

Practitioner Review: Engaging fathers – recommendations for a game change in parenting interventions based on a systematic review of the global evidence

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Background: Despite robust evidence of fathers' impact on children and mothers, engaging with fathers is one of the least well-explored and articulated aspects of parenting interventions. It is therefore critical to evaluate implicit and explicit biases manifested in current approaches to research, intervention, and policy. **Methods:** We conducted a systematic database and a thematic hand search of the global literature on parenting interventions. Studies were selected from Medline, Psychinfo, SSCI, and Cochrane databases, and from gray literature on parenting programs, using multiple search terms for parent, father, intervention, and evaluation. We tabulated single programs and undertook systematic quality coding to review the evidence base in terms of the scope and nature of data reporting. **Results:** After screening 786 nonduplicate records, we identified 199 publications that presented evidence on father participation and impact in parenting interventions. With some notable exceptions, few interventions disaggregate 'father' or 'couple' effects in their evaluation, being mostly driven by a focus on the mother–child dyad. We identified seven key barriers to engaging fathers in parenting programs, pertaining to cultural, institutional, professional, operational, content, resource, and policy considerations in their design and delivery. **Conclusions:** Barriers to engaging men as parents work against father inclusion as well as father retention, and undervalue coparenting as contrasted with mothering. Robust evaluations of father participation and father impact on child or family outcomes are stymied by the ways in which parenting interventions are currently designed, delivered, and evaluated. Three key priorities are to engage fathers and coparenting couples successfully, to disaggregate process and impact data by fathers, mothers, and coparents, and to pay greater attention to issues of reach, sustainability, cost, equity, and scale-up. Clarity of purpose with respect to gender-differentiated and coparenting issues in the design, delivery, and evaluation of parenting programs will constitute a game change in this field. **Keywords:** Research design, coparent, father involvement, child development, violence, prevention, family.

Introduction

Parenting interventions hold great promise for the promotion of healthy children, healthy families, and healthy societies, in ways that comprehensively impact the social, physical, and mental dimensions of human wellbeing (Olds, Sadler, & Kitzman, 2007; Panter-Brick & Leckman, 2013). Why then are fathers so marginal to the bulk of parenting interventions? Issues related to fathers were hardly discussed in a recent literature review of early child development programs, which assessed the effectiveness of 15 parenting interventions in low-income and middle-income countries and formulated research priorities and programmatic recommendations (Engle, Fernald, Alderman, Behrman, & Al, 2011). Similarly, very few references to engaging fathers were made in policy documents that reviewed the clear economic, health, and education arguments for investing in early child development

programs worldwide (Naudeau, Kataoka, Valerio, Neuman, & Elder, 2011). Programmatic approaches to early child development have recently called for a paradigm shift in global policy, to foster more effective interventions and systemic approaches to relevant health, education, child protection, and financing agenda (Britto & Ulkuer, 2012). This demands a careful evaluation of how issues of father participation and impact are articulated in approaches to (a) research, (b) intervention, and (c) policy.

This review aims to engage with academic researchers who involve themselves in program design and/or evaluation, and with stakeholders who define the parameters, fund programs, or direct the implementation of parenting interventions. Our purpose is to distill the ingredients that matter for including fathers in a range of settings, in order to best promote the social, physical, and mental health of children and caregivers. We respond to a need to disseminate evidence, flag problematic issues, and encourage best practice, regarding the effectiveness

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of parenting interventions on family dynamics and child wellbeing. Globally, we know that father–child relations vary across time and cultures, and have differential impact on families and children (Cabrera & Tamis-Lemonda, 2013; Gray & Anderson, 2010; Hewlett, 2011; Shwalb, Shwalb, & Lamb, 2013). We also know that men’s parenting styles (e.g., authoritarian, authoritative, permissive, indifferent, protective, negligent) are more variable and nuanced than commonly thought (Selin, 2014), and that traditional values pertaining to motherhood and fatherhood can exist alongside counter-cultural values that engage men in supporting mothers and children (Solis-Camara, Fung, & Fox, 2014). An empirical, theoretical, and programmatic lens on gender equity is here needed to move beyond the ‘one-size-fits-all’ parenting programs that essentially work to reproduce the social constructs of mother-based childrearing practices.

Research on why fathers matter

Like mothers, fathers have roles and impacts that prove both positive and negative for child wellbeing and family functioning: fatherhood is an important aspect of child development (Lamb, 2010; Lamb & Lewis, 2013; Pleck, 2010). Cohort studies have revealed the overall protective and positive effect of father involvement on offspring social, educational, behavioral, and psychological outcomes – throughout infancy, childhood, adolescence and adulthood. Short- and long-term positive outcomes include those pertaining to psychological health, externalizing and internalizing behavioral problems, substance misuse, criminality or delinquency, economic disadvantage, capacity for empathy, peer relationships, nontraditional attitudes to earning and child care, satisfaction with adult sexual partnerships, and self-esteem and life-satisfaction (Fatherhood Institute, 2013b; Feldman, Bamberger, & Kanat-Maymon, 2013; Flouri, 2005; Flouri & Buchanan, 2004; Kim, Mayes, Feldman, Leckman, & Swain, 2013; Martin, Ryan, & Brooks-Gunn, 2007; Pattnaik & Sriram, 2010; Pleck & Masciadrelli, 2004; Sarkadi, Kristiansson, Oberklaid, & Bremberg, 2008).

Disengaged and remote father–child interactions, as early as the third month of life, have been found to predict externalizing problems in children longitudinally (Ramchandani et al., 2013). Fathers’ sensitivity in free play with their 2 year-olds was found to be pivotal to child adjustment at age ten, and more predictive than early mother–child attachment at age 16 (Grossman et al., 2002). In one prospective longitudinal study of 100 families, early-life maternal and paternal reciprocity were shown to each uniquely predict children’s social competence and aggression in preschool, while father–adolescent and mother–adolescent reciprocity each predicted different aspects of dialogical negotiation (Feldman et al., 2013). A select body of literature has now evidenced

the neuroendocrine and neurobiological changes associated with specific male and female parental behaviors (Atzil, Hendler, Zagoory-Sharon, Wine- traub, & Feldman, 2012; Kim et al., in press). Paternal psychopathology, evidenced in antisocial behavior, substance misuse, and depression, has demonstrable impacts on child and adolescent functioning (Phares, Rojas, Thurston, & Hankinson, 2010). Moreover, fathers are key to coparenting interactions that impact family dynamics in ways related to, but distinct from, parent–child or marital relationships (Fivaz-Depeursinge & Corboz-Warnery, 1999; McHale & Lindahl, 2011). In sum, an emergent but substantial body of research highlights how critical fathers can be to child wellbeing, and why it seems good science and good practice to involve fathers in preventive interventions to foster healthy child development.

Interventions with fathers

The evidence base on parenting interventions that exploit these benefits of paternal engagement, however, is quite limited. Specifically, one systematic review of early childhood programs identified only 14 intervention studies that included fathers, 11 of them conducted in the United States (Magill-Evans, Harrison, Rempel, & Slater, 2006). In a metaanalysis of interventions for parents of children with developmental disabilities, Singer, Ethridge, and Aldana (2007) identified 17 interventions (again mainly US-based), only three of which included impact data in relation to fathers. A systematic review of Behavioral Parent Training for attention-deficit/hyperactivity disorder (ADHD) studies found only 13% included information on father-related outcomes (Fabiano, 2007). And in a systematic review of fathers’ involvement in programs for the primary prevention of child maltreatment (most of which were also US-based), only two of the 16 interventions that met eligibility criteria reported father-specific data (Smith, Duggan, Bair-Merritt, & Cox, 2012). Overviews that take a global perspective are currently confined to the gray literature (i.e., published material that has not undergone formal peer review), namely conference proceedings, databases, programs implemented by non-governmental organizations and diverse charities worldwide (Burgess, 2009; McAllister, Burgess, Kato, & Barker, 2012). For example, McAllister et al. (2012) reviewed current issues, discussed best practice, and listed a total of 43 international ‘father-focused’ or ‘father-friendly’ programs, detailing case studies with the best evidence base for interventions from the prenatal period through the first 8 years of children’s lives. Their report made three crucial observations regarding the nature and scope of the evidence base. First, the evidence base is methodologically weak, in the sense that very few interventions dealing with father engagement have undergone robust evaluation any-

where in the world. Second, in evaluation, very few 'parenting' interventions disaggregate findings by gender, and most are limited to short-term impacts on family lives and self-reported beliefs and behaviors. Taking this step would allow sound conclusions to be drawn regarding the relative effectiveness of mothering, fathering, or coparenting interventions. Third, on a global scale, the evidence base on parenting roles and parenting interventions is heavily tilted toward fathers, mothers, and children living in the global north. In the global south, there exists some evidence regarding interventions with men to promote reproductive health and prevent gender-based violence or HIV transmission, but little evaluation conducted with fathers *in their role as caregivers* for promoting child health and development.

Father-focused interventions encompass programs commonly set to increase the *quantity* and improve the *quality* of fathers' involvement with their children. In this respect, parenting is considered a core mediator in the design of many interventions, given its putative influence on a wide range of child outcomes (Olds et al., 2007; p. 357). An increased *quantity* of the time men spend interacting with their children thus serves as an important proxy for positive child outcomes. Exemplars of interventions which pay attention to fathers' time commitments include, in the United States, a range of Early Years father-child activity programs, such as in *Head Start* (Fagan & Iglesias, 1999) and *Early Head Start* (Vogel et al., 2011) and, in Peru, *Proyecto Papa in Acción* (McAllister et al., 2012). Of course, the time that fathers spend in parenting activities varies considerably worldwide – both in absolute terms, and relative to mothers (Miranda, 2011). Based on OECD data, Scandinavian countries emerge as the most gender-equal in time spent on child care (Fatherhood Institute, 2010). In middle- and low-income countries, father-inclusive programs have often explicitly or implicitly encouraged increased male involvement in child care and domestic labor as part of a wider promotion of gender equality (Bhandari & Karkara, 2006; Barker, Doğruöz, & Rogow, 2009; McAllister et al., 2012). The *quality* of father-child interaction is commonly addressed in programs by focusing on fathers' understanding of child development and/or their skills in child-behavior management. For example in Turkey, the community-based *Father Support Program* aims to enhance awareness in fathers regarding their importance in child care and child development, and to reduce harsh parenting (Barker et al., 2009). Such types of father-focused interventions are promoted in a wide range of settings, including jails, centers fostering early child development, and centers for child and adolescent mental health, where fathers, as target participants, are often not well acquainted with parenting literature, receive little social support, or have little experience as primary caregivers. Interestingly, in cultures that favor a gender division of

reproductive and productive tasks, such as Turkey and Pakistan, impetus for involving men in both parenting programs and violence prevention programs has come from women themselves (AÇEV, 2009; Bhandari & Karkara, 2006), as well as from international organizations. Some UNICEF programs have begun with the premise that men have limited knowledge of child health and development, while fathers, being prime decision-makers in the home and community, are crucial to improved maternal-child health outcomes. While engaging fathers in such contexts presents challenges, the demand by women for father engagement is apparent.

More *holistic* parenting interventions have addressed wider aspects of coparenting and family life known to impact child health and development (Feinberg, Kan, & Goslin, 2009; Hawkins, Lovejoy, Holmes, Blanchard, & Fawcett, 2008). Thus Cowan, Cowan, Pruett, Pruett, and Wong (2009) identified five aspects of family life relevant to father engagement: caregiver mental health, the quality of relationships between parents, the quality of father-child or mother-child relationships, the pattern of caregiver-child relationships transmitted across generations, and the balance of stressors and social supports outside the immediate family. Because parental mental health and the social architecture of family life can be important predictors of child health, the design and evaluation of some parenting interventions have sought to address those wider dimensions. Indeed, a US program such as *Family Foundations* has strategically focused on the coparenting relationship of couples expecting their first child, in order to prevent the kind of stresses and early parenting difficulties that may lead to a negative developmental cascade in children (Brown, Feinberg, & Kan, 2011; Feinberg, Jones, Kan and Goslin, 2010; Feinberg & Kan, 2008). This approach is in stark contrast to the Nurse-Family Partnership (NFP) program, in place for more than three decades, but targeted at first-time mothers (Donelan-McCall, Eckenrode, & Olds, 2009). In the United Kingdom, where this program is known as the Family Nurse Partnership (FNP), relatively more attention has been paid to engaging with fathers alongside vulnerable teenage mothers, providing early professional help at a time when new parents redefine themselves as caregivers and as a couple (Ferguson & Gates, 2013).

There are substantial weaknesses in program evaluation related to coparents, namely program engagement with two parents rather than one. Few studies have sought to examine whether fathers are effective 'change agents' (Elder et al., 2011), or as effective as mothers in implementing change (Adesso & Lipson, 1981; Cia, Barham, & Fontaine, 2010). Some studies indicate that, even where only one parent participates in the intervention, gains in family functioning are greater or better maintained when there is another parent in the home (Bagner &

Eyberg, 2003; Hahlweg, Heinrichs, Kuschel, Bertram, & Naumann, 2010; Webster-Stratton, 1985). Another-parent-in-the-home also seems to be protective against program drop-out (Bagner, 2013). But is delivery more effective when both parents *participate*? May et al. (2013) found this to be the case, as did Lundahl, Tollefson, Risser, and Lovejoy (2008) and Bakermans-Kranenburg, van Ijzendoorn, and Juffer (2003) in metaanalyses. The quality of evidence to-date, however, is highly variable: thus while Bakermans-Kranenburg et al. (2003) found three interventions with fathers to be ‘significantly more effective’ than interventions with mothers alone, the studies involved only 81 fathers, and were not randomized. Without randomization, we cannot be sure whether positive effects have more to do with the nature of families in which both parents participate, than with fathers’ participation per se. The very few studies that have randomized participants to test this important proposition have found that engaging with both parents, rather than one, may indeed deliver benefits (Besnard, Capuano, Verlaan, Poulin, & Vitaro, 2009; Cia et al., 2010; Cowan et al., 2009; May et al., 2013; Rienks, Wadsworth, Markman, Einhorn, & Etter, 2011).

In sum, most parenting evaluations have not been gender-disaggregated, nor has the impact of delivering a program to both parents vs. one individual parent been measured. Most global overviews have focused attention on identifying ‘strategic entry points’ for early child development investments, to include center-based programs, home-based programs, and media campaigns (Naudeau et al., 2011). Moreover, concern is rarely expressed regarding the potential for couple participation to ‘skew’ findings. For instance, if a significant percentage of the parents attending are couples, and if couple participation enhances outcomes, does a positive evaluation stem from program design and delivery, or from the fact that many parents attended *à deux*? Similarly, given that fathers do not seem to benefit as much as mothers from program participation (arguably due to program design, rather than father deficits), are findings skewed by participant gender, even when parents attend *solo*? In their review of parenting interventions targeting competencies relevant to child health and development, Olds et al. (2007) emphasized that the evidence base on parenting interventions will only be improved if research projects adhere to the highest standards of randomization in controlled trials, and in particular, to the CONSORT standards for reporting evidence. Without robust evidence, the considerable promise of parenting programs for improving the life course of children will remain undocumented.

Policy frameworks on parenting

Policies relevant to men as fathers are often focused on specific social or health outcomes, rather than

holistically and synergistically geared to improving family level caregiving environments. In the global north, such policies are most often found in the design of paternity and parental leave systems and in the allocation of parenting time after divorce or separation. In the global south, most of the funding to engage men in programmatic interventions has been in the areas of intimate partner violence, sexual and reproductive health, and HIV prevention, including Prevention of Mother to Child Transmission. Even there, engagement with men may be limited or even counter-productive (Sherr & Croome, 2012).

Policies on parenting tend to reflect and perpetuate, implicitly or explicitly, the gender biases that prevail in cultural stereotypes and mainstream parenting practices. In the realm of social welfare policies, conditional cash transfers or other income support programs for low-income families have often excluded men, on the grounds that women devolve more of their income to the household than do men. Recent critiques of income support programs are instructive: to focus exclusively on women may inadvertently contribute to a gender divide, in which women are viewed as caregivers and responsible, while men are seen as inherently derelict in their capacity for family support. Similarly, strong gendering biases in parenting policies tend to reproduce a *mothering* rather than *fathering* cultural model of childrearing: these tilt programmatic interventions toward mothers, rather than toward both fathers and mothers as coparents.

Indeed, policy frameworks underpinning family-based interventions are often predicated on a *father deficit* model, one that sees fathers as ineffective or neglectful in the arena of child health and development (Hawkins & Dollahite, 1997; Maxwell, Scourfield, Featherstone, Holland, & Tolman, 2012). Such a deficit model of father involvement is widespread in the social construction of parenting interventions in countries such as the United Kingdom and the United States, but also in the global south. A more productive framework would espouse a socioecological model that focuses attention on the social, economic, and political environments that shape the quality or quantity of father engagement with their children and their commitment to coparenting (Cowan et al., 2009; Sunar et al., 2013).

Gaps in the global evidence base

In sum, there is little evidence of a *virtuous* cycle in the evidence base, given the gender biases that are often manifested in policy frameworks, parenting interventions, and even basic research. We know that gaps in the evidence base are best addressed by grounding parenting interventions in theory, as well as in epidemiology and developmental research. As highlighted by Olds et al. (2007; p. 357), this

includes a theory of program *engagement*, with a clear understanding of what drives beliefs and behavior, including the fundamental question of 'why would parents want to spend their time participating in [a given] program.' Olds et al. (2007) did not highlight issues pertaining to father or couple involvement. However, such issues lie at the heart of biases implicitly or explicitly embedded in most parenting interventions.

Program engagement is certainly a critical element of successful implementation. Yet there is scant research relating how participant engagement relates to program outcomes (Daniel et al., 2011; Scourfield, Cheung, & Macdonald 2014). A growing number of studies are adopting more proactive approaches to engaging fathers, spurring a deeper reflection on how best to engage with men in programmatic interventions (Holmes, Galovan, Yoshida, & Hawkins, 2010; Maxwell, Scourfield, Holland, Featherstone, & Lee, 2012; Palm & Fagan, 2008). In sum, when it comes to fathers, our knowledge on the empirical *associations* between fathers' involvement in raising children and the health or educational outcomes of children is quite consistent – fathers have a substantial impact on child development and wellbeing. What is missing is a systematic evaluation of the global evidence base regarding fathers' impact on child wellbeing outcomes *via the interventions which involve or could involve them*.

Objectives of this review

This paper offers a systematic review of *father-inclusive* parenting and coparenting interventions undertaken across the world. It asked two specific research questions. First, how are fathers currently involved in parenting interventions worldwide? This step identifies the main obstacles to their inclusion and engagement, in terms of existing programs as well as everyday parenting activities. Second, what improvements can be made in the design, implementation, and evaluation of parenting programs to effectively engage with fathers and assess related impacts? This step identifies improvements that would constitute a game change in this field. We considered preventive programs related to prenatal health and sexual health; harm-reduction programs that addressed child maltreatment, domestic violence, or alcohol abuse; behavioral training programs, such as those for teenage parents, first-time parents, and parents of children with developmental or medical conditions; programs that engaged men in settings such as jails or early years' centers; and programs that involved men in child care and promoting gender equality. Father/men-only programs are not necessarily the best programmatic strategy, but they are often the only place in which to find evidence on father participation or effectiveness.

Methods

We conducted a systematic search of standard literature databases and a thematic hand search of the global literature on parenting interventions, to include studies that offered data on father participation and impact. This search strategy enabled us to identify the most widely used and best-documented parenting programs world-wide, and to include studies of programs in the global south that would not have been captured by systematic searches of peer-reviewed journals. We identified both single studies and reviews that indicated successful strategies in father engagement and that evidenced links between fathers' program participation and child outcomes. The term 'father' designated all men who are socially significant to children or assume actual fatherly roles in taking care of children, whether or not the birth father, married to the mother, or coresident with the child.

For the systematic database search, we targeted articles from Medline, PsychInfo, SSCI, and the Cochrane Library. Using the appropriate proximity operators and (un)limited truncation characters for each respective database, our search strategy was as follows. In step 1, our search terms were: *parent** with (program or intervention or engage or evaluation), *father** with (program or intervention or engage or inclusion), *men** with *intervention*, *gender*, *partner*, or *coparent*. In step 2, we narrowed the pool of results to necessarily include one search term designated by steps (a–c), as follows: we combined step 1 and (2a) *father* and (2b) (*intervention* or *program*) and (2c) (*parent* or *coparent*) and (2d) (*evaluation* or *review*). Thus results from step 1 were narrowed such that the final set of results necessarily included at least one search term from Step 2a, one search term from Step 2b, and so on. We imposed no date or language limits on our database searches, which were finalized in October 2013.

We supplemented the above searches with a thematic hand search of the gray literature on parenting programs, such as those conducted by UNICEF worldwide and available databases on the topic of fatherhood and child neglect. We also examined books on fatherhood or parenting, conference proceedings from voluntary organizations, research networks such as Childwatch, and the websites of OECD, the Global Child Development Network, the African Child Policy Forum, WHO, the World Bank, Fatherhood.gov, and ACF/OPRE. Finally, we contacted authors of sourced articles, and fathers' and men's organizations worldwide.

Two authors removed duplicate records obtained from systematic database and thematic searches, then screened all papers on the basis of their abstracts and/or full-length text. Three coauthors independently assessed all papers with respect to three exclusion criteria, to exclude material that (a) provided insufficient gender-disaggregation in program evaluation, (b) duplicated information presented elsewhere, or (c) did not include process evaluation or impact evaluation of family dynamics or child wellbeing. Two coauthors reviewed a subsample of publications to ensure inter-rater reliability. The remaining papers constituted the final set of full-text documents selected for this review.

To evaluate quality and scope within this literature, we then identified a small number of studies on the basis of their empirical and/or thematic contribution to father-inclusive parenting interventions. We searched for exemplars of diverse settings, target group, mode of program delivery, and outcome indicators, in order to characterize, on a global scale, current efforts to engage with fathers and evaluate their impact on child and family wellbeing. Four authors, working in pairs, independently assessed all papers selected for review, with respect to three inclusion criteria, to capture studies (a) situated in the global south as well as the global north, (b) including both process data on father participation and outcome data on father or child impact, and (c) exemplifying diverse modes of program delivery and target populations. Where several potential exemplars existed of a given program,

we selected the parenting intervention that had benefited from the most comprehensive and high-quality evaluation.

Our review thus focused attention on research design and evaluation, rather than findings per se. On a global scale, the lack of gender-differentiated data essentially precluded a useful metaanalysis based on actual findings. Metaanalyses, however, are not the sole form of systematic reviews (Gough, Oliver, & Thomas, 2012; Petticrew & Roberts, 2006; Uman, 2011). We systematically assessed the scope and quality of extant literature. First, we comprehensively identified all the studies relevant to answering two specific research questions (on engaging fathers in parenting interventions worldwide, and evaluating the soundness of program design and implementation). Second, we tabulated single programs and created a coding scheme to explicitly assess the evidence base with respect to caregiver demographics, sample size, group comparison, and measures on family and child outcomes.

Results

The evidence base

Figure 1 shows the steps of our literature searches. From a total 31,586 articles that mentioned fathers, we identified 868 articles that engaged with fathers in parenting or coparenting interventions and mentioned program evaluation or review, and an additional 153 publications from hand searches of the gray literature, many of which concerned the global south. In total, we screened 786 nonduplicate records. We then excluded 472 records on the basis of abstracts and 115 papers on the basis of full-text articles, following our three exclusion criteria. To the

best of our knowledge, we identified the best-known parenting interventions or studies that included some evidence of father inclusion or father impact on child or family outcomes ($n = 199$ publications). We categorized the results of our final search according to whether this material consisted of (a) publications ($n = 113$) assessing a given father-inclusive parenting program, or (b) reviews, commentaries, book chapters, and working papers ($n = 86$) potentially useful for thematic discussion.

We present a global overview of the evidence base in Table 1 and online supplementary Table S1. Table 1 focuses on 34 exemplars ($n = 52$ publications) to capture the diverse range of father-inclusive parenting interventions, in order to draw thematic conclusions on the nature of the evidence base regarding gender-disaggregated parenting interventions. It includes 14 exemplars from the United States, and 20 from other countries. Table S1 reviews an additional 58 programs ($n = 61$ evaluations), including 36 US-based programs (39 publications) and 22 programs from other countries. Upon examination, these were programs with smaller sample sizes, less rigorous evaluation of father participation or father impact, and/or interventions highly similar to chosen exemplars. In selecting our exemplars, we sought to achieve global representation as well provide comparative perspective. Given the state of the evidence base, programs from the global south were often less rigorously evaluated

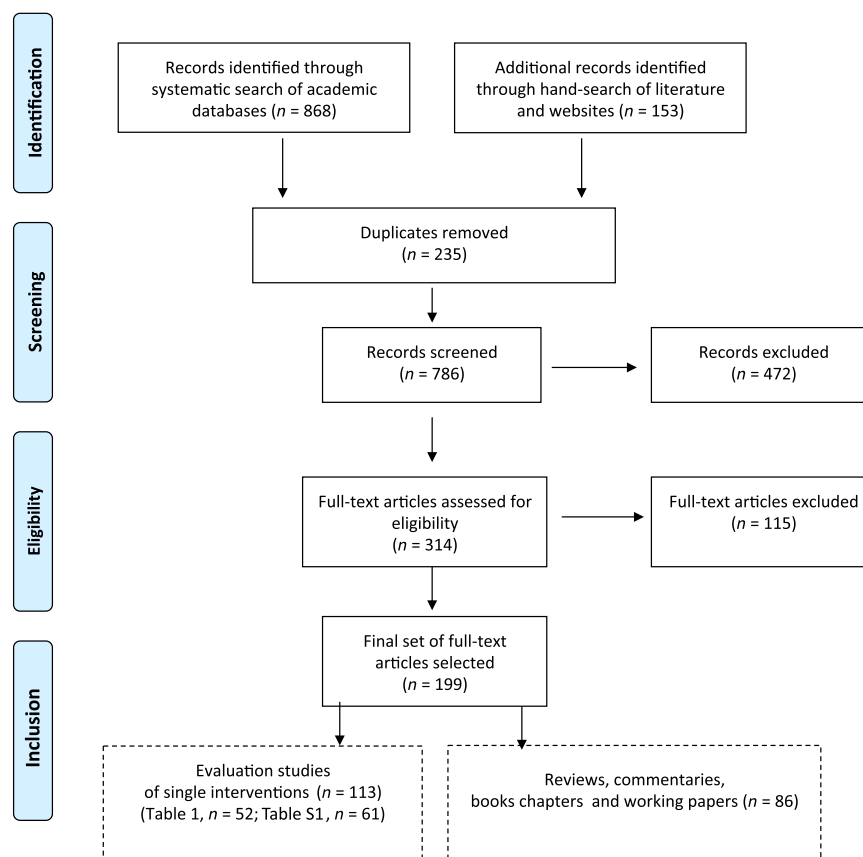


Figure 1 Literature search PRISMA diagram

than those from the global north; nonetheless, they were included to provide geographical spread. In all, we list 92 programs ($n = 113$ publications) from 20 different countries – Australia ($n = 9$), Brazil ($n = 1$), Canada ($n = 5$), China ($n = 1$), Finland ($n = 1$), Germany ($n = 1$), Iran ($n = 1$), Israel ($n = 1$), Jordan ($n = 1$), Mexico ($n = 2$), Niger ($n = 1$), the Netherlands ($n = 1$), New Zealand ($n = 1$), Pakistan ($n = 1$), Peru ($n = 1$), Sweden ($n = 2$), Turkey ($n = 2$), Ukraine ($n = 1$), United Kingdom ($n = 7$), and USA ($n = 52$). While Table S1 details, by country, the types of program, their settings, target group, father sample size, and data availability on father participation and impact, Table 1 provides detailed information on process and impact data, in addition to information on program type, mode of delivery, and target group.

Most program evaluations are situated in the global north – parenting interventions in the global south are rarely captured by systematic database searches, while parenting interventions captured by thematic hand searches rarely involve fathers. Most interventions are designed with a view to harm-reduction or primary prevention. These include programs targeting vulnerable families ‘at risk’ of various negative outcomes (e.g., programs such as Head Start in the USA, directed at low-income parents to mitigate the effects of poverty on parenting and child outcomes). They also include programs specifically targeting men with a history of violent behavior, or fathers of vulnerable children (e.g., born prematurely, with disabilities or conduct disorders), for prevention of future harm and/or improvement of parenting skills and child and family outcomes. Few programs aim to strengthen family-level resilience to enhance better-quality parenting.

How are fathers currently engaged?

Regarding our first question (how fathers are currently involved in parenting interventions), posed to evaluate the extent to which fathers are targeted for inclusion, the cases in Table 1 and Table S1 demonstrate a wide range of program design – and relatively low coherence overall. Some interventions target just one parent, most often the mother by default, as does, for example the *Positive Parenting Program* (Triple P) developed in Australia (Fletcher, Freeman, & Matthey, 2011). Others are designed to engage with mothers and fathers in separate groups, such as the *Proyecto Papa in Acción* in Peru, aiming to increase the quantity of father–child engagement and fathers’ sensitivity to understanding child health and development issues (McAllister et al., 2012). Still others, such as the Fatherhood Relationship and Marriage Education intervention (FRAME) work only with couples (Rienks et al., 2011; Wadsworth et al., 2011). Some programmatic interventions are designed for high-risk families – such as the Australian *Dads on Board* intervention with fathers who have under-

taken behavior-change programs due to their use of violence, while others are universal programs such as the *Leksand Models* in Sweden, a maternity services-based intervention (Hoskings & Walsh, 2010; Johansson, 2012).

We found noteworthy exemplars of parenting interventions offering relatively good designs as well as promising outcomes from addressing or including fathers (Table 1). Thus the *Supporting Father Involvement* program in the United States focuses explicitly on fathers’ roles and coparenting: remarkably, this intervention tested whether men-only or coparent groups were the most effective means of supporting fathers’ participation in the lives of their children (Cowan, Cowan, Kline Pruett, Pruett, & Gillette, 2014; Knox, Cowan, Cowan, & Bildner, 2011). Other initiatives have been developed to support positive coparenting, taking this as a leverage point for the enhancement of family functioning and child outcomes (Feinberg & Kan, 2008). Also from the United States, *Head Start* exemplifies the type of intervention that focuses explicitly on the father-preschooler dyad, looking to improve child behavior, social skills, and school readiness by increasing fathers’ engagement with their children and enhancing their support and childrearing skills (Fagan & Iglesias, 1999). In Niger, *Ecole des Maris* characterizes a community-based program that encourages men to advocate for and help develop health services to be accessed by mothers and children. This program, funded by the United Nations Population Fund (UNFPA), is based on the theoretical premise that traditional male social power can act as a brake on rates of improvement in maternal and child health. Because men in Niger dominate household and community decision-making, the program explicitly involved men to transform attitudes and behaviors of whole communities, training ‘model husbands’ to enhance women’s access to local health services, especially assisted childbirth. Similarly in Turkey, the *Father Support Program* (FSP) run by the Anne Çocuk Eğitim Vakfı (AÇEV) or Mother Child Education Foundation, was established when the Foundation realized that fathers would benefit from the kind of support that had hitherto focused on the mothers of preschool children; indeed, the mothers enrolled in AÇEV’s *Mother Support Program* had reported that their husbands were ‘obstacles’ in supporting what women were learning to foster positive child development (Barker, Doğruöz, & Rogow, 2009, p.8). The sessions targeted at fathers were thus designed to foster family-level communication and move beyond authoritarian models of fatherhood.

Of what quality are the evaluations?

Unsurprisingly, there exist few randomized-control trials and quasi-experimental evaluations of parenting programs that have included fathers. Among the 34 programs in Table 1, eleven (eight of them in the

Table 1 Global overview of parenting programs that evaluated father impact and participation (34 exemplars)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Australia					
Burleigh Relaxation Baby Bath and Massage	1 × 1-hr home visit session, showing a video and giving both parents hands-on experience of the techniques	Mother and fathers (couples) and their 4-week-old infants	RCT ($n = 15$ intervention, $n = 15$ controls). Measures: self-completion time diaries; observations of father–child interaction and family dynamics; Kansas Marital Satisfaction Scale, CES-D scale, Rosenberg Self-esteem scale	Process: time and activities sheets for parents to fill out; collected 8 weeks later, at which time observations carried out by two observers. Impact: (a) parents: father/mother infant bathing frequency, massage frequency, infant caretaking, interaction quality, self-esteem, depression, marital satisfaction, and (b) infants: responses/overtures to mother/father	Scholz and Samuels (1992), and Samuels, Scholz, & Edmondson (1992)
Dads on Board	Weekly 2-hr therapeutic groupwork sessions over 8 weeks plus 'therapeutic newsletter' (reporting on each session) for parents between sessions. Two facilitators (male & female), closely supervised	Fathers who had already participated in behavior-change programs as a result of their use of violence – plus their babies/toddlers. Mothers can attend but focus is on father–child dyad	Progress of seven father-participants and their partners (if attending), monitored and reported. Measure: <i>Maternal/Paternal Postnatal Attachment Scale</i>	Process: pre/post test (parent report) plus facilitator observation and report. Impact: father/infant and mother/infant attachment; fathers' behavior and understanding (read infant cues; develop curiosity/respect for infant; understand concept of 'holding'; understand impact of own behavior on infant)	Bunston (2013)
Healthy Dads, Healthy Kids Program	8 × 1.5 hr weekly face-to-face sessions for 3 months: 5 sessions for fathers only, 3 physical activity sessions for fathers and children	Overweight and obese fathers and their primary school-aged children	RCT ($n = 27$ intervention, $n = 26$ wait-list control)	Process: data collected at baseline, and at 3- and 6-month follow-up: observation and self-report. Impact: (a) fathers: weight status; waist circumference; systolic blood pressure; physical activity; dietary intake, physical activity, and (b) children: dietary intake; weight status	Burrows et al. (2012), and Morgan et al. (2011)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Positive Parenting Program (Triple P)	Exemplar of a widely-endorsed behavioral parent training (BPT) program, delivered in various formats – the most effective with fathers being <i>Stepping Stones</i> (10 sessions, for parents of a child with a disability) and <i>Pathways</i> (14 sessions, including 4 on anger management)	Focus on dyadic parent-child interaction: 26% of attendees are single mothers and 21% fathers [likely to be the partners of participating mothers]	Metaanalysis of 28 studies reporting father engagement in Triple P (a tiny proportion of program delivery, since data are rarely gender-disaggregated and never disaggregated by individual v. couple participation). Measure: <i>The Parenting Scale</i>	Process: (mainly) pre- and post- self-report (mothers and fathers); attendance & homework completion (facilitator report); up to 2 year follow-up. Impact: (a) fathers: compliance with program; impact on fathers relative to mothers, and (b) children: behavior	Fletcher et al. (2011), and Fabiano (2007)
Canada					
Caring Dads	17-week group parenting intervention; systematic outreach to mothers to ensure safety and freedom from coercion; ongoing, collaborative case-management of fathers with referrers and other professionals involved with their families	Men who have maltreated (including neglected) their children and/or exposed them to intimate partner violence	Assessment of 98 men who completed the course and had pre and post assessments. Measures: <i>Buss-Perry Aggression Questionnaire</i> ; <i>The Parenting Scale</i> ; <i>The Parenting Alliance Measure</i>	Process: Pre- and post (fathers' self-report). Impact – fathers: aggression/hostility/laxness; parenting; coparenting	Scott and Lishak (2012)
Home-visiting intervention (no formal name given to this intervention)	Parent education in the home during two visits by a home visitor	First-time fathers of 5-month-olds	RCT ($n = 81$ intervention, $n = 81$ control). Measures: <i>Nursing Child Assessment Teaching Scale</i> ; <i>Parenting Sense of Competence Scale</i>	Process: Data collected at baseline and 3 months postintervention (child 8 month old): observation; father self-report. Impact – fathers: skills in fostering cognitive growth, sensitivity to infant cues	Benzies et al. (2008), and Magill-Evans, Harrison, Benzies, Gierl, and Kimak (2007)
China					
Early intervention for fathers of premature infants	Parent education and support in a neo-natal intensive care unit: booklet plus 5 sessions of 1:1 guidance by nurses	Fathers of neonates less than 37 weeks gestation in a neo-natal intensive care unit	Quasi-experimental design – historical comparison study: $n = 35$ intervention fathers, $n = 34$ controls Measures: <i>Parental stressor scale (NICU)</i> ; <i>Fathering ability scale (NICU)</i> ; <i>Nurse-parent support tool (NICU)</i> ; demographic and control variables; booklet evaluation	Process: pre/post intervention (fathers' reports). Impact: parenting stress; fathering ability; perceived support by nurse	Lee, Wang, Lin, and Kao (2013)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Iran Anger management training	7 × weekly group workshops	Mothers and fathers	13 fathers and 8 mothers Measures: <i>State-Trait Anger Expression Inventory; Parental Anger Evaluation Questionnaire</i>	Process: Pre/post intervention survey (parent self-report). Impact: anger intensity; anger expression; anger control	Yekta, Zamani, Parand, and Zardkhaneh (2011)
Israel Nonviolent resistance (NVR) Parent Training	50 min once-weekly sessions with both parents for 4–10 weeks plus 2 × intersession phone support calls	Mothers and fathers (couples) of children (age under 18) with acute behavior problems	Quasi-experimental: 46 mothers and 43 fathers, with wait-list control. Measures: <i>The Parental Helplessness Questionnaire; an Escalation Questionnaire; Demographic Questionnaire</i>	Process: Pre/post (6 weeks after intervention) questionnaires (parent self-report). Impact: parental helplessness, power struggles, negative feelings, parental submission, father's family-participation	Lavi-Levavi, Shachar, and Omer (2013)
Jordan UNICEF Better Parenting Program (BPP)	16 hr delivered via different schedules – e.g., consecutive days, weekly, monthly	Mothers, fathers (whether together as a couple or in single-sex groups is not known)	In Jordan only – quasi-experimental design: intervention ($n = 336$ participants, only 18 of them, i.e., 6%, fathers), and a control group	Process: Data collected at baseline and immediately postintervention (parent self-report). Impact: knowledge of child development; parenting skills (reduction of harsh discipline, use of explanation during discipline, perception of behaviors that constitute child neglect; time with children playing and reading)	Al-Hassan (2009), and Al-Hassan and Lansford (2011)
Niger Ecoles des Maris	UNFPA-funded schools for 'model husbands,' in Zinder region, twice-monthly meetings	Men in the community via married husbands of good character as advocates/early adopters	Observation/report data monitoring	Process: Postintervention reporting and self-report; pre-post data comparison. Impact: rates of prenatal care, assisted and safe deliveries, infant mortality; community actions (e.g., new facilities for women and midwives); men's attitudes and behavior	UNFPA (2011)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Pakistan Aangan, Rozan	Regional capacity building workshops on men, caring and fatherhood, to address child sexual abuse	Whole community, including fathers and men, religious leaders, police, teachers and health professionals	Reporting	Process: postintervention reporting Impact: establishing of local committee; attendance by men at couples' and fathers' groups; participation by religious leaders in child sexual abuse training and referral	Bhandari and Karkara (2006)
Peru Proyecto Papa in Accion	Five workshops covering the basics of positive parenting and the importance of visual/verbal stimulation/reading to young children; support session for fathers facing particular difficulties	Mothers and fathers (single parents and partnered parents)	Participants: <i>n</i> = 500, including 125 men	Process: Postintervention survey: father self-report and some partner report. Impact – fathers: family involvement; respect for family members; connection with children; use of violence; participation in domestic and caregiving work	McAllister et al. (2012)
Sweden Internet-based Parent Management Training (PMT)	7 × 1.5 hr sessions delivered over 10 weeks via the internet (text, illustrations, videos of parent/child interactions, parenting discussion forums) Homework. Online feedback	Mothers and fathers of 104 children aged 3–12 exhibiting conduct disorders	Quasi-experimental design: intervention parents compared with wait-list controls. Sixty-nine percent of participants were couples. Couple and individual parent participation measured, also impact by child gender and dose-response rates. Measures included: <i>Early Assessment Risk List-20B/21G</i> ; <i>Eyberg Child Behavior Inventory</i> ; <i>Strengths and Difficulties Questionnaire</i> ; <i>Parenting Practices Interview</i>	Process: Baseline face-to-face evaluation of children for psychiatric disorders. Pre/post (and 6 month follow-up) parent reports. Attendance records. Impact: child behavior; parenting strategies; cost	Enebrink, Hogstrom, Forster, and Ghaderi (2012)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Leksand Model	16–18 group sessions prenatal to 12 months postpartum. Topics include child development, bonding, couple relationship, new roles, parental leave	Expectant mothers and fathers recruited via maternity services, with fathers specifically invited to the first antenatal appointment and there personally invited to participate in Leksand	Quasi-experimental design: families of babies born in 2000, followed to 2006. Leksand groups compared with controls who received traditional parent-preparation and fewer sessions	Process: surveys (self-report), interviews, attendance records Impact: (a) mothers & fathers: satisfaction with staff and program; mother/father attendance; fathers' parental leave uptake; program cost, and (b) children: collected, but not reported in English language publications	Johansson (2012), and Hoskings and Walsh (2010)
Turkey					
Father Support Program (FSP), ACEV	13-session weekly program	Fathers only	Surveys	Process: Pre/post surveys (fathers' self-report). Impact: parenting skills and behavior; communication; gender relations	Barker et al. (2009)
United Kingdom					
Celebrating Fatherhood: a year long campaign 2012–13	Activities included: training for professionals; a photographic exhibition, a film, a website, a celebration event, and 'Fathers' Fridays'	Fathers and male carers; local service providers; policy makers	Report	Process: Pre/post data comparison (2011–12 vs. 2012–13). Impact: numbers of fathers using Children's Centres, attending 'Fathers' Fridays', SEN (Special Educational Needs) meetings, etc.; local media coverage about fathers	Bath & North East Somerset Council (2013)
Family Nurse Partnership (FNP)	30-month intensive home-visiting support for mothers (program on Licence and developed from the US Nurse Family-Partnership Program)	Highly vulnerable teenage mothers, fathers frequently engaged also	(a) Survey of 54 fathers currently in the program, (b) interviews with 24 fathers and professionals; (c) Data and information in National Evaluations	Process: father self-report; professionals' reports; national data analysis Impact: fathers' program participation; couple communication and relationship; coparenting; parenting	Ferguson and Gates (2013), Barnes et al. (2011), and Fatherhood Institute (2013)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Strength to Change	Assessment followed by c. 10 individual sessions followed by a 1 year group program	Fathers who have perpetrated domestic violence	Mainly process evaluation: (a) project throughput data (32 men, 11 women) over 18 months, (b) 47 interviews (21 men, 13 partners), and (c) 10 interviews with project staff & steering group members. Measure: Bespoke data collection tool recording individual's and partner's history, service use, social and family context, patterns of abuse and risks	Process: interviews during/ post intervention (no baseline); data analysis. Impact: fathers' motivation to complete program and change behavior; actual behavior change; awareness of impact of violence on children	Stanley, Graham-Kevan, and Borthwick (2012)
Ukraine					
UNICEF Papa Schools	Between 7 and 9 2-hr men-only peer mentoring sessions across the transition to fatherhood. One element in a multifaceted program to improve early childhood health and development	Expectant fathers	Regional data (no comparison regions) and UNICEF evaluation of the whole program	Process: Baseline and postintervention surveys; data analysis Impact: fathers' birth attendance and knowledge and understanding of infant/child development; breastfeeding rates, infant mortality, child trauma	McAllister et al. (2012)
United States					
Creating Opportunities for Parent Empowerment (COPE)	A 4-phase educational-behavioral intervention program relating to the care of premature infants (audio-taped/written information plus activity sheets)	Families of preterm infants in intensive care units	RCT: 258 mothers (147 in the COPE group, 113 in the comparison group) and 154 fathers (81 in the COPE group and 73 in the comparison group). Measures: <i>State-Trait Anxiety Inventory</i> ; <i>Beck Depression Inventory</i> ; <i>Parental Stressor Scale-Neonatal Intensive Care Unit</i> ; <i>Index of Parental Behavior in the NICU</i> ; <i>Parental Belief Scale-NICU</i> ; <i>Clinical Risk Index for Babies (CRIB)</i> ; <i>Infant NICU LOS</i> (length of hospital stay); demographic information; infant gestational age	Process: analysis of hospital data and demographic information; parent self-report and parent-infant interaction observation. Data collected at baseline and at 5 other time points, including at 2 months' corrected infant age Impact: (i) mothers and fathers: parental stress and mood; parental stress and parenting behavior; parental sensitivity; involvement in infant care, and (ii) infant: length of hospital stay and associated costs	Melnik et al. (2006)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Early Head Start (EHS)	Fathers' participation in EHS activities	Low-income fathers of preschoolers in a rural area	RCT: 74 fathers, 47% randomly assigned to EHS support Measures: <i>Coded Observational Measures; Bayley Scales of Infant Development; Center for Epidemiological Studies Depression Scale; Parenting Stress Index; Dyadic Adjustment Scale</i>	Process: data collection at 10, 14, 24, and 36 months. Observation at 24 months. Impact: (a) fathers: father-toddler social toy play, (b) toddlers: development at 24 and 36 months	Roggman et al. (2004)
Family Foundations (FF)	Psycho-educational sessions, 8 classes over 6 months delivered through existing childbirth education departments	Expectant first-time parent couples	RCT: 5-waves of follow-up: second wave involved $n = 147$ mothers (71 control, 76 intervention group). Follow-up to 7 years in some instances	Process: pre-post surveys (parent self-report); observation. Impact: (a) mothers and fathers: includes individual and family functioning (stress, depression, quality of couple and coparenting relationship), and (b) children: child adjustment	Feinberg, Roettger, Jones, Paul, and Kan (in Press), Brown, Feinberg, and Kan (2011), Feinberg, Jones, Kan, and Goslin (2010), Feinberg, Kan, and Goslin (2009), Feinberg and Kan (2008)
Flint Fathers and Sons Program	Fifteen 2-to-3 hr sessions (fathers with sons) conducted twice-weekly over 2 months	Nonresident African American fathers and their preadolescent sons	Quasi-experimental design – 158 intervention and 129 comparison group families. Measures: <i>Parental Monitoring Index</i> ; questions from some validated scales coalesced into new scales; demographic and control variables	Process: pre/post test surveys (self-report) Impact: (a) fathers: paternal monitoring; father-child communications; communication about sex and risky behavior extent; intentions to communicate; race-related socialization; parenting skills; satisfaction, and (b) sons: paternal monitoring; father-child communications; communication about sex and risky behavior extent/efficacy; race-related socialization; intentions to avoid violence; physical fighting; intentions to exercise	Ellis, Caldwell, Assari, and De Loney (2014), and Caldwell et al. (2008, 2010, 2011, 2014)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Fatherhood Relationship and Marriage Education (FRAME)	14 workshop hours over five group sessions, addressing issues known to affect the quality of couple relationships: communication, coping, problem solving; parenting skills	Low-income, high-risk couples with children	RCT: data collected from 112 fathers out of 137 couples randomly assigned to couple, male-only, or female-only control. Measures: Demographic and control variables including relationship with child (birth, v. social father); <i>Brief Symptom Inventory-18 (anxiety & depression)</i> ; <i>8-item Danger Signs scale (communication)</i> ; <i>Coping Efficacy Scale</i> (modified); <i>Inventories of Father Involvement</i> ; <i>Communication Skills Test</i> ; <i>Parenting Alliance Inventory</i> ; <i>Dyadic Adjustment Scale (Relationship Adjustment)</i>	Process: pre-post surveys (parent self-report); analysis of demographic and control variables. Impact: amount of father involvement	Rienks et al. (2011), and Wadsworth et al. (2011)
Head Start	Class-room volunteering; Fathers' Day activities; fathers' support groups; father-child activity sessions. Father-sensitivity training for staff	Fathers & father-figures of 3-to-5 year olds	Quasi-experimental research design (146 intervention fathers/father-figures vs. 55 comparison group) in four Head Start sites vs. four control sites. Measures: <i>Parenting Dimensions Inventory Parent/Caregiver Involvement Scale</i> <i>Woodcock-Johnson Tests of Achievement (revised) Social Skills Rating System</i>	Process: Pre/post fathers' self-report; interviews; teacher report; observation Impact: (a) father: accessibility & engagement with child; support for learning; child-rearing behaviors; dose-effect; father's residential status; child gender, and (b) child: behavior; social skills; academic readiness skills	Fagan and Iglesias (1999)
In-home training of fathers with children with autism	A 12-week twice-weekly in-home training for fathers in following the child's lead, imitation with animation, commenting on the child, and expectant waiting. Fathers also trained to train mothers	Fathers and mothers of 19 children with autism, 3-to-8 year old	Surveys and observation. Measures: <i>ADI-R</i> , <i>ADOS</i> , and the <i>Vineland Adaptive Behavior Scales</i> ; <i>Parenting Stress Index-Short Form</i> ; <i>Family Adaptability and Cohesion Evaluation Scales II</i>	Process: pre/post surveys (parent self-report); video observation. Impact: (a) fathers and mothers: parenting stress; parenting behavior; parent-to-parent knowledge/skills transmission, and (b) child: behavior	Bendixen et al. (2011), Elder et al. (2011), Elder et al. (2005)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Inside Out Dads	12 weekly group sessions in a small group format with at least one peer leader per group	Incarcerated fathers	Quasi-experimental ($n = 307$) and control ($n = 104$) groups in three correction facilities; semistructured interviews with program participants ($n = 27$) and stakeholders ($n = 6$); within-facility comparison of infraction data collected for 90 days before program entry, during program participation and for 90 days after program exit. Measures: Inside Out Dad Survey, plus <i>Coping Self-Efficacy Scale, Fathers' Parental Attitude Research Instrument</i>	Process: Pre/post surveys (father self-report); postintervention interviews; data analysis. Impact: infractions; coping; confidence in receiving support from staff; parenting knowledge; parenting behavior; parenting attitudes; family relationships; views on fatherhood; program content and delivery	Rutgers University-Newark Economic Development Research Group (2011)
Keep A Clear Mind (KACM) drug use prevention program	4 × weekly in-school lessons for students, each followed by five parent/child homework activities	Teenagers and their mothers and fathers	RCT: 1022 parents and 511 teenagers assigned to intervention and wait-list control. Measures: (a) for students, standardized and validated developed by authors for previous studies, and (b) for fathers and mothers, new but pretested	Process: pre/post test student and parent surveys (self-report); teacher survey. Impact: (a) fathers: drug-related parent-child communication; parental beliefs; program compliance, satisfaction and perceived effectiveness; drug-related knowledge; motivation to help children avoid drugs, and (b) children: alcohol, tobacco, and marijuana use, intentions, beliefs, and knowledge; program compliance and satisfaction	Werch et al. (1991)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Minnesota Early Learning Design Coparenting and Childbirth curricula	5 × 90-min group sessions held once a week for 5 consecutive weeks	Expectant young African American and Hispanic fathers and their adolescent partners	RCT: coparenting intervention ($n = 44$, experimental group) and childbirth/baby care intervention ($n = 46$, comparison group) plus 'strong' quasi-experimental design ($n = 64$, control group) Measures: <i>Fathers' prenatal communication and involvement; Parenting Alliance; Fathers' support of mother; Fathers' engagement with infant; Parenting sense of competence; Demographic measures; Measure of fathers' subjective experiences with the Intervention</i>	Process: pre/post intervention questionnaires (mothers and fathers); weekly questionnaires (fathers). Impact: coparenting; parenting competence	Fagan (2008)
Oregon model of Parent Management Training (PMTO)	Manual provides material for 13 sessions	Stepfathers; stepchildren	RCT: 110 recently married families with an early-elementary-school-aged focal child: experimental condition (61%) and control (39%) assessed over 2 years. The mean number of sessions attended by the intervention group was 11.71 over an average of 27.42 weeks	Process: Extensive multiple-method data obtained from questionnaires, interviews, and direct observation during four center visits, plus preintervention baseline and three postintervention follow-ups. Impact: (a) stepfathers: involvement; engagement; parenting behavior, and (b) stepchildren: compliance; mood	DeGarmo and Forgatch (2007)
Shaken Baby Syndrome Prevention Program	Leaflets, posters, a video and signed parental undertakings in an 8-county region of western New York State	Expectant and new mothers and fathers	Quasi-experimental design comparing abusive head trauma rates in 1–3 year olds over 5 years with preintervention rates in the same region and state-wide rates during the intervention period	Process: Post intervention survey; data collection; data comparison; Impact: rates of abusive head trauma; parents' recall of video and leaflet content at 7 month follow-up, extent of commitment contract signature	Dias et al. (2005)

Table 1 (continued)

Parenting program	Delivery	Target group and extent of father involvement	Nature and rigor of the evaluation	Process and impact outcomes	Reference
Siempre Papa (the 24/7 Dad Curriculum; Spanish edition, delivered across the United States)	Twelve 2-hr sessions implemented in groups or with individuals plus mental health & case-management support	Latino fathers, including in a correctional facility	211 fathers participating in the intervention 2006–2011 in Maryland; plus headline findings from other evaluations	Process: Pre-post father self-report. Impact: fathers' parenting skills and knowledge; time spent with children; attitudes toward partners and gender roles; communication with partners and children	McAllister et al. (2012)
Supporting Father Involvement	32-hr curriculum over 14–16 weeks by male/female coleaders including couple communication, parenting, family behavior patterns. Case management and support provided	Mainly low-income Mexican American and African American families	3-arm RCT with 900+ couples. Men-primarily groups compared with couples-groups and controls. Measures include: video observation; 'The Pie'; 'Who does What' Questionnaire; Father-child Relationship Scale; Parenting Stress Index; Parenting style attitudes questionnaire; Quality of Marriage Index; Couple Communication Questionnaire; Child Adaptive Behavior Inventory	Process: baseline and postintervention self-report and independent rating, with video observation and follow-up at 18 months. Impact: (a) fathers: involvement and engagement, parenting stress and behavior, couple satisfaction, (b) couples: relationship satisfaction, decreased stress, couple violence, harsh parenting and family income, (c) children: behavior (hyperactivity) and adjustment, and (d) institutions: increased father-friendliness	Knox et al. (2011), Cowan et al. (2014), Cowan et al. (2009), and Cowan et al. (2007)

Global programs are designated to a specific country where impact evaluation took place. RCT, randomized controlled trial. Process data describe the extent to which fathers were included in the deliverables of the intervention; impact data describe outcomes related to effectiveness.

United States) benefited from a randomized controlled trial evaluation, and nine (four of them in the United States) from quasi-experimental evaluation. Even among these robustly evidenced programs, sample sizes can be tiny: for example just 27 intervention and 26 control fathers were included in the Australian child obesity program (*Healthy Dads, Healthy Kids*), while others (e.g., *Supporting Father Involvement* and *Family Foundations*, both United States) were couple interventions. Among 14 of our tabulated programs, evaluations took the form of simple pre/post surveys, based on interviews with mixed groups of participants, while in some cases (e.g., *Proyecto Papa in Acción*, Peru), the evaluation was a cross-sectional survey, postintervention.

Evaluations of programs from the global south tend to be among the least rigorous. For example, in Jordan, while 93% of participants reported that the UNICEF-led Better Parenting Program was highly useful in conveying the role of fathers in children's lives, the evaluation survey data contained only 18 fathers out of a total 336 participants – so fathers' views are essentially missing (Al-Hassan & Lansford, 2011). And while the Turkish *Mother Support Program* (AÇEV) is internationally renowned because of its long-term evaluation (yielding key evidence of lifetime effects and multilevel benefits), the associated Turkish *Fathers Support Program* has received limited evaluation, namely a pre- and postcourse attitude survey to parenting roles, behavior, and communication (Barker et al., 2009).

In looking at the evidence from Table 1, which includes some of the best-known and best-evaluated programs for 'parents' in which fathers are known to have participated, it is striking to find that (a) the evidence relating to fathers, where presented, is commonly secondary to the evidence pertaining to mothers, and that (b) the evidence relating to couple v. individual participants is, with one exception, missing altogether. Indeed, the CONSORT standards designed to provide a systematic and explicit framework for reporting quasi-experimental or experimental data are far from attentively adhered to.

What outcomes are reported?

We indicate in Table 1 and Table S1 a range of *process* and *impact* outcomes. The 'process data' describe the activities, schedules, and deliverables of the intervention, while the 'impact data' describe outcomes related to effectiveness per se. In most cases, the lack of robust evaluation makes it difficult to evaluate 'findings' and substantiate the claims that programs have made for positive outcomes of father engagement; for this reason, we do not tabulate empirical findings.

The evidence base on fathers is both patchy and limited, reflecting the fragmented nature of data collection and program design. While relevant outcomes of parenting interventions include both par-

ent-focused and child-focused variables, many of the interventions in Table 1 include only parent-focused variables, rather than comprehensive measures of family functioning and child developmental outcomes. As for research methods, only eight of the interventions (e.g., the *Home Visiting Program* in Canada) include observation, rather than just parental reports, to capture the quality of parent-child interactions. Few assessment periods extend to 6 months postintervention, although exemplar cohort studies with several-wave data such as *Family Foundations*, the *Leksand* model and the Oregon model of Parent Management Training (Stepfathers) are able to shed light on longer-term birth outcomes and school or family functioning. Few studies have included measures of mental health in their evaluation; the *Family Foundations* program is one example of couple-based prevention program that explicitly examined the protective or buffering effects on stress and maternal depression (Feinberg, Jones, Kan, and Goslin, 2010). Some interventions have focused specifically on violence prevention, including reduced harsh parenting by fathers (examples include *Triple P* and *Dads on Board* in Australia, and UNICEF's *Better Parenting Program* in Jordan). And while outcomes in Table 1 encompass both father impact and father participation, some parenting interventions (e.g., *Celebrating Fatherhood* in the United Kingdom and *Aangan* in Pakistan) were designed principally to increase fathers' engagement with local services, rather than to assess the impact of this on family or child wellbeing. Well-evaluated parenting interventions (e.g., *Incredible Years*, *Triple-P*, *Family Nurse Partnership*) typically report moderate effects on parent and child outcomes, including parents' knowledge acquisition, health behaviors and children's externalizing behavior. However, 'father effects' may remain elusive where reporting is not gender-disaggregated, where sample sizes of mothers or fathers are not equivalent, or when different procedures are used for fathers and mothers in data collection.

Discussion and recommendations

Our evidence base shows that systematic evaluation of 'father engagement' and 'father effectiveness' is stymied by the way parenting interventions are designed and delivered. We turn to the second question guiding this review: what improvements can be made? Thus far, our results show that an overhaul of program design and delivery is required to obtain the necessary good-quality data on father and couple participation and impact. In both research and community-based practice, a game change in this field would consist in engaging unequivocally with coparents – rather than include just mothers and explicitly or implicitly marginalize fathers and other coparents, as in the bulk of parenting interventions implemented to-date.

Table 2 offers a guide to best practice to help rethink issues of (a) design, (b) delivery, and (c) evaluation on a global or local scale. We identified, from our reading of the literature, key issues at each of these three stages of parenting interventions; specifically, our research and clinical experience led us to highlight issues that present themselves as programmatically related to engaging coparents. First, with respect to design, we identified seven major issues in terms of cultural, institutional, professional, operational, content, resources, and policy biases that work to marginalize fathers from the outset. We have already raised some of the gender biases in cultural, institutional, and professional practices predicated on a deficit model that sees fathers as ineffective or neglectful as parents. Because the impact of fathers on child wellbeing

and family functioning, either positive or negative, is incontrovertible, it is short-sighted to sideline fathers, or indeed other coparents, and to ignore their contributions by focusing only on mothers. Asking the question ‘how to make parenting interventions culturally compelling to both fathers and mothers as coparents?’ is a good starting point. The next fundamental requirement for a game change in parenting interventions would be to pay attention to the necessity of gender-disaggregated data collection and data reporting – namely, exactly how many fathers, mothers, and coparents participated in a given program – to render analyses by subgroup possible.

Second, with respect to delivery, we highlight key programmatic and logistic issues that can work to systematically disengage fathers from parenting

Table 2 A guide to best practice for building the evidence base of coparenting interventions

Design	Delivery	Evaluation
<p>Cultural biases: How culturally-compelling are parenting interventions, in terms of making themselves relevant and attractive to coparents?</p>	<p>When, where, and how: Does the timing, the place, and the medium of program delivery work to include fathers as well as mothers? Are sufficient resources committed to ensure reaching them both? What are the advantages and disadvantages of individual home visits vs. group-based programs, and those of programs that engage with single parents vs. coparents?</p>	<p>Reach: Inclusion and engagement of significant caregivers, including fathers and other individuals in addition to mothers.</p>
<p>Institutional biases: How father-friendly is the organization in terms of policies, recruitment, support, and monitoring? How responsive are parenting interventions to gender-related differences in parenting goals?</p>	<p>Training: Are facilitators ready and skilled to work with coparents, fathers as well as mothers or other caregivers? Are their approaches sensitive to gender-specific concerns?</p>	<p>Process: Data on recruitment of participants, delivery of program, monitoring of attendance, participation, and referrals, pre/post institutional practices, and participant attitudinal changes; observation and monitoring beyond self-reports.</p>
<p>Professional biases: Do staff capabilities and attitudes toward parents exclude fathers?</p>	<p>Communication: Are both mothers and fathers explicitly informed and individually reminded about the importance of program participation, and benefits to children? Are both parents followed up in cases of nonattendance? Are nonparticipating partners explicitly contacted?</p>	<p>Impact: Prevention and reduction of problematic outcomes related to quality of parenting and family functioning; child outcomes in health, education, psychosocial development, and maltreatment.</p>
<p>Operational biases: Is data collection on parents disaggregated by sex? Does it identify coparents among mixed groups of participants?</p>	<p>Activities: Are homework expected of all coparents? Is participation monitored for one or both parents?</p>	<p>Sustainability: Commitment to policies, resources, and activities; outcomes lasting beyond a program’s timeframe.</p>
<p>Content biases: Is the content of the intervention relevant to fathers, as well as mothers?</p>	<p>Holistic support: Are the needs of fathers as well as mothers recognized? Where support is needed, are male as well as female caregivers directed to relevant health, education, and other social services?</p>	<p>Cost: Demonstrable cost-benefit for children, families, and societies; estimated cost of failing to engage with coparents.</p>
<p>Resource biases: Are sufficient resources committed to enable an organization to audit current practices and implement change?</p>		<p>Equity: Better outcomes for those most disadvantaged.</p>
<p>Policy biases: Are vision, needs assessment, partnerships, action plans, and strategies endorsed and integrated, with clear attention given to gender and coparenting issues?</p>		<p>Scale-up: Provision for replication in other settings; dissemination of findings to strengthen the evidence base; advocacy for a policy agenda on child wellbeing.</p>

interventions. For example the timing and the location of program delivery can be obvious deterrents to fathers, and to working parents generally. The case of *Family Foundations* presents a good example of a method of delivering a program to first-time parents in a nonstigmatizing way, with 8-week sessions provided through an existing institutional niche, namely a hospital's childbirth education department (Brown, Feinberg & Kan, 2011). Involving fathers early on, offering flexible hours or visiting at home, being persistent in communicating the positive gains to children of father involvement, being explicit in welcoming them personally to participate (not simply through the mothers), are all essential steps that remove barriers to father engagement (Maxwell, Scourfield, Featherstone, et al., 2012). Some key questions – with respect to 'how' programs are best implemented – still remain unanswered: depending on cultural norms, risk profiles, financing and flexibility, programs might work best when targeting mothers and fathers during home visits or when delivering group-based parenting programs in health, community or employment settings, and might be most effective when reaching out to an individual parent or to two or more family members involved in coparenting.

Finally, with respect to evaluation, key issues include moving beyond the evaluation of *process data* (for example how many fathers or mothers participated in program activities and how and when impacts were measured). What is needed is more robust and longer-term evaluation of *outcome data*, to include parenting quality, coparenting quality, family functioning, parental stress/depression, as well as child outcomes in relation to health, education, psycho-social development and maltreatment. At best, this evidence is provided through randomized controlled trials, cohort studies, observations, or third-party reports. We highlight here issues of reach and sustainability, rather than just effectiveness or impact. These are important components of programmatic 'success' that raise issues regarding possible tradeoffs between effectiveness, efficiency, and equity. For example they raise questions as to whether the needs of harder-to-reach fathers are served in parenting interventions, and whether psycho-education programs targeting behavior change, in the absence of structural interventions to benefit vulnerable families, benefit mostly those who are already advantaged.

One of the most neglected aspects of evaluation relates to economic arguments, in terms of comparing the benefits of targeted versus holistic interventions or engaging with one parent versus coparents. A comprehensive framework would include cost-effectiveness analyses, evaluating alternative yet comparable programs, and cost-benefit analyses, weighing tradeoffs of alternative investments for 'maximum social gain' (Naudeau et al., 2011; pp. 160–2), to allow better financing allocation mecha-

nisms and scale-up of initiatives with demonstrable short- and long-term benefits. For example in their review, Olds et al. (2007; p. 372 and p. 381) cited estimates from The Washington State Institute for Public Policy showing that two programs – *Parents as Teachers* (home visits and 3-year parent-group meetings) and the *Nurse-Family Partnership* program (tested in three separate randomized controlled trials, RCTs) – respectively produced a \$800-per-family and a \$17,000-per-family return on investment. Importantly, Heckman and colleagues have argued that traditional 'equity-efficiency tradeoffs' are not pertinent to interventions delivered to disadvantaged children in the early years of life: early child development programs offer both a cost-efficient way to produce a capable workforce and an equity-gain in helping those at greatest disadvantage (Heckman, 2009; Heckman & Masterov, 2007; Campbell et al., 2014). From a policy point of view, 'it is not enough to know that early-life conditions matter. It is important to know the costs and benefits of remediating early-life deficits at different stages of the life cycle' (Conti & Heckman, 2013), as well as the longer-term benefits of enhancing the capabilities of children.

Conclusions

This review has fore-grounded discussion of parenting interventions that include fathers as significant actors in the lives of children. It makes a threefold contribution to the extant literature: we provide a global and comparative overview of the evidence base, highlight why there are weaknesses in this field, and offer recommendations on father inclusion and engagement.

First of all, our review demonstrates a current *lack of synthesis and coherence* in the global evidence base. To-date the literature on father engagement is highly fragmented across education, gender, social work, and health-related fields, with patchy synthesis therein. It lacks a comparative perspective as well as global representation, which makes it difficult to extrapolate relevant data from the experience of practitioners and participants in the high-income north, and from the initiatives emerging from the global south.

Second, our review highlights a number of reasons why the evidence base on parenting interventions that have included fathers is often of poor quality. There are few exemplars using an overarching theoretical model or an integrated operational strategy from design through to evaluation. Most reviews to-date have included studies in which the small numbers of participating fathers were excluded from analysis, in which 'parents' were undifferentiated by gender, and in which the participation of couples versus individual parents was not accounted for. Our understanding of fathers' participation and impact in parenting interventions is therefore still

in its infancy, and the generalizability of findings far weaker for fathers than for mothers.

Third, we make recommendations on father inclusion and engagement in parenting programs, but caution that these must be respectful of cultural values and consonant with structural constraints that shape everyday behavior. Some of the evidence presented in this review comes from father-only programs, with only a few focused more comprehensively on coparenting relationships. While this evidence is important, one must not be drawn into thinking that father-only programs are the best way forward – some noteworthy research suggests that they are not (Cowan et al., 2009; Spaulding, Grossman, & Wallace, 2009; Wadsworth et al., 2011). Indeed, many men are extremely unwilling to attend men/father-only groups (Russell et al., 1999), while from a programmatic point of view, men-only services are often an add-on to other programs, deemed unsustainable when resources are short. Furthermore, behavioral change within families seems unlikely to be sustained when only one parent, whether the mother or father, is the sole target of a parenting intervention. We need to comprehensively understand the *community of care* provided to children, and the sensitivity of children to a range of caregiving contexts. A body of cross-cultural research thus reminds us of the significance of alloparents (including grandparents, other blood relatives, and community neighbors) as alternative caregivers with a stake in the everyday responsibilities of parenting, beyond sole consideration of the mother or biological parent (Bentley, 2009). In fact, children may be raised by several generations of female relatives, as in Mexico (Solis-Camara et al., 2014), or placed under the care of different relatives in response to changing socio-economic demands, as in Afghanistan (Panter-Brick, Goodman, Tol, & Eggerman, 2011). This raises questions regarding which program modalities are the most compelling in which contexts, focusing attention on the means of program delivery (group-based vs. home visits, universal v. targeted, mother-only, father-only, or coparents), above and beyond attention to program content. Recent advances in the field of child health and development have also reminded us that we need to rethink interventions in terms of the best leverage points to build family-level resilience, not just minimize risk to children (Panter-Brick & Leckman, 2013). They also challenge us to rethink the kind of evidence needed to detect ‘differential susceptibility to context,’ regarding both adverse and beneficial effects of parenting (Pluess & Belsky, 2010).

Understanding the fundamental dimension of *gender* in parenting programs is as significant as current efforts to target the different subgroups of mothers (lone parent, teenage mothers, low-income mothers, minority-group mothers, substance-abusing mothers, and/or incarcerated mothers) in the global north, or indeed to recognize the caregiving impor-

tance of grandmothers, mothers-in-law, and other relatives in the global south. The gendered and social nature of parenting means that fathers, mothers, and other caregivers arrive with distinct expectations, assets, constraints, and experiences: these cannot be homogenized or overlooked. In lower-income countries, women (e.g., in the AÇEV-led initiatives in Turkey, *Aangan* in Pakistan) and professionals (e.g., healthcare and development workers in Niger, Jordan, Ukraine) have actively sought methods of engaging men in family issues. They work to mobilize men’s interest and to engage men in private and public spaces, in order to enhance interpersonal communication, family-level care, community action, and child outcomes.

Parenting interventions thus need to be compelling to all stakeholders and decision-makers, namely fathers and other significant caregivers as well as mothers, program directors, and funders. More specifically, resources can be unnecessarily wasted where there is no effective engagement with fathers in their roles as caregivers, because this may undermine a range of existing parenting activities and negate additive or synergistic impacts in the lives of children. Whether absent or present, fathers have an impact on children, mothers, and family dynamics, for better and for worse. Marginalizing such important players amounts to poor professional practice and poor evaluation. It may also undermine practitioners’ and policy makers’ duty of care, in failing to assess risk, enhance resilience, and optimize the positive impacts on family and child wellbeing that are aspired to in parenting interventions. Key priorities are to engage fathers and coparenting couples successfully, to disaggregate process and impact data by fathers, mothers, and coparents, and to pay greater attention to issues of reach, sustainability, cost, equity, and scale-up.

Supporting information

Additional Supporting Information may be found in the online version of this article:

Table S1 Global overview of parenting programs that evaluated father impact and participation.

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Key points

- Fathers have substantial impact on child development, wellbeing, and family functioning, yet parenting interventions rarely target men, or make a dedicated effort to include them.
- Our review of the global evidence on parenting interventions that have included men as parents or coparents shows that insufficient attention is given to reporting father participation and impact.
- A fundamental change in the design and delivery of parenting interventions is required to overcome pervasive gender biases and to generate robust evidence on outcomes, differentiated by gender and by couple effects in evaluation.

References

- AÇEV (2009). *Building a generation of reconciliation: The role of early childhood development in peace building*. Istanbul, Turkey: AÇEV (Anne Çocuk Eğitim Vakfı).
- Adesso, V.J., & Lipson, J.W. (1981). Group training of parents as therapists for their children. *Behavior Therapy*, 12, 625–633.
- Al-Hassan, S. (2009). *Evaluation for the better parenting programme: A study conducted for UNICEF*. Jordan: Hashemite University. Available from: http://www.unicef.org/evaluation/files/Final_report_of_BPP-June_Jordan.pdf [last accessed 13 June 2014].
- Al-Hassan, S.M., & Lansford, J.E. (2011). Evaluation of the better parenting programme in Jordan. *Early Child Development and Care*, 181, 587–598.
- Atzil, S., Hendler, T., Zagoory-Sharon, O., Winetraub, Y., & Feldman, R. (2012). Synchrony and specificity in the maternal and the paternal brain: Relations to oxytocin and vasopressin. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51, 798–811.
- Bagner, D.M. (2013). Father's role in parent training for children with developmental delay. *Journal of Family Psychology*, 27, 650–657.
- Bagner, D.M., & Eyberg, S.M. (2003). Father involvement in parent training: When does it matter? *Journal of Clinical Child and Adolescent Psychology*, 32, 599–605.
- Bakermans-Kranenburg, M.J., van Ijzendoorn, M.H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, 129, 195–215.
- Barker, G., Dođruöz, D., & Rogow, D. (2009). *And how will you remember me, my child? Redefining fatherhood in Turkey. Quality/Calidad/Qualité* (pp. 1–34). New York: The Population Council.
- Barnes, J., Ball, M., Meadows, P., Howden, B., Jackson, A., Henderson, J., & Niven, L. (2011). *The Family Nurse Partnership Programme in England: Wave 1 implementation in toddlerhood and a comparison between Waves 1 and 2a implementation in pregnancy and infancy*. London: Department of Health.
- Bath & North East Somerset Council (2013). *Celebrating fatherhood: A year long campaign*. Bath, UK: Bath & North East Somerset Council. Available from: http://www.bathnes.gov.uk/sites/default/files/cf-booklet_130610_web_0.pdf [last accessed 13 June 2014].
- Bendixen, R.M., Elder, J.H., Donaldson, S., Kairalla, J.A., Valcante, G., & Ferdig, R.E. (2011). Effects of a father-based in-home intervention on perceived stress and family dynamics in parents of children with autism. *American Journal of Occupational Therapy*, 65, 679–687.
- Bentley, G. (2009). *Substitute parents: Biological and social perspective on alloparenting across human societies*. New York: Berghahn Books.
- Benzies, K., Magill-Evans, J., Harrison, M.J., MacPhail, S., & Kimak, C. (2008). Strengthening new fathers' skills in interaction with their 5-month-old infants: Who benefits from a brief intervention? *Public Health Nursing*, 25, 431–439.
- Besnard, T., Capuano, F., Verlaan, P., Poulin, F., & Vitaro, F. (2009). Effet ajouté de la participation des pères à une intervention familiale (Added effect of the fathers' participation in a family intervention). *Revue de Psychoéducation*, 38, 45–71.
- Bhandari, N., & Karkara, R. (2006). *Regional capacity building workshop on men, caring and fatherhood*. Kathmandu: Save the Children Sweden.
- Britto, P.R., & Ulkuer, N. (2012). Child development in developing countries: Child rights and policy implications. *Child Development*, 83, 92–103.
- Brown, L., Feinberg, M., & Kan, M. (2011). Predicting engagement in a transition to parenthood program for couples. *Evaluation and Program Planning*, 35, 1–8.
- Bunston, W. (2013). 'What about the fathers?' Bringing 'Dads on Board™' with their infants and toddlers following violence. *Journal of Family Studies*, 19, 70–79.
- Burgess, A. (2009). *Fathers and parenting interventions: What works?*. Abergavenny: Fatherhood Institute.
- Burrows, T., Morgan, P.J., Lubans, D.R., Callister, R., Okely, T., Bray, J., & Collins, C.E. (2012). Dietary outcomes of the healthy dads healthy kids randomised controlled trial. *Journal of Pediatric Gastroenterology and Nutrition*, 55, 408–411.
- Cabrera, N., & Tamis-Lemomda, C. (2013). *Handbook of father involvement: Multidisciplinary perspectives*. New York: Routledge.
- Caldwell, C.H., Antonakos, C.L., Assari, S., Kruger, D., de Loney, E.H., & Njai, R. (2014). Pathways to prevention: Improving nonresident African American Fathers' parenting skills and behaviors to reduce sons' aggression. *Child Development*, 85, 308–325.
- Caldwell, C.H., De Loney, E.H., Mincy, R., Klempin, S., Brooks, C.L., & Rafferty, J. (2011). Strengthening bonds between nonresident African American fathers and sons as a way to reduce or prevent youth risky behaviors. In C. Haen (Ed.), *Engaging boys in treatment: Creative approaches to the therapy process* (The Routledge Series on counseling and psychotherapy with boys and men) (pp. 265–291). New York: Routledge.
- Caldwell, C., Rafferty, J., de Loney, E., & Reischl, T. (2008). The Flint Fathers and Sons Program. Practice notes: Strategies in health education. *Health Education & Behavior*, 35, 155–157.
- Caldwell, C., Rafferty, J., Reischl, T., de Loney, E., & Brooks, C. (2010). Enhancing parenting skills among nonresident African American fathers as a strategy for preventing youth risky behaviors. *American Journal of Community Psychology*, 45, 17–35.
- Campbell, F., Conti, G., Heckman, J.J., Moon, S.H., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. *Science*, 343, 1478–1485.

- Cia, F., Barham, E.J., & Fontaine, A.M.G.V. (2010). Impacts of a parent intervention program: Their children's academic achievement and classroom behavior. *Psicologia: Reflexao e Critica*, 23, 533–543.
- Conti, G., & Heckman, J. (2013). The developmental approach to child and adult health. *Pediatrics*, 131, S133–S141.
- Cowan, C.P., Cowan, P.A., Pruett, M.K., & Pruett, K. (2007). An approach to preventing coparenting conflict and divorce in low-income families: Strengthening couple relationships and fostering fathers' involvement. *Family Process Special Issue: Divorce and Its Aftermath*, 46, 109–121.
- Cowan, P., Cowan, C., Pruett, M.K., Pruett, K., & Gillette, P. (2014). Evaluating a couples group to enhance father involvement in low-income families using a benchmark comparison. *Family Relations*, 63, 356–370.
- Cowan, P.A., Cowan, C.P., Pruett, M.K., Pruett, K., & Wong, J.J. (2009). Promoting fathers' engagement with children: Preventive interventions for low-income families. *Journal of Marriage and the Family*, 71, 663–679.
- Daniel, M., Lekkas, P., Cargo, M., Stankov, I., & Brown, A. (2011). Environmental risk conditions and pathways to cardiometabolic diseases in indigenous populations. *Annual Review of Public Health*, 32, 327–347.
- DeGarmo, D.S., & Forgatch, M.S. (2007). Efficacy of parent training for stepfathers: From playful spectator and polite stranger to effective stepfathering. *Parenting, Science and Practice*, 7, 331–355.
- Dias, M.S., Smith, K., Deguehery, K., Mazur, P., Li, V.T., & Shaffer, M.L. (2005). Preventing abusive head trauma among infants and young children: A hospital-based, parent education program. *Pediatrics*, 115, e470–e477.
- Donelan-McCall, N., Eckenrode, J., & Olds, D. (2009). Home visiting for the prevention of child maltreatment: Lessons learned during the past 20 years. *Pediatric Clinics of North America*, 56, 389–403.
- Elder, J.H., Donaldson, S.O., Kairalla, J., Valcante, G., Bendixen, R., Ferdig, R., ... & Serrano, M. (2011). In-home training for fathers of children with autism: A follow up study and evaluation of four individual training components. *Journal of Child and Family Studies*, 20, 263–271.
- Elder, J.H., Valcante, G., Yarandi, H., White, D., & Elder, T.H. (2005). Evaluating in-home training for fathers of children with autism using single-subject experimentation and group analysis methods. *Nursing Research*, 54, 22–32.
- Ellis, K., Caldwell, C.H., Assari, S., & De Loney, E.H. (2014). Nonresident African-American fathers' influence on sons' exercise intentions in the fathers and sons program. *American Journal of Health Promotion*. doi: <http://dx.doi.org/10.4278/ajhp.130417-QUAN-179>. [Epub ahead of print].
- Enebrink, P., Hogstrom, J., Forster, M., & Ghaderi, A. (2012). Internet-based parent management training: A randomized controlled study. *Behaviour Research and Therapy*, 50, 240–249.
- Engle, P., Fernald, L., Alderman, H., Behrman, H., & Al, E. (2011). Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *The Lancet*, 378, 1339–1353.
- Fabiano, G.A. (2007). Father participation in behavioral parent training for ADHD: Review and recommendations for increasing inclusion and engagement. *Journal of Family Psychology*, 21, 683–693.
- Fagan, J., & Iglesias, A. (1999). Father involvement program effects on fathers, father figures, and their head start children: A quasi-experimental study. *Early Childhood Research Quarterly*, 14, 243–269.
- Fagan, J. (2008). Randomized study of a pre-birth coparenting intervention with adolescent and young fathers. *Family Relations*, 57, 309–323.
- Fatherhood Institute (2010). *The fatherhood report 2010–11: The fairness in families index*. London: Fatherhood Institute. Available from: http://www.fatherhoodinstitute.org/wp-content/uploads/2010/12/FI-FiFI-Report-2010_FINAL.pdf [last accessed 22 June 2014].
- Fatherhood Institute (2013a). *Case study: Fathers in the family nurse partnership*. London: Fatherhood Institute. Available from: <http://www.fatherhoodinstitute.org/2013/case-study-fathers-family-nurse-partnership-fnp-programme/> [last accessed 9 June 2014].
- Fatherhood Institute (2013b). *Fatherhood Institute research summary: Fathers' impact on their children's learning and achievement*. London: Fatherhood Institute. Available from: <http://www.fatherhoodinstitute.org/2013/fatherhood-institute-research-summary-fathers-and-their-childrens-education/> [last accessed 22 June 2014].
- Feinberg, M., Jones, D., Kan, M., & Goslin, M. (2010). Effects of family foundations on parents and children: 3.5 years after baseline. *Journal of Family Psychology*, 24, 532–542.
- Feinberg, M.E., Roettger, M., Jones, D., Paul, I., & Kan, M. (In Press). Effects of a psychosocial couple-based prevention program on adverse birth outcomes. *Journal of Maternal and Health*. Accepted for publication, May 2014.
- Feinberg, M.E., & Kan, M.L. (2008). Establishing family foundations: Intervention effects on coparenting, parent/infant well-being, and parent-child relations. *Journal of Family Psychology*, 22, 253–263.
- Feinberg, M., Kan, M., & Goslin, M. (2009). Enhancing coparenting, parenting, and child self-regulation: Effects of family foundations 1 year after birth. *Prevention Science*, 10, 276–285.
- Feinberg, M.E., Roettger, M., Jones, D., Paul, I., & Kan, M. (Under review). *Effects of a psychosocial couple-based prevention program on adverse birth outcomes*.
- Feldman, R., Bamberger, E., & Kanat-Maymon, Y. (2013). Parent-specific reciprocity from infancy to adolescence shapes children's social competence and dialogical skills. *Attachment & Human Development*, 15, 407–423.
- Ferguson, H., & Gates, P. (2013). Early intervention and holistic, relationship-based practice with fathers: Evidence from the work of the Family Nurse Partnership. *Child & Family Social Work*. doi: 10.1111/cfs.12059.
- Fivaz-Depeursinge, E., & Corboz-Warnery, A. (1999). *The primary triangle: A developmental systems view of mothers, fathers and infants*. New York: Basic Books.
- Fletcher, R., Freeman, E., & Matthey, S. (2011). The impact of behavioural parent training on fathers' parenting: A meta-analysis of the triple P-positive parenting program. *Fathering*, 9, 291–312.
- Flouri, E. (2005). *Fathering & child outcomes*. Chichester, West Sussex: John Wiley & Sons.
- Flouri, E., & Buchanan, A. (2004). Early father's and mother's involvement and child's later educational outcomes. *British Journal of Educational Psychology*, 74, 141–153.
- Gough, D., Oliver, S., & Thomas, J. (2012). *An introduction to systematic reviews*. Los Angeles/London: Sage Publications.
- Gray, P., & Anderson, K.G. (2010). *Fatherhood: Evolution and human paternal behavior*. Cambridge, MA: Harvard University Press.
- Grossman, K., Grossman, K.E., Fremmer-Bombik, E., Kindler, H., Scheurer-English, H., & Zimmermann, P. (2002). The uniqueness of the child-father attachment relationship: Fathers' sensitive and challenging play as a pivotal variable in a 16-year long study. *Social Development*, 11, 307–331.
- Hahlweg, K., Heinrichs, N., Kuschel, A., Bertram, H., & Naumann, S. (2010). Long-term outcome of a randomized controlled universal prevention trial through a positive parenting program: Is it worth the effort? *Child and Adolescent Psychiatry and Mental Health*, 4, 14.

- Hawkins, A., & Dollahite, D. (1997). *Generative fathering: Beyond deficit perspectives*. Thousand Oaks, CA: Sage Publications.
- Hawkins, A.J., Lovejoy, K.R., Holmes, E.K., Blanchard, V.L., & Fawcett, E. (2008). Increasing fathers' involvement in child care with a couple-focused intervention during the transition to parenthood. *Family Relations, 57*, 49–59.
- Heckman, J. (2009). The case for investing in disadvantaged young children. In *Big ideas for children: Investing in our nations' future* (pp. 49–58). Washington, DC: First Focus.
- Heckman, J., & Masterov, D. (2007). The productivity argument for investing in young children. *Review of Agricultural Economics, 29*, 446–493.
- Hewlett, B. (2011). *Father-child relations: Cultural and biosocial contexts*. New Brunswick, NJ: AldineTransaction.
- Holmes, E.K., Galovan, A.M., Yoshida, K., & Hawkins, A.J. (2010). Meta-analysis of the effectiveness of resident fathering programs: Are family life educators interested in fathers? *Family Relations, 59*, 240–252.
- Hoskings, G., & Walsh, I. (2010). *International experience of early intervention for children, young people and their families*. Croydon: Wave Trust.
- Johansson, T. (2012). The Swedish Leksand model – family preparation as a starting point for the family centre. In M. Kekkonen, M. Montonen, & R. Vitala (Eds.), *Family centre in the Nordic countries – a meeting point for children and families* (pp. 69–74). Copenhagen: Nordic Council of Ministers.
- Kim, P., Mayes, L., Feldman, R., Leckman, J., & Swain, J. (2013). Early postpartum parental preoccupation and positive parenting thoughts: Relationship with parent-infant interaction. *Infant Mental Health Journal, 34*, 102–116.
- Kim, P., Rigo, P., Mayes, L., Feldman, R., Leckman, J., & Swain, J. (in press). Neural plasticity in fathers of human infants. *Social Neuroscience*. Accepted for publication, 4 June 2014.
- Knox, V., Cowan, P.A., Cowan, C.P., & Bildner, E. (2011). Policies that strengthen fatherhood and family relationships: What do we know and what do we need to know? *The Annals of the American Academy of Political and Social Science, 635*, 216–239.
- Lamb, M.E. (2010). *The role of the father in child development*. Hoboken, NJ: John Wiley & Sons.
- Lamb, M.E., & Lewis, C. (2013). Father-child relationships. In N. Cabrera, & C.S. Tamis-Lemonda (Eds.), *Handbook of father involvement: Multidisciplinary perspectives* (pp. 119–134). New York: Routledge.
- Lavi-Levavi, I., Shachar, I., & Omer, H. (2013). Training in nonviolent resistance for parents of violent children: Differences between fathers and mothers. *Journal of Systemic Therapies, 32*, 79–93.
- Lee, T.Y., Wang, M.M., Lin, K.C., & Kao, C.H. (2013). The effectiveness of early intervention on paternal stress for fathers of premature infants admitted to a neonatal intensive care unit. *Journal of Advanced Nursing, 69*, 1085–1095.
- Lundahl, B.W., Tollefson, D., Risser, H., & Lovejoy, M.C. (2008). A meta-analysis of father involvement in parent training. *Research on Social Work Practice, 18*, 97–106.
- Magill-Evans, J., Harrison, M.J., Benzies, K., Gierl, M., & Kimak, C. (2007). Effects of parenting education on first-time father's skills in interactions with their infants. *Fathering, 5*, 42–57.
- Magill-Evans, J., Harrison, M., Rempel, G., & Slater, L. (2006). Interventions with fathers of young children: Systematic literature review. *Journal of Advanced Nursing, 55*, 248–264.
- Martin, A., Ryan, R., & Brooks-Gunn, J. (2007). The joint influence of mother and father parenting on child cognitive outcomes at age 5. *Early Childhood Research Quarterly, 22*, 423–439.
- Maxwell, N., Scourfield, J., Featherstone, B., Holland, S., & Tolman, R. (2012). Engaging fathers in child welfare services: A narrative review of recent research evidence. *Child & Family Social Work, 17*, 160–169.
- Maxwell, N., Scourfield, J., Holland, S., Featherstone, B., & Lee, J. (2012). The benefits and challenges of training child protection social workers in father engagement. *Child Abuse Review, 21*, 299–310.
- May, F.S., McLean, L.A., Anderson, A., Hudson, A., Cameron, C., & Matthews, J. (2013). Father participation with mothers in the Signposts program: An initial investigation. *Journal of Intellectual Developmental Disability, 38*, 39–47.
- McAllister, F., Burgess, A., Kato, J., & Barker, G. (2012). *Fatherhood: Parenting programmes and policy – a critical review of best practice*. Washington, DC: The Fatherhood Institute/Promundo/MenCare.
- McHale, J.P., & Lindahl, K.M. (2011). *Coparenting: A conceptual and clinical examination of family systems*. Washington, DC: American Psychological Association.
- Melnyk, B.M., Feinstein, N.F., Alpert-Gillis, L., Fairbanks, E., Crean, H.F., Sinkin, R.A., ... & Gross, S.J. (2006). Reducing premature infants' length of stay and improving parents' mental health outcomes with the creating opportunities for parent empowerment (COPE) neonatal intensive care unit program: A randomized, controlled trial. *Pediatrics, 118*, E1414–E1427.
- Miranda, V. (2011). *Cooking, caring and volunteering: unpaid work around the world*. OECD Publishing: OECD Social, Employment and Migration Working Papers, No. 116.
- Morgan, P.J., Lubans, D.R., Callister, R., Okely, A.D., Burrows, T.L., Fletcher, R., & Collins, C.E. (2011). The 'Healthy Dads, Healthy Kids' randomized controlled trial: Efficacy of a healthy lifestyle program for overweight fathers and their children. *International Journal of Obesity, 35*, 436–447.
- Naudeau, S., Kataoka, N., Valerio, A., Neuman, M., & Elder, L. (2011). *Investing in young children: An early childhood development guide for policy dialogue and project preparation*. *Directions in development*. Washington, DC: The World Bank.
- Olds, D.L., Sadler, L., & Kitzman, H. (2007). Programs for parents of infants and toddlers: Recent evidence from randomized trials. *Journal of Child Psychology and Psychiatry, 48*, 355–391.
- Palm, G., & Fagan, J. (2008). Father involvement in early childhood programs: Review of the literature. *Early Child Development and Care, 178*, 745–759.
- Panter-Brick, C., Goodman, A., Tol, W., & Eggerman, M. (2011). Mental health and childhood adversities: A longitudinal study in Kabul, Afghanistan. *Journal of the American Academy of Child & Adolescent Psychiatry, 50*, 349–363.
- Panter-Brick, C., & Leckman, J.F. (2013). Editorial Commentary: Resilience in child development – interconnected pathways to wellbeing. *Journal of Child Psychology and Psychiatry, 54*, 333–336.
- Pattnaik, J., & Sriram, R. (2010). Father/Male involvement in the care and education of children: History, trends, research, policies, and programs around the world. *Childhood Education, 86*, 354–359.
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*. Malden, MA: Blackwell Publishing.
- Phares, V., Rojas, A., Thurston, I.B., & Hankinson, J.C. (2010). Including fathers in clinical interventions for children and adolescents. In M.E. Lamb (Ed.), *The role of the father in child development*. (pp. 459–485). Hoboken, NJ: John Wiley & Sons.
- Pleck, J. (2010). Paternal involvement: Revised conceptualization and theoretical linkages with child outcomes. In M.E. Lamb (Ed.), *The role of the father in*

- child development* (pp. 58–93). Hoboken, NJ: John Wiley & Sons.
- Pleck, J., & Masciadrelli, B. (2004). Paternal involvement by U.S. residential fathers: Levels, sources, and consequences. In M.E. Lamb (Ed.), *The role of the father in child development* (pp. 222–271). Hoboken, NJ: John Wiley & Sons.
- Pluess, M., & Belsky, J. (2010). Differential susceptibility to parenting and quality child care. *Developmental Psychology*, 46, 379–390.
- Ramchandani, P.G., Domoney, J., Sethna, V., Psychogiou, L., Vlachos, H., & Murray, L. (2013). Do early father-infant interactions predict the onset of externalising behaviours in young children? Findings from a longitudinal cohort study. *Journal of Child Psychology and Psychiatry*, 54, 56–64.
- Rienks, S.L., Wadsworth, M.E., Markman, H.J., Einhorn, L., & Etter, E.M. (2011). Father involvement in urban low-income fathers: Baseline associations and changes resulting from preventive intervention. *Family Relations*, 60, 191–204.
- Roggman, L.A., Boyce, L.K., Cook, G.A., Christiansen, K., & Jones, D. (2004). Playing with daddy: A positive impact of Early Head Start. *Fathering*, 2, 83–108.
- Russell, G., Barclay, L., Edgecombe, G., Donovan, J., Habib, G., Callaghan, H., & Pawson, Q. (1999). *Fitting fathers into families*. Canberra: Australian Federal Department of Family & Community Services.
- Rutgers University-Newark Economic Development Research Group (2011). *Assessing the impact of inside out dad on Newark Community Education Centers (CEC) Residential Reentry Center Residents*. School of Public Affairs and Administration.
- Samuels, C.A., Scholz, K., & Edmundson, K. (1992). The effects of baby bath and massage by fathers on the family system: The Sunraysia Australia Intervention Project. *Early Development and Parenting*, 1, 39–49.
- Sarkadi, A., Kristiansson, R., Oberklaid, F., & Bremberg, S. (2008). Fathers' involvement and children's developmental outcomes: A systematic review of longitudinal studies. *Acta Paediatrica*, 97, 153–158.
- Scholz, K., & Samuels, C.A. (1992). Neonatal bathing and massage intervention with fathers, behavioural effects 12 weeks after birth of the first baby: The Sunraysia Australia Intervention Project. *International Journal of Behavioral Development*, 15, 67–81.
- Scott, K.L., & Lishak, V. (2012). Intervention for maltreating fathers: Statistically and clinically significant change. *Child Abuse and Neglect*, 36, 680–684.
- Scourfield, J., Cheung, S.Y., & Macdonald, G. (2014). Working with fathers to improve children's wellbeing: Results of a survey exploring service provision and intervention approach in the UK. *Children and Youth Services Review*, 43, 40–50.
- Selin, H. (2014). *Parenting across cultures: Childrearing, motherhood and fatherhood in Non-Western Cultures*. New York: Springer Science+Business.
- Sherr, L., & Croome, N. (2012). Involving fathers in prevention of mother to child transmission initiatives – what the evidence suggests. *Journal of the International AIDS Society*, 15 (Suppl. 2). doi:10.7448/IAS.15.4.17378.
- Shwalb, D.W., Shwalb, B.J., & Lamb, M.E. (2013). *Fathers in cultural context*. New York: Routledge.
- Singer, G.H.S., Ethridge, B.L., & Aldana, S.I. (2007). Primary and secondary effects of parenting and stress management interventions for parents of children with developmental disabilities: A meta-analysis. *Mental Retardation and Developmental Disabilities Research Reviews*, 13, 357–369.
- Smith, T.K., Duggan, A., Bair-Merritt, M.H., & Cox, G. (2012). Systematic review of fathers' involvement in programmes for the primary prevention of child maltreatment. *Child Abuse Review*, 21, 237–254.
- Solis-Camara, P., Fung, M., & Fox, R. (2014). Parenting in Mexico: Relationships based on love and obedience. In H. Selin (Ed.), *Parenting across cultures: Childrearing, motherhood and fatherhood in non-western cultures* (pp. 349–366). New York: Springer Science+Business.
- Spaulding, S., Grossman, J.B., & Wallace, D. (2009). *Working dad: Final report on the fathers at work initiative*. Philadelphia: Public/Private/Ventures.
- Stanley, N., Graham-Kevan, N., & Borthwick, R. (2012). Fathers and domestic violence: Building motivation for change through perpetrator programmes. *Child Abuse Review*, 21, 264–274.
- Sunar, D., Kağitçibaşı, C., Leckman, J., Britto, P., Panter-Brick, C., Pruett, K., ... & Sirali, Y. (2013). Is early childhood relevant to peacebuilding? *Journal of Peacebuilding & Development*, 8, 81–85.
- Uman, L. (2011). Systematic reviews and meta-analyses. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 20, 57–59.
- UNFPA (2011). *L'École des Maris au Niger, des chiffres et des homes Niamey, Niger UNFPA*.
- Vogel, C., Boller, R., Xue, Y., Blair, R., Aikens, N., Burwick, A., & Shrago, Y. (2011). *Learning as we go: A first snapshot of Early Head Start programs, staff, families, and children*. Washington, DC: OPRE, ACF, US Dept of Health and Human Services.
- Wadsworth, M.E., Santiago, C.D., Einhorn, L., Etter, E.M., Rienks, S., & Markman, H. (2011). Preliminary efficacy of an intervention to reduce psychosocial stress and improve coping in low-income families. *American Journal of Community Psychology*, 48, 257–271.
- Webster-Stratton, C. (1985). The effects of father involvement in parent training for conduct problem children. *Journal of Child Psychology and Psychiatry*, 26, 801–810.
- Werch, C.E., Young, M., Clark, M., Garrett, C., Hooks, S., & Kersten, C. (1991). Effects of a take-home drug prevention program on drug-related communication and beliefs of parents and children. *Journal of School Health*, 61, 346–350.
- Yekta, M.S., Zamani, N., Parand, A., & Zardkhaneh, A. (2011). *The effectiveness of anger management training on parents' anger expression and control*. Scientific Information Database.

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