Quality-focused interventions in early childhood education and care (ECEC) in economically developing countries

WHAT ARE QUALITY-FOCUSED INTERVENTIONS IN EARLY CHILDHOOD EDUCATION AND CARE (ECEC)?

Quality-focused ECEC interventions are aimed at improving the quality of an existing intervention, service or program.

These studies are of particular interest in the current global ECEC context as the emphasis on early childhood services shifts from access and participation to quality.

Quality encompasses many aspects of an ECEC program, including:

Structural dimensions such as:
- infrastructure and resources
- training for personnel
- adult-child ratios.

Process dimensions such as:
- adult-child interactions
- opportunities for play and exploration.

The 20 quality-focused interventions in ECEC identified for this review (of a total of 109 studies; see further details under Background) provide evidence from eleven countries, namely Bangladesh, Chile, China, Colombia, Costa Rica, Ethiopia, India, Indonesia, Kenya, Uganda and Zanzibar.

KEY MESSAGES

- Quality-focused interventions seek to ensure that quality in ECEC keeps pace with expansion.
- Reducing variations in service quality is an aim of many quality-focused interventions.
- Evidence of impact of quality-focused interventions on children's learning outcomes (total 20 studies) is mainly available for Latin America and the Caribbean (9 studies), South and West Asia (6 studies), with some for East Asia (3 studies) and East Africa (2 studies) and none for the Pacific Region.
- Greater effectiveness is shown for quality-focused interventions that start from a lower quality base.
- Little evidence is available for quality-focused interventions for children under the age of three, probably because much ECEC for that age group occurs in less formal settings.
- Where interventions focus on personnel, shorter, more focused modules which are aligned with staff capabilities and roles are likely to be more effective than other training programs.
- Interventions aimed at fostering play-based activities and more adult-child interactions rather than whole-group activities tend to link to better outcomes.
What works and why?

Factors shown in the review to have an impact on the effectiveness of quality-oriented ECEC interventions are illustrated in Figure 1.

In general, improvements to process quality (e.g. by enhancing adult-child interactions) exerts an effect on learning outcomes, even when structural quality (infrastructure and resources) remains the same. Still, structural quality can be more important than process quality in some settings. In Indonesia, for example, the greater impact of Plan-supported preschools on learning was due to their location in a school, which had flow-on benefits for resourcing, dosage (five days per week) and teacher professional identity (Aboud et al., 2016).

Also, self-selection into programs potentially inflates the effects of program quality on learning outcomes, for both adults and children. Frequently, while higher-quality programs attract children from more affluent backgrounds, program quality has an effect on outcomes over and above home and family backgrounds. Self-selection may also occur for adults, with one Indian study noting that anganwadis who had self-selected into the quality improvement program were likely to have been more motivated in the first place (Ade et al., 2010).

Moreover, dosage of quality programs influences their effects on children’s learning outcomes while duration of programs appears to have mixed effects on learning outcomes. Accessibility and relevance of professional development also makes a difference. Here, simple, modular professional development is shown to be more effective than overwhelming educators with unrealistic expectations. In addition, “native” practices rather than novel ones are found by personnel to be more accessible, highlighting the need for cultural relevance (Mendive et al., 2016).

Service providers’ perceptions of their roles is another factor making a difference to the impact of quality improvement initiatives. In Turkey, for example, staff in custodial centres who see their role as “minding” children deliver lower-quality programs than staff who see their centres as having an educative purpose (Bekman, 2002). On the other hand, early childhood teachers in Bangladesh have great difficulty changing the didactic pedagogies in which they had been instructed as students (Moore et al., 2008).

Finally, a low base of ECEC quality provides fertile ground for even modest quality improvement programs to have effects.

Why implement such programs?

Quality-focused ECEC interventions are implemented:

- To improve the quality of an existing intervention, service or program.
- To ensure that program quality keeps pace with expansion.
- To reduce variation in service quality, especially in contexts where children can access different types of ECEC programs.
- To improve service quality by addressing specific needs in developing country context as many programs have been developed in high income countries.
- For professional development of the ECEC workforce.

Figure 1 Factors related to quality improvement in ECEC
How is quality assessed?

In addition to the requirement that children's learning outcomes had to be measured (see also Policy Note 1), many studies used internationally-recognised measures of quality. The Early Childhood Environment Rating Scale (ECERS) or variants were the most commonly used instrument. Less common measures included the Classroom Assessment Scoring System (CLASS) and the Family Day Care Rating Scale (FDCRS). In many instances, these instruments – designed in economically developed countries – required adaptations, particularly to suit the low-resource environments of local contexts.

In addition to being measured through these instruments, quality was compared between and within programs and also made the focus of interventions.

Background

The global commitment to early learning has been expressed in the United Nations (UN) Sustainable Development Goals Agenda (SDG, United Nations, 2016) and access to support for early learning is considered a human right for all children, whether provided by the family, community or institutional programs (UNESCO, 2013). Inadequate cognitive stimulation has been identified as one of the key psychosocial risk factors associated with poor child development – a factor that is modifiable, with the right interventions (Walker et al., 2007). Thus, insights into how early learning supports may be delivered effectively in various contexts are essential.

To this end, a scoping review of ECEC interventions in economically developing countries between 1998 and 2017, aimed at improving children's learning in the years before school, was conducted (Jackson et al., 2019). To gauge their effectiveness and to be included in the review, interventions had to have measured children's learning outcomes which, in line with the SDGs, could comprise cognitive, socio-emotional, language and motor development.

The 109 studies included in the review were grouped into six categories which aligned with a recent meta-analysis of ECEC interventions in low and middle income countries (Rao et al., 2017). The number of studies in each intervention category was as follows:

- Parent-focused interventions 37 studies
- Child-focused education and nurturing care 35 studies
- Quality 20 studies
- Income supplementation 8 studies
- Comparative 5 studies
- Integrated interventions 4 studies.

For a summary map of the evidence - using the Firefox browser - visit https://datavis.acer.org/gem/early-childhood-interventions-gap-map

This policy brief summarises findings from the scoping review of the 20 studies of quality-focused ECEC interventions linked to changes in developmental outcomes for children to distil their key success factors for policy- and decision makers.

COMPARISONS BETWEEN PROGRAMS

Studies in this group evaluated the quality of two or more distinct kinds of ECEC services or programs and investigated the relationship between service quality and learning outcomes for children.

One study, for example, compared the quality between a donor-supported ECEC program and the government-supported model. The donor-supported programs included the Plan-funded enhancements to preschool in Indonesia (Aboud, Proulx, & Asrilla, 2016) and the PROTEEVA preschool enhancement program in Bangladesh (Diazgranados, Borisova, & Sarker, 2016).

Comparisons within programs

These studies typically evaluated variations in quality among one type of ECEC service and its impact on learning outcomes.

For example, quality was compared among preschool services, in Bangladesh (Aboud, 2006), in China (Li et al., 2016) and in Costa Rica (Rolla San Francisco et al., 2005) but without linking quality to child outcomes.

Interventions to improve the quality of programs

Improving the quality of the intervention was the focus of studies in this group.

For example, two studies focused on professional development of paraprofessional ECEC service providers, including a two-semester vocational education program for madres comunitarias in Colombia (Bernal, 2015) and a 1.5-year program for anganwadis in India (Ade, Gupta, Maliye, Deshmukh, & Garg, 2010).
Implications

There is ample evidence that program quality has not kept pace with the increased expansion of ECEC services globally (Leyva et al., 2014; Li et al., 2016). Even models of ECEC provision which used to be effective may suffer compromises in quality when scaled-up (Diazgranados et al., 2016). Additionally, variation in service quality due to contextual reasons and inadequate training of service providers can hinder program effectiveness. Overall, the implementation of ECEC service standards in some countries and the growing interest in improving ECEC quality has led to a rise of quality-focused ECEC programs in the developing economies.

Still, the following questions may assist policy- and decision-makers when designing a quality focused intervention.

1 What is the main aim of the intervention? Reduction in quality variation between service providers? Keeping quality at pace with access?

2 As expectations regarding ECEC quality reflect different cultural and pedagogical perspectives, have local beliefs and practices as well as attitudes towards young children been taken into account?

3 What tools will be used to measure ECEC program quality?

Although studies from the review adapted versions of internationally-recognised measures of quality, recently developed measurement tools have been designed particularly for use in the developing contexts, which may be more appropriate. (see also https://research.acer.edu.au/monitoring_learning/41/)

4 Have the following aspects been considered when planning quality-focused interventions aimed at ECEC personnel?
   - Sufficient time to practice and change behaviour
   - Focusing on play-based activities and adult-child interactions rather than whole-group activities
   - Designed as shorter, more focused modules
   - Roles of personnel (e.g. more nurturing or more educational).

FURTHER READING


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