

# Early literacy in South Africa: The promise of book sharing

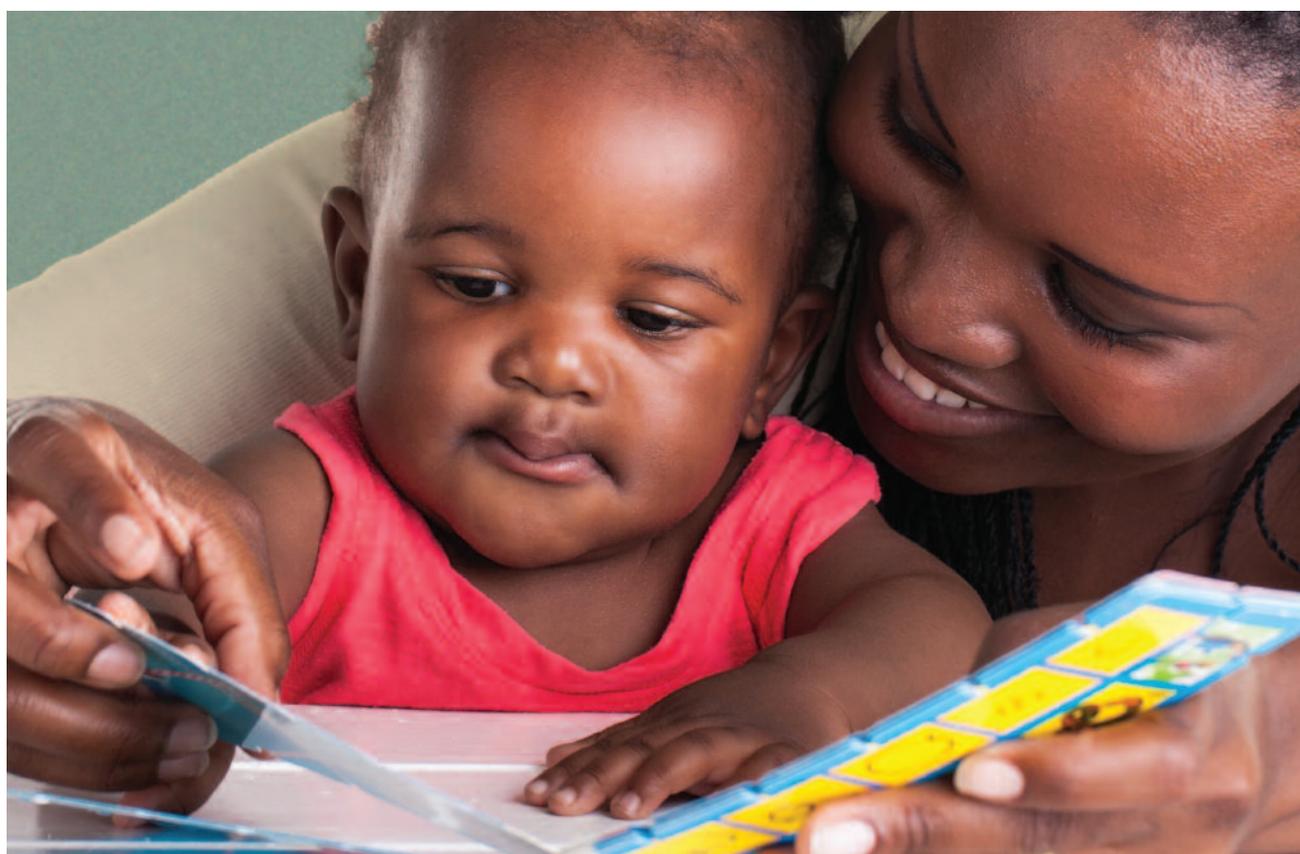
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It has been estimated, conservatively, that 200 million young children, predominantly from Asia and Sub-Saharan Africa, are failing to achieve their developmental potential as a consequence of poverty. These children are disadvantaged in multiple ways, suffering adverse consequences in terms of their growth, physical health, socio-emotional competence and cognitive skills. While all of these adverse outcomes carry clear disadvantage, arguably it is the deficits in cognitive skills, including literacy, and the associated educational failure that serve especially to exacerbate the entrenchment of cycles of deprivation. This occurs not only through their impact on later earnings, but also, especially in mothers, through their association with high fertility, poor childcare, and poor child health and survival rates (Grantham-McGregor et al., 2007).

The cognitive disadvantage is apparent early on in childhood. Thus, in high-income countries (HICs), it is well established that early cognitive and socio-emotional development are strong determinants of subsequent school progress and literacy (e.g.

Murray et al., 2010), and this appears to be equally true in low- and middle-income countries (LMICs; Groman and Pollitt, 1996). Given that children's ability at the point of school entry is such an important predictor of their progress through school, there is a strong case for intervention in the preschool period. Indeed, studies of interventions delivering such early cognitive stimulation in HICs consistently show substantial and sustained benefits in terms of child language and cognitive functioning (Walker et al., 2007).

A notable feature of the most effective of these interventions, however, is their comprehensive nature: thus, they are typically directed at multiple risk factors and are of 'adequate duration, intensity and quality... integrated within health and nutrition services' (Engle et al., 2007). Importantly, despite the great weight of positive evidence in favour of the introduction of such early development programmes, government investment has tended to be low. There are several possible reasons for this. Aside from concerns about the immediate cost, one likely impediment is that mounting such comprehensive interventions poses major logistical



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*Book sharing between a mother and infant can enhance early literacy development*

challenges in terms of personnel, training and delivery, especially in circumstances where resources are scarce. It is important, therefore, to explore whether there might be simple, low-cost strategies directed specifically at promoting early child cognitive and pre-literacy skills, which would present a less daunting implementation prospect, especially in LMIC contexts.

One possible early intervention strategy that has received little attention to date in LMICs is the promotion of book sharing between a carer and an infant, a form of intervention which, some have argued, is especially potent for enhancing early literacy development (Bus et al., 1995; Whitehurst et al., 1988). Research from HICs does, indeed, suggest that book sharing may be especially effective as a means of promoting infant language development and skills relevant to later literacy. This research, generally with children aged nine months to two years, has consistently found that periods of prolonged engagement between carer and infant more commonly occur when sharing picture books than in other situations. Further, during these times, more than in any other context, carers name objects for the infant and more often acknowledge, extend and elaborate on the focus of the infant's interests or on the sounds they make (Fletcher and Reese, 2005).

Since it is well established that vocabulary and language development occurs through both direct instruction of word meanings (Stahl, 1997) and incidental learning from verbal contexts (Elley, 1989), book sharing is an especially rich and effective environment for promoting child language development. In particular, the opportunity that book sharing presents for initiating conversations may be key to its effectiveness (Bond and Wasik, 2009), since such conversations provide a structure around which the adult helps to promote child language and vocabulary development. Book sharing may also be such a powerful medium of instruction because it occurs in a naturalistic and meaningful context that is both interesting and motivating for young children (Justice and Pullen, 2003).

Given these established benefits of book sharing, it is unsurprising that studies have shown that more frequent book sharing between children and their parents is an indicator of better language and literacy skills later on, an association that still holds even when family social class is taken into account (Bus et al., 1995). Particularly convincing evidence for the value of supportive book sharing comes from studies where instruction that aims to improve the quality of book sharing has been provided. These studies have generally assessed the value of training in 'dialogic reading', a

## The book-sharing training programme

The programme involves eight training sessions, although it can probably be delivered effectively in some contexts in fewer sessions. The sessions can be run on a one-to-one basis or in small groups. Each session begins with a PowerPoint presentation, which is accompanied by illustrative video clips. The PowerPoint sessions typically last for about half an hour and are then followed by a ten- to 15-minute session of individual attention, where the trainer sits with a caretaker and infant while they share a book. This is an opportunity for the trainer to support and encourage the caretaker in what they are doing. Typically, during these individual sessions, the trainer will take the opportunity to share the book with the infant herself, modelling the sorts of behaviours that have been introduced in the PowerPoint presentation. The content of each of these eight sessions is specified in a manual and each session has clips of videoed book-sharing interactions associated with it to illustrate the point being discussed (e.g. pointing and naming or elaboration).

The training programme includes the following basic components of dialogic reading and endeavours to provide guidance in acquiring these necessary skills (Whitehurst et al., 1988).

**Active child participation:** The infant should be encouraged to actively participate in the book-sharing experience rather than simply be a passive listener being read to. The carer is encouraged to follow cues from the infant; to support and encourage the infant's active participation; and to facilitate the infant's handling of the book by helping to turn pages, and steady and orient the book.

**Pointing and naming:** The carer is encouraged to point and name objects in the infant's visual field, indexed by simple looking, patting, banging or scratching the picture. The carer is

encouraged to respond to these behaviours by pointing to and naming the object (or action or emotion for more cognitively sophisticated children) that has attracted the infant's attention.

**Emphasising the stimuli to which the baby responds:** The carer is encouraged to support the infant's interest in whatever is named by animating what is shown (e.g. moving their hand up and down to mark the bouncing of a pictured ball).

**Active questioning using 'where'-style questions:** For words the infant understands, the carer is encouraged to prompt the infant to point to a particular object or character, asking questions starting with 'Where is the...?' or 'Can you find the...?'.

**Active questioning using 'what'- or 'who'-style questions:** Later, when the infant knows how to say the word for an object, the carer is encouraged to ask questions like 'What is this?' while pointing to the relevant aspect of the picture for the baby to name.

**Active linking of book content to the baby's real world:** The carer is encouraged to link the content illustrated in the book to the infant's own experience (e.g. encourage the infant to imitate a character's actions; take turns to point to a pictured animal's nose, and then find their own nose and the carer's nose, the carer saying the word along with each point). Linking should be appropriate to the infant's age and cognitive sophistication. Thus, with young infants such linking is located in the here and now, whereas with older infants the carer may choose to elaborate what is on the page to the infant's wider experience (e.g. the pictured dog is 'just like the dog next door'; or perhaps the picture can be linked to a recent visit to the shop when the mother and baby bought groceries 'just like the mother and baby here in the book').

method of intervention first described by Whitehurst and associates, in which parents are trained, either one-to-one or else in small groups, to provide high quality book sharing (e.g. Whitehurst et al., 1988). ‘Dialogic reading’ refers to adults’ use of evocative or interactive behaviours during book sharing with their child, including following the child’s interest, asking open-ended questions, following the child’s answers with further questions, repeating and expanding on child’s responses, and providing praise and encouragement of the child’s participation. These studies have consistently shown that, compared to other kinds of parent training, book sharing programmes are associated with the greatest gains in infants’ language skills (Reese et al., 2010).

Virtually all the research into the value of book sharing has been carried out in the HICs. However, children in LICs are disproportionately subject to the socio-economic and family risk factors associated with compromised language, cognitive and literacy skills. Specifically for children in poverty, language opportunities at home can be extremely limited (Hart and Risley, 1995) and book sharing with children is a significantly less likely occurrence in low- compared to middle-income families. Thus, the introduction of book sharing in these contexts may be especially beneficial to emergent literacy.

Child cognitive development in the Global South is a particular cause for concern. There is strong evidence that its children are failing to achieve acceptable levels of performance in the key skills of reading and literacy. A recent government report revealed that of learners in Grade 3 (children aged nine years) more than half did not achieve the expected level of performance (DBE, 2011). Two years earlier, South Africa came bottom in an international ranking of literacy skills among nine- and ten-year-old-children in 40 countries (Performance in International Reading Literacy Study). The reasons for this failure are no doubt complex and may, in part, be related to the neglect of an explicit focus on early literacy and language development among the poorer segments of South African society (De Witt, 2009), and to the essential ‘oral’ nature of the culture. Certainly, too, there is a legacy of the apartheid era, which significantly disadvantaged the education of the black community. Whatever the causal basis, South African children are entering the school system at age six with few, if any, pre-literacy skills and are rapidly falling behind relative to other – rich and poor – countries.

We have developed a book-sharing training programme for delivery to isiXhosa-speaking South African families. This involves caregivers meeting in groups (usually between three and five caregivers with infants) with a trainer on a weekly basis over six to eight weeks. The trainer’s role is to convey didactic information, to model key skills, and to facilitate and encourage caretakers in good book-sharing practice. This is achieved using a PowerPoint presentation together with exemplar video material. Following the presentation, each carer–infant pair has a brief period of sharing a book during which the trainer makes suggestions and provides support. We piloted this training programme in Khayelitsha, a peri-urban settlement on the outskirts of Cape Town (Cooper et al., 2014). We compared two small groups of mothers and infants: one received book-sharing training and the other support with general play (as a control for contact time). We recruited four trainers who enthusiastically engaged in the process of acquiring the necessary skills. Following a week of instruction, these women

had grasped the essentials of what was necessary to be effective trainers and had developed the confidence to take on the role of trainer.

Many of the carers were initially sceptical about the training programme, but the early video material of local carers and young children engaging in book sharing was revelatory to them. Indeed, throughout the training the presentation of videos was especially compelling and of enormous use to the trainers in illustrating to the mothers the key points on good practice. The mothers engaged well with the book-sharing training. They also benefitted from it. Thus, compared to the comparison mothers, the mothers who received the training became more sensitive, more facilitating and more elaborative in book sharing with their infants; and in a play assessment, they also became more sensitive. Notably, there appeared to be general benefits from the training for both infant attention and language.

Following the successful piloting of the programme, we conducted a randomised controlled trial (RCT) to evaluate the impact of the book-sharing training programme in Khayelitsha (Vally et al., in press). Ninety-one carers and their 14–16-month-old infants were recruited into the study. These dyads were randomised to either book-sharing training or a no-intervention control group. The intervention, which involved eight weekly sessions, was as described in the box (The book-sharing programme). The training was highly successful. Significant improvements were evident in maternal book-sharing behaviours, especially in sensitivity, elaborations and reciprocity. This improvement also extended to the carers’ sensitivity during a play talk involving toys. Notably, on a standardised carer report, carers who received the intervention reported a significantly greater increase in the number of words understood by their infant compared to those in the control group, as well as a larger increase in the number of words that their infant could vocalise. Intervention group children also showed substantially greater gains on a measure of sustained attention. This is especially significant in light of the fact that measures of sustained attention in infancy have been found to be strong predictors of later cognitive performance and IQ (Slater, 1995).

## Conclusions

We have shown that, in line with evidence from HICs, a dialogic book-sharing programme delivered to an impoverished South African sample is of considerable benefit to the development of the infants’ language and focused attention. In societies where there is no or little culture of book sharing, and no alternative form of interpersonal engagement that could serve an equivalent educative function, the introduction of sensitive and facilitatory book sharing could have a profound effect on children’s intellectual development. The training programme is simple and inexpensive to deliver and could readily be rolled out in a range of urban and rural LMIC contexts.

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