

Chapter 2

Cross-Cultural Collaboration Research to Improve Early Childhood Education

Doris Bergen and Belinda Hardin

Introduction

Internationally, there is a growing need for quality early childhood care and education as greater numbers of families migrate to urban areas and more mothers enter the workforce. However, the programs available for young children vary greatly in quality. A number of reports have stressed the undeniable link between quality caregiving and young children's survival and health (Meyers 2006; United Nations Educational, Scientific and Cultural Organization (UNESCO) 2006, 2010; World Health Organization 2004) as well as their social, emotional, cognitive, language, and physical development (Belsky et al. 2007; Burchinal et al. 2010). Thus, it is important to increase efforts to assist early childhood educators throughout the world to engage in evaluative actions and to reflect on those evaluations to improve their program quality.

International initiatives emphasizing the need for quality ECCE services have gained momentum in recent years. For example, in 2000 representatives from 164 countries reaffirmed their commitment to improving the accessibility and quality of education worldwide by adopting the *Dakar Framework for Action, Education for All: Meeting Our Collective Commitments* (UNESCO 2000). The Dakar Framework contains six goals, the first of which is: "... expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children" (UNESCO 2000). The Dakar Framework continues to focus attention of policy makers and professionals on strategies for increasing and improving ECCE services. One response to international concerns about the quality of ECCE services was the Association for Childhood Education International's (ACEI) development

B. Hardin (✉)
Specialized Education Services Department
University of North Carolina, Greensboro, NC, USA
e-mail: bjhardin@uncg.edu

D. Bergen
Educational Psychology, Miami University, Oxford, OH, USA
e-mail: bergend@muohio.edu

of the ACEI Global Guidelines Assessment (GGA), an ECCE program assessment designed to help early childhood professionals examine and improve the quality of their program services throughout the world, particularly in developing countries (Association for Childhood Education International (ACEI) 2003, 2006, 2011; Barbour et al. 2004; Sandell et al. 2010). The GGA is based on the *Global Guidelines for Education and Care in the 21st Century* developed by the World Organization for Early Childhood Education (OMEP) and the Association for Childhood Education International (OMEP/ACEI, 1999). The Global Guidelines were designed by more than 80 participants from 27 countries with the goal of creating a set of fundamental practices that would be relevant and useful throughout the world. The sociocultural nature of the Global Guidelines is central to the content and purpose of the GGA, which is grounded in the theoretical tenets of Vygotsky and Bronfenbrenner—that knowledge is personally constructed but socially negotiated through interactions across a variety of environments (Bronfenbrenner 1979; Bronfenbrenner and Morris 1998; Vygotsky 1978). Wertsch et al. (1995) describe these types of sociocultural dynamics as the “relationships between human action, on the one hand, and the cultural, institutional, and historical situations in which this action occurs, on the other” (p. 11). From this viewpoint, learning is a transactional experience mediated by the “funds of knowledge” of young children and families as well as multiple environmental contexts (Moll et al. 1992). Thus, the quality of these dialogic experiences and the settings in which they take place is essential for maximizing children’s development. The GGA’s definition of quality takes into account individual and local variations, as well as a global perspective of what constitutes quality early care and education, stating that, “A quality early childhood curriculum is focused on the whole child and considers physical, cognitive, linguistic, creative, and social/emotional growth. The ultimate goal of an early childhood curriculum is to produce more competent, caring and empathic world citizens” (ACEI 2006, p. 8).

This chapter provides an overview of country-initiated efforts to enhance the quality of early childhood programs and describes the results of an investigation on the psychometric properties of the GGA, an instrument designed to help early childhood staff evaluate their program quality, which is based on the OMEP/ACEI Guidelines. The GGA is translated into nine languages and used by hundreds of early childhood professionals in North America, Central America, South America, Asia, Africa, and the European Union. The reliability and validity of the GGA, recommendations for improving quality, and suggestions for further study on this important issue are discussed below (Fig. 2.1).

Quality Elements, Research, and Challenges

According to ACEI and OMEP (1999), the basic elements of quality ECCE services include: (1) attention to environment features and resources, (2) developmentally and culturally appropriate curriculum, (3) well-educated early childhood staff, (4) meaningful parent and community involvement, and (5) attention to the needs of diverse young children, including those with disabilities. Many countries are challenged by

Fig. 2.1 Guatemalan child care program. (Photo courtesy of program director)



the lack of consistent regulations, resources, and support for early childhood programs. Meyers (2006) points out that although greater coverage (e.g., more children receiving services) has provided an impetus for important changes worldwide, coverage does not necessarily mean children are experiencing high quality services. For example, international reports suggest that more than 20 % of preprimary teachers lack professional training among three-fifth of all countries (UNESCO 2006). Given the diversity that still exists throughout the world, there is great need for assessment measures designed for global use that can be used by ECCE professionals to evaluate how well they are meeting these five areas of program excellence.

Research on the GGA

Purpose Because the ACEI Global Guidelines Task Force was concerned about improving early childhood programs internationally and determining how well their instrument demonstrates quality and needs for improvement, they recommended a

reliability and validity pilot study to be conducted. The following questions guided this research:

1. What is the reliability and validity of the GGA across sites and countries as well as separately for each site?
2. What are patterns of similarities and differences in program services by type of informant, site, country, and total sample?
3. When compared across countries and sites, do results support the use of this measure for early childhood programs in general and also provide a measure that adapts to country and site differences?

Participants The participants in this study were from four countries—Guatemala, Taiwan, United States, and People’s Republic of China—and six sites (two in Taiwan and the United States). All four countries provide early care and education services, but they differed by population characteristics (e.g. size, economic status, language). The sites were chosen through contacts established by principal investigators in each country and ACEI Global Guidelines Task Force members. A stratified sampling procedure was used based on country, program type, and geographic area to create a balance between the variations of these program characteristics across the total sample, which consisted of 168 programs.

About two-thirds of the programs were private and another fourth were public, with the remaining programs defined themselves as “other.” Over half were located in urban areas, a third in rural areas, and the rest defined themselves as “other.” Programs reported the socioeconomic status of their service areas as average (69.4 %), mostly poor (22.8 %), or mostly wealthy (7.8 %). Over 80 % of the programs were open 10–12 months a year and 9–12 h per day. Of the 127 programs that reported total enrollment, 41 % had between 51–100 children, while one-fourth had fewer than 50 children, and the rest had between 100–400 children in the program. Some programs served both toddler and preschool age children (38 %) or preschool age children only (28.3 %), while others included infants (30.8 %) and a few had primary age children as well (3 %) (Fig. 2.2).

Procedures Six research site coordinators were recruited to implement the study at the local level, including three university faculty members, two private program directors, and one doctoral student. Two-hour conference calls were held with each coordinator to train them on confidentiality requirements, criteria for selecting programs, data collection procedures, and the GGA instrument. They then recruited local program participants, oriented and trained them, and gave written guidelines for administering the GGA, copies of the GGA, letters for participants describing the study, and participation consent forms. All verbal and written information was presented in the native language of the participants. The GGA translations were completed for ACEI prior to the study using the consensus method (Geisinger 1994).

There were two people at each site (a director and non-director) who completed the GGA by adhering to the study procedures. Directors also completed a *program information form* that requested demographic information (gender, ethnicity, education level, years teaching, etc.). Each participant received a certificate of participation

Fig. 2.2 Liaoning University Child Care Center, Dalian, People's Republic of China. (Photo courtesy of Professor Wen Liu)



from ACEI. Completed assessments were mailed to the principal investigators for data entry and analysis. Individual ratings [0 (Low)–5 (High)] and examples coded for evidence for each rating [1 (No or weak evidence)–3 (Strong evidence)] were entered into a database. Evidence examples were translated into English for data analyses. For the ratings, two individuals verified the results for each item against the original protocol, and all errors were reconciled and corrected. For the validity code evidence, reliability of coder agreement across a random sample of responses showed a range of agreements between 98.6 % and 99.1 %.

Results Six sets of data analyses were conducted: descriptive analysis by site and for the overall sample; internal consistency of the overall scale and individual subscales; item means to understand patterns of similarities and differences within and across countries; factor analyses and discriminant analyses to address the functionality of the GGA as a global tool for measuring early childhood services; and validity analyses to compare congruity of the evidence with the ratings.

Item means were computed for each of the 88 indicators and the total GGA and compared by country and site. The results indicate that the US1 site ratings were generally higher than the other research sites and China ratings were lower overall. Types of items with high means included those concerned with promoting good health practices, positive child and adult interactions, and providing environments that foster a sense of well-being for children. Items rated lower included those focused on materials in outdoor play environments, children being actively engaged in self-evaluation, and collaborative partnerships with parents and community members. A significant number of participants rated items in the last area (Children with Special Needs) as “not available” or left these questions blank, reflecting a deficit in services for many children with special needs.

Total item mean scores for each of the 335 participants were analyzed by program type (private, $n = 106$; public, $n = 45$) across the six sites (17 programs categorized as “other” were excluded from this analysis). The results showed higher item mean totals for private program participants (3.08 to 4.25) than public program participants

(2.93 to 4.13), which would be expected since private programs generally had more resources for equipment, materials, and training than public programs in this sample.

Cronbach's coefficient alpha was used to understand the internal consistency of each subscale by research site and for the total sample. The results indicate a very strong internal consistency for each subscale (0.89 to 0.92) and the total GGA (0.97). The alpha coefficients across the five subscales for each research site (0.82 to 0.95) and also for the total assessment (0.94 to 0.98) are quite high, suggesting that the underlying constructs for this measure worked similarly across different research sites. Also, correlations between raters showed a moderate degree of interrater consistency (0.46 to 0.70) for the five subscales and the total GGA (0.62) when completed by two different raters for the same program.

The international group of early childhood professionals who developed the Global Guidelines on which the GGA is based sought to capture essential elements of ECCE services from a global perspective. Thus, the content of the GGA was intended to represent both the common culture of ECCE services across geographical locations as well as individual differences in services related to contextual differences among countries. Both factor and discriminant analyses were conducted to understand these aspects of the GGA. Items with loadings of ± 0.40 or higher were included in the final designation of each factor. Four distinct factors were revealed accounting for 31.5 %, 6.3 %, 3.8 %, and 3.2 % of the variance, respectively. **The first factor** represented general program quality, the **second factor** represented services for children with special needs, and the **third factor** represented parent and community partnerships. The **fourth factor** represented environment and physical space. The classification results for the discriminant analysis show that 91.0 % of the original grouped cases were correctly classified, indicating that the patterns recognized by the factor analysis are in fact real relative to the original data. The reclassifications also show that individuals from each country are classified together meaning there is homogeneity within each country.

Because the researchers were not able to do on-site verifications of respondents' ratings, the method for verifying ratings assessed the degree of accordance between the rating scores and the evidence provided by the raters to determine whether the evidence justified their rating scores. Results showed that overall mean for evidence ranged from 1.9–2.0 on the 3-point scale for all five dimensions of the instrument, indicating a moderate level of validity for the ratings. Scores, compared by research site and by position, showed directors' and nondirectors' ratings were equally valid (1.97; 1.92) and that validity scores across countries ranged from 1.6–2.2. Thus, this measure provided some level of support for the respondents' evaluations of their programs.

Conclusions and Recommendations

As concerns about the quality of early childhood care and education have increased globally, so has the need for reliable and valid tools to help ECCE staff design new programs and better understand the quality of existing programs. In this study, the

ACEI Global Guidelines Assessment was piloted in four countries and across six sites to investigate its effectiveness. Overall, the results indicate the GGA is a viable option for understanding and improving program quality in these four countries, and potentially worldwide. Because there was a need for some additional “fine tuning” of the instrument, additional Rasch analyses of the respondents’ answers were conducted to determine whether some questions were repetitive. The GGA was revised based on the Rasch analysis that included some wording changes and a reduced number of questions. These revisions were approved by the GGA Task Force and the newly published GGA, third edition, can be downloaded from the ACEI web-site (www.acei.org). Also, additional studies that include on-site verification of the raters’ responses now are being conducted with larger samples in a broader range of countries. These additional studies include examination of the concurrent validity of the GGA by comparing results with those from a comparable instrument (e.g., ECERS-R). This continuing research will provide greater insight for measuring program quality of ECCE programs on a global scale. In addition, and most importantly, the use of the GGA instrument will give respondents insights into their own program quality features and enable them to identify areas they wish to improve to make their programs meet the highest standards of quality, no matter where they are located in the world.

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