It! Matching Game: Play the board game to learn about words that have different meanings.

Center D: **Comprehension**

Review that Movie: Read short reviews of movies and think of three things you want to know about the plot.

Center E: **Writing**

Wacky Directions: Write directions from your house to school or another place and make your own map.

Center F: **Reading More**

Famous Figure Matching: Play a matching game online and talk about famous African Americans throughout history.

12:50pm-1:00pm: Wrap Up and Closing

Activity Directions

Letters and Sounds: Find that Sound!

Activity goal: Help your child read words that have a group of letters that make one sound.

1. Choose two letter-sound relationships, *ch*, *sh*, or *wh* that you want to teach your child.
2. Use the pictures to explain that some groups of letters make only one sound.
3. After your child says the sounds, share how the pictures can help him/her remember.
4. Search for words that have the letter-sound relationships in newspapers and circulars and highlight (or circle) the letter-sound relationships.

Word Reading: Who Are You?

Activity goal: Teach your child strategies to use when they get to a word that they do not know how to read.

1. With your child read 2-3 biographies of famous African Americans.
2. Choose 2-3 words for your child to read and help with sound the words out using your bookmark.
3. With your child, come up with a statement about the person and draw a picture.

Vocabulary: Flip It! Matching Game

Activity goal: Show how sentence clues can help to figure words your child might not know. Remind your child that sentence clues can help us figure out words we may not know.

1. Tell your child that an antonym is a word that means the opposite of another word.
2. Read your child the sentences and ask what s/he thinks the target word means.
3. Use the lifelines to help your child figure out the meaning of the new word.
4. Check your child's understanding of the word by comparing it to the word meaning.

Comprehension: Review that Movie

Activity goal: Show how pausing & asking questions can help us read and understand better.

1. Remind your child that asking questions can help us better understand what we are reading. You and your child will read blurbs about three movies.
2. After reading all 3 descriptions, ask your child to come up with 3 questions they have about the movie they are most interested in seeing.
3. Go online to watch trailers of the movie and see if his/her questions are answered.

Writing: Wacky Directions

Activity goal: Help your child develop his/her writing ability, particularly writing directions.

1. You and your child will write directions from your house to a local landmark, like school or a friend's house.
2. Using the example as a guide, write 3-4 directions. You can add road signs too!
3. You can help by reminding your child of the directions and their order and providing feedback on his/her writing.

Reading More: Famous Figure Matching

Activity goal: Play games with your child that require some reading.

1. Play the game *Find the Face* with your child on the computer.
2. Share other facts that's you know about the famous African American figures with your child.

Appendix C: Random Assignment of Families to Conditions

As shown in Table 1.1 of the manuscript, there are slightly more treatment-children than control-group children in the sample. This is mainly due to an odd number of families with first-grade children ($n_{girls} = 7$, $n_{boys} = 7$) and second-grade girls ($N = 13$) in Site Two who enrolled in the study. In addition, there were more first-grade boys in the treatment/workshop group in Site One and more second-grade boys in the workshop group in Site Two. Several factors resulted in slightly more treatment/workshop than control boys. All three children who were excluded from the study were first-grade boys from Site One assigned to the control group. School records indicated that a Site Two second-grade boy was a girl, thus he was randomized to the workshop group as a second-grade girl, rather than to the control condition as a second-grade boy. He remained in the workshop condition as a second-grade boy. There was a set of second-grade twin boys in Site Two that were both randomized to the workshop group because they shared a caregiver.

Importantly, there were no differences between the treatment and control sample on pre-workshop measures (described in more detail in the Method section of Chapter 1). In short, random assignment appears to have been successful. Figures C.1 and C.2 provide a flow of adult primary caregivers and children through each stage of the study.

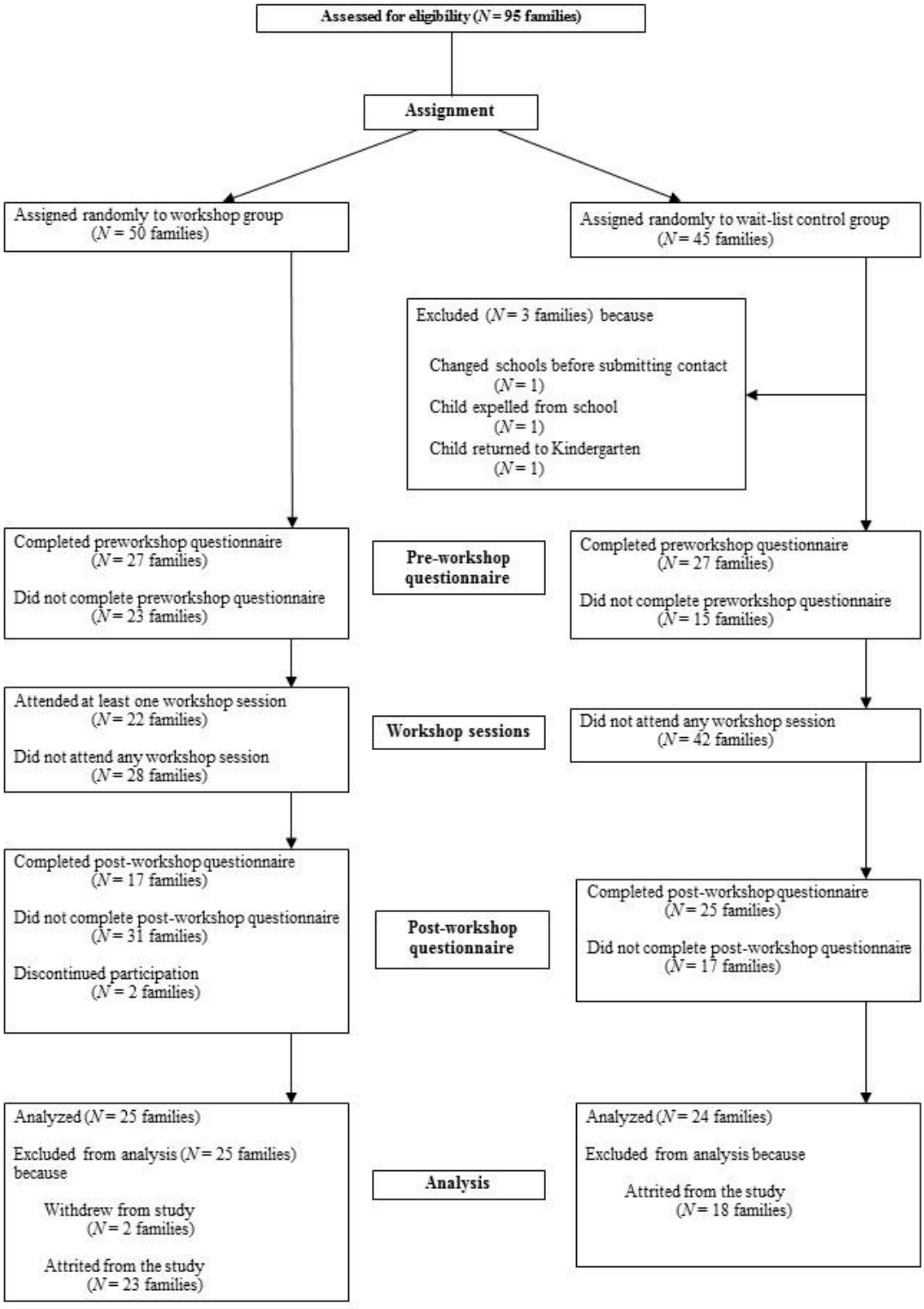

Figure C.1. Flow of caregivers/families through each stage of the experiment.

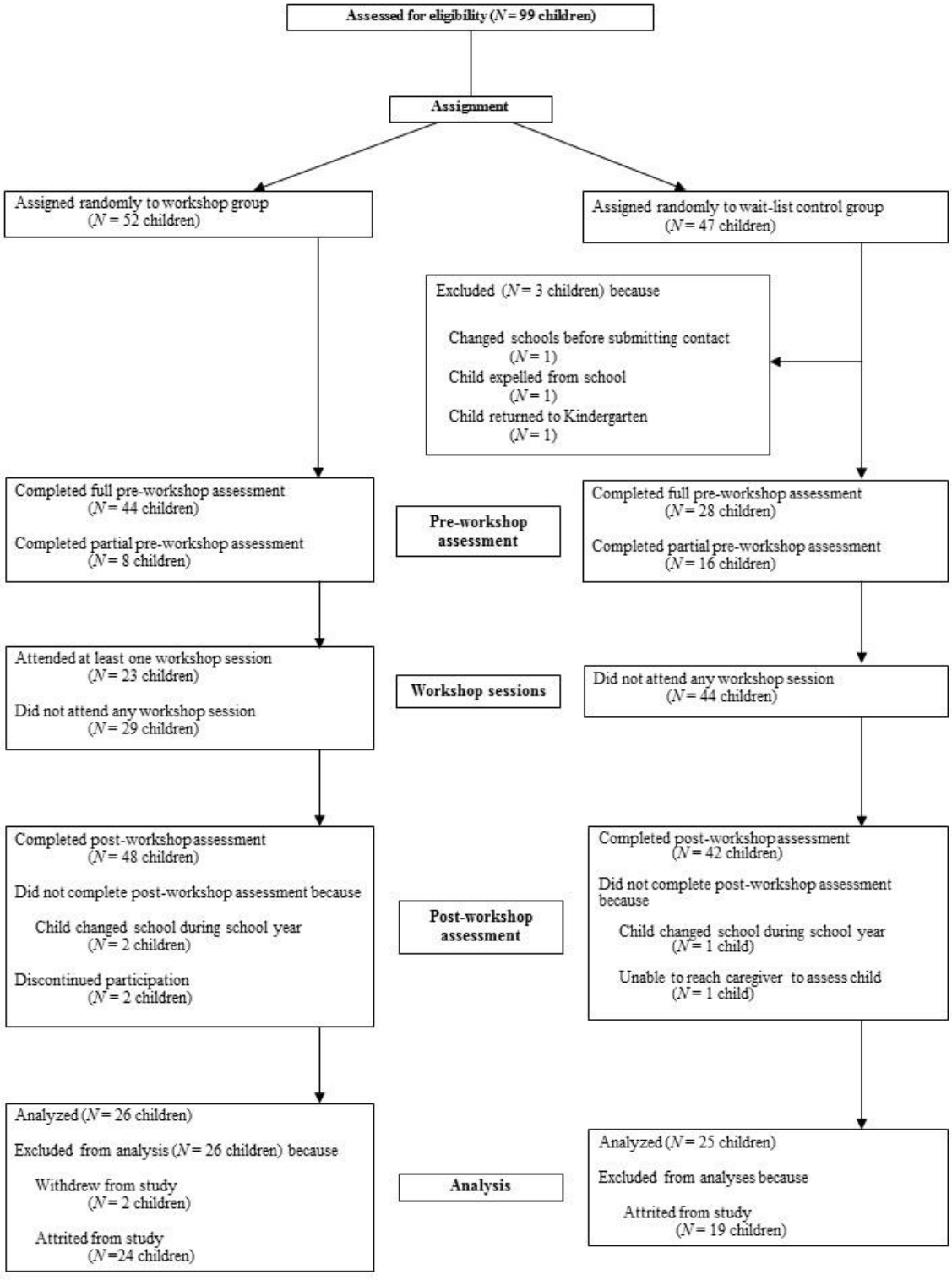

Figure C.2. Flow of children through each stage of the experiment.

Appendix D: Session Text Messages

Families randomly assigned to the workshop group in Site Two received three text messages a week for the duration of the study. Adapted from the READY4K! program approach to text messaging (York & Loeb, 2014), workshop families received three different types of text messages each week over the course of the five-month program that 1) provided families who did not attend sessions access to strategies addressed in the workshops, and 2) provided ongoing support between workshops for families to incorporate strategies the session strategies and activities into their everyday literacy interactions with their children. On Mondays, families received a "fact" text that demonstrated to families how the session strategies and activities are related to specific literacy skills covered in the last workshop session. On Wednesdays, families received a "tip" text that reminded adult caregivers of specific strategies they could use in the moment to support literacy learning. On Fridays, families received a "growth" text that extended a strategy and provided ways to build on what was discussed during the session.

The first text message was sent in the week after the first workshop session and the final message was sent three weeks after the fifth session. Sending the additional text messages after the last workshop allowed families another additional time to incorporate the most recent session strategies and activities into their everyday routine. The following are sample text messages sent to families over a two-week period.

Letters and Sounds

- GROWTH: By sharing your child how YOU read groups of letters and their associated sounds, you are modeling how he/she can sound out new words. Choose 2-3 words while you read with your child to remind your child of the sound of *sh*, *th*, or *ch*, or the sound(s) of common pairs of vowels such as *oa*, *oi*, and *oo*.

Word Reading

- FACT: Some letters can make different sounds depending on the word they're in, which can take time for your child to learn. For example, the letter c makes the /s/ sound in the word "center" and makes the /k/ sound in the word "catch". You can help your child remember these differences by telling them to "try another sound" if the one they try first doesn't work. You can also remind your child of common sounds a letter makes as he/she tries to sound out words.

Vocabulary

- TIP: When your child comes across an unfamiliar word in books and other texts, tell your child to see if there is familiar word that might mean the same thing as the unfamiliar word to help develop vocabulary. For example, you can ask your child, "Do you hear another word that could be the same as [the unfamiliar word]?"

Comprehension

- FACT: You can use different types of questions to help your child understand what he/she is reading. For example, you can ask "who" or "what" questions to make sure your child knows the main characters and ideas. Using "how" questions can help your child connect what he/she is reading to other things he/she knows.

Writing

- TIP: Writing for a real purpose, like to convince someone to attend a party, is a great way to engage your child and help to develop his/her writing skills. Sometime this week, find a purpose for your child to write. For example, have your child write a message to a sibling or a list of things to buy on an upcoming grocery trip.

Reading Volume

- GROWTH: Your child is more likely to enjoy reading when he/she is reading things of high interest. This week, talk to your child about the topics that he/she wants to learn more about. Take a trip to the library or bookstore, or look online for books of high interest to your child that you can read together.

References

York, B. N., & Loeb, S. (2014). *One step at a time: The effects of an early literacy text messaging program for parents of preschoolers* (Working Paper No. 20659). Retrieved from National Bureau of Educational Research website: http://www.nber.org/papers/w20659

Appendix E: Missing Data Analysis

Caregivers in the non-attritor sample were missing at relatively moderate rates (18-22%) and the differences in pre-workshop missingness by treatment status were relatively small (equally likely within 4-5 percentage points to be missing for the workshop or control group, across main covariates). As shown in Table E.1, post-workshop data were missing at relatively high rates (4-22%) and the difference in post-workshop missingness by treatment status were relatively large (28-32 percentage points more likely to be missing for the workshop group, across outcomes). On both outcome measures, caregivers in the workshop group were missing statistically significantly more data that those in the control group. These differences can be attributed to how I defined an attrited family[7], which did not include workshop families who had no post-workshop data but did attend at least one workshop session.

In the non-attritor sample, I found that child pre-workshop data were missing at relatively moderate rates (4-29%) and the differences in pre-workshop missingness by treatment status were relatively large (4-44 percentage points more likely to be missing for the control group, across main covariates). There were statistically significant pre-workshop workshop-control group differences in the amount of missing data for 4 of the nine pre-workshop covariates: decoding skills, listening comprehension, vocabulary, and writing fluency. Most of these differences can be attributed to the number of children who received the full battery of assessments at pre-workshop, as it appears more pre-workshop control children who received half of the assessments attrited from the sample

[7] Attrited families included those that fit any of the following criteria: any family who returned neither the pre-workshop nor post-workshop questionnaire; workshop group families who did not return a post-workshop questionnaire and did not attend at least one workshop session; and control group families who did not return the post-workshop questionnaire.

than children in the workshop group. As shown in Table E.2, post-workshop data were missing at relatively small rates (0-4%) and the differences in post-workshop missingness by treatment status were relatively small (4 percentage points more likely to be missing for the workshop group, across outcomes).

Table E.1

Percent of Missing Data for Caregiver Scores in the Non-attritor Sample

	Pre-workshop				Post-workshop			
Caregiver outcome	Workshop	Control	Estimated difference	*p*-value	Workshop	Control	Estimated difference	*p*-value
Home literacy engagement	16.00	20.83	-4.83	.670	32.00	0.00	32.00**	.002
Self-efficacy in supporting child	24.00	21.83	3.17	.796	32.00	4.17	27.83*	.012
N caregivers	25	24			25	24		

Note. Self-efficacy in supporting child = Self-efficacy in providing reading and writing support.
* $p < .05$; ** $p < .01$

Table E.2

Percent of Missing Data for Child Scores in the Non-attritor Sample

	Pre-workshop				Post-workshop			
Child outcome	Workshop	Control	Estimated difference	*p*-value	Workshop	Control	Estimated difference	*p*-value
Literacy knowledge and skills								
Letter and word recognition	3.85	0.00	3.86	.332	3.85	0.00	3.85	.332
Decoding skills	3.85	48.00	-44.15***	.000	3.85	0.00	3.85	.332
Listening comprehension	3.85	48.00	-44.15***	.000	3.85	0.00	3.85	.332
Vocabulary	11.53	48.00	-36.46**	.004	3.85	0.00	3.85	.332
Writing fluency	0.00	16.00	-16.00*	.034	3.85	0.00	3.85	.332
Literacy attitudes and self-efficacy								
Academic reading attitudes	0.00	8.00	-8.00	.147	3.85	0.00	3.85	.332
Recreational reading attitudes	0.00	8.00	-8.00	.147	3.85	0.00	3.85	.332
Writing attitudes	0.00	8.00	-8.00	.147	3.85	0.00	3.85	.332
Reading and writing self-efficacy	3.85	12.00	-8.15	.228	3.85	0.00	3.85	.332
N children	25	26			25	26		

Note. Literacy attitudes and self-efficacy = Attitudes toward and self-efficacy in reading and writing; Literacy self-efficacy = Self-efficacy in reading and writing.
* $p < .05$; ** $p < .01$; *** $p < .001$

Appendix F: Impact of Group Assignment on Participant Outcomes without Imputation

Table F.1

Impact of Group Assignment and Session Attendance on Caregiver Outcomes (without imputation; N = 50)

	RQ 1 (ITT): Workshop group			RQ 1 (TOT): Attended 1+ sessions	
Caregiver outcome	β	*SE*	ES	Estimate	ES
Home literacy engagement	-6.50	(5.00)	-0.29	-7.74	-0.35
Self-efficacy in supporting child	1.14~	(3.52)	0.09	1.36~	0.11~

Note. Self-efficacy in supporting child = Self-efficacy in providing reading and writing support. This table shows the results from two different random-effects regression analyses, where workshop group status (workshop vs. control) was regressed onto each caregiver outcome. TOT estimates were calculated by dividing the ITT estimate by the percent of non-attriting, workshop group caregivers who attended at least one session. Models include dichotomous indicators for each randomization group (i.e., Site One second-grade boy, Site One second-grade girl), caregiver education, and caregiver age. The caregiver self-efficacy model also included caregiver's baseline self-efficacy score as a covariate. Models are also adjusted for the clustering of families within schools. Robust standard errors are in parentheses.
~ $p < .10$

Table F.2

Impact of Group Assignment on Child Outcomes and Associations between Session Attendance and Child Outcomes (without imputation; N = 50)

	RQ 1 (ITT): Workshop Group			RQ 1 (TOT): Attended 1+ sessions		RQ 2 (Dosage): Attended 3+ sessions		
Child outcome	β	*SE*	ES	Estimate	ES	β	*SE*	ES
Literacy knowledge and skills								
Letter and word recognition	0.24	(1.35)	0.01	0.29	0.01	-4.29	(3.99)	-0.21
Decoding skills	-1.82	(2.21)	-0.06	-2.25	-0.08	2.98	(5.88)	0.11
Vocabulary	0.34	(0.78)	0.02	0.42	0.02	0.69	(1.59)	0.04
Listening comprehension	1.10	(0.75)	0.29	1.36	0.36	0.33	(1.02)	0.09
Writing fluency	6.31	(5.44)	0.19	7.80	0.24	-11.12	(10.73)	-0.34
Literacy attitudes and self-efficacy								
Academic reading attitudes	1.19	(2.79)	0.08	1.47	0.09	6.91*	(3.13)	0.45*
Recreational reading attitudes	0.93	(3.16)	0.07	1.15	0.08	6.70~	(4.03)	0.48~
Writing attitudes	0.33	(5.11)	0.01	0.41	0.01	-5.60	(6.51)	-0.16
Literacy self-efficacy	-1.05	(1.69)	-0.11	-1.30	-0.14	6.56*	(3.25)	0.72*

Note. Literacy attitudes and self-efficacy = Attitudes toward and self-efficacy in reading and writing; Literacy self-efficacy = Self-efficacy in reading and writing. This table shows the results from 16 different random-effects regression analyses, where workshop group status (workshop vs. control) and workshop dosage (attended one or two sessions vs. attended three or more sessions) were regressed onto each child outcome. TOT estimates were calculated by dividing the ITT estimate by the percent of non-attriting, workshop group children who attended at least one session. Models include dichotomous indicators for each randomization group (i.e., Site One second-grade boy, Site One second-grade girl), the pre-workshop child score, the pre-workshop listening comprehension score, and child age. Models are also adjusted for the clustering of children within schools. Robust standard errors are in parentheses.
~ $p < .10$; * $p < .05$

Appendix G: Post-workshop Descriptive Statistics for the Non-attritor Sample

Table G.1

Post-workshop Descriptive Statistics for Caregivers in the Non-attritor Sample

	Workshop		Control			%
Caregiver outcome	*M*	*SD*	*M*	*SD*	*N*	missing
Home literacy engagement	57.80	9.28	61.15	12.58	41	16.33
Self-efficacy in supporting child	41.38	6.56	38.50	6.18	40	18.37
N caregivers	25		24			

Note. Self-efficacy in supporting child = Self-efficacy in providing reading and writing support. In the workshop group, eight families (32%) were missing home literacy and self-efficacy scores at post-workshop. In the control sample, one family (4%) was missing self-efficacy scores.

Table G.2

Post-workshop Descriptive Statistics for Children in the Non-attritor Sample

	Non-attritor sample				Workshop sample			
	Workshop		Control		1-2 sessions		3+ sessions	
Child outcome	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Literacy knowledge and skills								
Letter and word recognition	32.40	10.80	30.08	9.96	32.56	6.98	31.00	13.90
Decoding skills	20.36	12.22	20.04	11.04	21.33	10.42	18.17	14.89
Listening comprehension	3.61	2.19	3.13	1.66	3.56	2.35	3.25	2.14
Vocabulary	11.17	4.18	10.96	3.00	10.69	4.10	10.75	4.29
Writing fluency	23.24	22.05	18.36	14.89	30.67	28.94	17.50	19.98
Literacy attitudes and self-efficacy								
Academic reading attitudes	27.92	9.41	28.32	8.48	29.33	7.28	28.50	10.86
Recreational reading attitudes	25.76	9.28	28.12	8.14	27.75	8.33	26.03	10.14
Writing attitudes	82.08	19.16	79.00	18.02	87.11	17.48	81.00	21.29
Reading and writing self-efficacy	19.40	4.18	19.60	5.16	19.78	3.38	19.25	5.22
N children	26		25		9		12	

Note. Literacy attitudes and self-efficacy = Attitudes toward and self-efficacy in reading and writing; Literacy self-efficacy = Self-efficacy in reading and writing. In the workshop sample, one child was missing data on all outcome measures (4%) at post-workshop. This child attended 2 sessions.

Appendix H: Culturally Responsive Coding Scheme Categories, Definitions, and Codes

This appendix presents definitions for the culturally responsive variables in the coding scheme used in the synthesis (Chapter 2). The codes described in this appendix were used to determine how and the ways in which programs attended to aspects of families' racial/ethnic background, which is presented Table 2.1.

Tenet of culturally responsiveness	Definition and codes
Bridging home and context	Program affirmed families' cultural heritages as valid and bridged children's home and out-of-home experiences. Evidence of this included programs that 1) used a wide range of sensory stimuli (auditory, visual, tactile), included individual and group learning, competitive and cooperative, and active and sedentary; 2) built meaningful bridges between home and out-of-home experiences, between abstract ideas and families' sociocultural experiences; and 3) incorporated multicultural information, resources and materials, some of which reflects the cultural backgrounds of children in the program. Codes included program did not affirm families' cultural heritage; program occasionally affirmed families' cultural heritage; or program consistently affirmed families' cultural heritage.
Teaching the whole family	Program developed comprehensive social, emotional, and political knowledge to teach the whole child and the child's family. Evidence of comprehensive programs included those that 1) developed a sense of community, shared responsibility, and social support among families; 2) sought to teach the whole family using cultural resources (e.g., knowledge, skills, values, experiences) to support varied aspects of family and parent engagement; and 3) helped families from racially/ethnically minoritized backgrounds maintain identity and connections with their ethnic groups and communities. Codes included program did not attend to multiple aspects of family engagement that are consistent with families' cultural background; program somewhat attended to multiple aspects of family engagement that are consistent with families' cultural background; and program clearly attended to multiple aspects of family engagement that are consistent with families' cultural background.

Appendix H *(continued)*

Tenet of culturally responsiveness	Definition and codes
Applying knowledge across domains	Program applied families' cultural knowledge, experiences, and perspectives across multiple dimensions of the learning context. Evidence of multidimensionality in programs included when programs 1) engaged families in multiple ways (e.g., in-person training sessions, invitation to school, explicit instructions for home engagement); 2) tapped into wide range of cultural knowledge, experiences, contributions, and perspectives within session activities and materials (e.g., interviews with families, research); and 3) acknowledged the legitimacy of the cultural heritage of different racial/ethnic groups as worthy content to be taught in the program's curriculum. Codes included program did not engage families' cultural knowledge across the dimensions of the learning context; program sometimes engaged families' cultural knowledge across the dimensions of the learning context; and program consistently engaged families' cultural knowledge across the dimensions of the learning context.
High expectations and support	Program empowered families by setting high expectations while providing support to reach them. Evidence of empowering programs included when programs 1) provided families with ample resources and/or support, 2) maintained high expectations for families (e.g., homework, in-session assignments), and 3) built parents and families' academic/social competence, personal confidence, courage, and/or persistence in supporting their child's academic and social development. Codes included program had low/no expectations for families and provided no support for families; program had high expectations for families and provided some support to reach them; and program had high expectations for families and provided consistent support to reach them.

Appendix H *(continued)*

Tenet of culturally responsiveness	Definition and codes
Recognize and leverage strengths	Programs recognized the strengths of families of color and enhance strengths to transform program delivery. Evidence of transformative programs included programs that 1) explicitly respected families culture and use families' culture as worthwhile resources (e.g., using materials and/or locations familiar to families), and 2) helped families become social critics who can reflect and take action to towards self-improvement (e.g., advocate for families by inviting members from the community to describe services available to them). Codes included program acknowledged families' strengths and makes limited/no attempts to enhance them; program acknowledged families' strengths to some extent and makes some attempts to enhance them; and program consistently acknowledged families' strengths and makes consistent attempts to enhance them.
Critique normative practices	Programs allowed families to critique normative educational or cultural practices in ways that emancipate them and their children. Evidence of emancipatory programs include those that 1) allowed families to be active participants in shaping their own learning; and 2) provided an opportunity for families to critique oppressive/normative schooling practices. Codes included program did not allow families to personalize their experience and does not critique normative school practices; program sometimes allowed families to personalize their experience and critiques normative school practices to some degree; and program consistently allowed families to personalize their experience and clearly critiques normative school practices.

Appendix I: General Article Coding Scheme Categories, Definitions, and Codes

This appendix presents definitions for the general article variables in the coding scheme used in the synthesis (Chapter 2). The codes described in this appendix were used to craft the article description and connection to outcomes columns listed in Table 2.1. I coded all articles in terms of the program qualities category. I used the article qualities category to code studies that reported on the results of implementing the program.

Category	Definition and codes
Program qualities	
Program target	Program target identified the particular focus of the program. Articles were designated as caregiver focus only when only parents participated in in-person training, and caregiver and child when both children and caregivers participated jointly in the session activities.
Target skill	Target skill identified the specific domain or domains of learning the initiative sought to support. Articles could receive more than one designation. Articles were categorized for the purpose of the review based on the domain in which the program content mostly addressed. Codes included behavior and social learning; language and literacy; and math and science.
Targeted grade(s)	Grade or grades of children targeted in the program. Articles could receive more than one designation. Codes included kindergarten, first grade, second grade, third grade, range, and elementary. *Range* was assigned to articles in which participating children were enrolled in the grades of interested in the synthesis (K-3) and grades that extended below or above the range of interest. The *elementary* code was assigned to articles that did not specify a specific grade and instead, describe the program as relevant for children in elementary school broadly defined.
Cultural group(s)	The particular racial/ethnic group the program targeted. Articles could receive more than one designation. Codes included African American, Asian American, Latinx, and Native American. I also coded whether the article targeted families that recently immigrated to the United States or Canada.
Intended family outcomes	Which family/parent knowledge and skills the program sought to support. Articles could receive more than one designation. Codes included changes to the home environment; changes to engagement with child; and to build parental confidence, competence, attitudes and/or interest.

Appendix I *(continued)*

Category	Definition and codes
Study qualities	
Child age	Average child's age in years. If the study did not report information, it was labeled as "Not Reported" (NR).
Family primary language	Primary language parents spoke to children at home. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included English, Spanish, Mandarin/Cantonese, and Korean.
Target audience	Family member who directly intervened on behalf of the child in the study. Some studies specified that the program was designed for mothers or fathers. Programs that did not provide a specification were coded as any parent/caregiver.
Family selection	How participating families were selected to participate in the program. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included self-selection, for families who chose to participate; referred by school, social services, and community clinics; and met screening threshold for academic difficulties/behavioral problems.
Socioeconomic status	Socioeconomic status (SES) of participating families. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included low-income or families below the poverty line, middle to higher SES, and mixed SES (e.g., low and middle SES).
Design	Study research design. Codes qualitative, non-experimental (i.e., treatment group only), experimental (i.e., randomization to groups), and quasi-experimental (i.e., non-random assignment).
Treatment group	Provisions for members of the treatment group. Studies could receive more than one designation. Codes included materials and training.
Program type	Who developed the program. Codes included researcher/university developed and adaptation of an existing program.
Family participation	How family participation in the program was tracked. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included families submit records in person or over the phone and log of session attendance.
Control group	Description of what the comparison group received. Studies that did not use an experimental or quasi-experimental design received a score of zero. Codes included business-as-usual, basic training/support, or materials.

Appendix I *(continued)*

Category	Definition and codes
Sample size	Number of children and families who participated in the study.
Frequency of contact	How often families interacted with program staff. I reported the number of meetings or sessions the program provided. If a range was given, report the average and the range.
Duration of contact	Number of hours families spent attending sessions/meetings. If the study did not report information, it was labeled as "Not Reported" (NR).
Program intensity	Intensity of program activities in the absence of program staff/in-person sessions. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included work with child daily, work with child weekly, and work with child in between sessions.
Duration	Total duration of the program. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included ranges of 1-3 weeks; 1-4 months; 5-8 months; 9-11 months; 1 year – 1 year 11 months, and 2+ years.
Context	Location in which program was administered. Studies could receive more than one designation. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included, school, community, and home.
Child assessment method	How children were assessed. Studies could receive more than one designation. If the study did not report information or did not assess children, it was labeled as "Not Reported" (NR). Codes included observations and/or interviews, child-reported measures, parent-reported measures, and teacher-reported measures.
Family assessment method	How families were assessed. Studies could receive more than one designation. If the study did not report information or did not assess families, it was labeled as "Not Reported" (NR). Codes included observations and/or interviews, child-reported measures, parent-reported measures, and teacher-reported measures.
Results	Program success. If the study did not report information, it was labeled as "Not Reported" (NR). Codes included not successful, as defined by mostly negative results; unclear, as defined by equal positive and negative results; and successful, as defined by mostly positive results.