Asya Öğretim Dergisi *www.e-aji.com*
[Asian Journal of Instruction] *e-ISSN:2148-2659*
2014 – 2(1(ÖZEL)), 128-134

STRUCTURAL QUALITY IN PRESCHOOLS: ENVIRONMENTAL INDICATORS

OKUL ÖNCESI EĞITIMDE YAPISAL KALITE : CEVRESEL GÖSTERGELER

Belkıs TEKMEN*

ABSTRACT: Using ecological systems theory as a framework, to study in the early childhood education field there should be an understanding of links between structural indicators of quality and children's development. There is a need to understand the mechanisms by which structural quality affects process quality, which requires examining what actually happens in the early childhood education care centers.

Due to the recognition of the significance of early childhood years worldwide, there has been a dramatic increase in the number of early childhood education programs in Turkey. However, the increase in the quantity of such programs brings the question of quality. As in every system in which early childhood education and care can be considered as one, for the continuous improvement, quality characteristics of these centers should be continuously licensed and inspected by the supervisor institutions. More emphasis should be given to the educational and developmental evaluation of the children enrolled in the centers, to understand the effect of the education and care received from the center.

In terms of quality, structural factors are easier to observe than process factors and thus, easier to measure and regulate, but they are considered to impact the desired outcomes for children. This study aims to understand the structural quality of these centers based on the Developmentally Appropriate Practices. Provider Survey – Organized Facility (Group Setting) Section I: Director Questionnaire and section II: Teacher / Caregiver Questionnaire developed for the International Association for the Evaluation of the Educational Achievement (IEA) Preprimary Project, Phase 2 are administered as the data collection tool and descriptive analysis is conducted to the results of self-reported questionnaire from 55 early childhood education centers.

Key Words: Preschool education centers, structural quality, process quality, developmentally appropriate practices.

ÖZET: Ekolojik sistemler kuramı temel alındığında, erken çocukluk eğitiminde yapılan çalışmalarda yapısal kalite göstergeleriyle çocuk gelişimi arasındaki ilişkinin kavranması kalite değerlendirmede temel gerekliliklerden biridir. Bunun yapılabilmesi için de yapısal kalitenin süreç ya da işlevsel kaliteyi nasıl etkilediğinin ortaya çıkarılması, diğer bir deyişle ortam dinamiklerinin birbiriyle etkileşiminin incelenmesi gereklidir.

Erken çocukluk eğitiminin öneminin daha geniş kitlelerce kavranmasının ardından Türkiye'de de okul öncesi eğitim kurumlarında ve programlarında dikkat çekici bir sayısal artış gözlenmektedir. Ancak bu niceliksel artış beraberinde niteliksel artış beklentisini de gündeme taşımaktadır. Erken çocukluk eğitimini de dahil edebileceğimiz dinamik sistemlerin bir özelliği olarak sürekli gelişimin sağlanması için, bu tür kurumların sürekli olarak lisanslandırma ve denetimlerinin yetkili ve ilgili kurumlarca düzenli olarak yapılması gerekmektedir. Bunun yanında, bu kurumlara devam eden çocukların eğitimsel ve gelişimsel değerlendirmelerinin de takip edilmesi söz konusu kurumlarca sağlanan eğitim ve bakımın çocuk üzerinde etkilerinin anlaşılması açısından da önemlidir.

Kalite değerlendirme bakış açısıyla incelendiğinde yapısal kalite göstergelerinin gözlenmesi, dolayısıyla da ölçülmesi ve düzeltilmesi işlevsel kalite göstergelerine göre daha kolaydır. Ayrıca sınıf ortamını çevresel ya da ekolojik kalite göstergeleriyle değerlendirme, sınıfta olup bitenleri anlamada ilk ve temel adımlardan biridir. Eğimde kalitenin değerlendirilmesi çalışmalarında yapısal kalite göstergelerinin ve işlevsel kalitenin bir bütün olarak ya da devam eden çalışmalar halinde yapılması elbette daha anlamlı sonuçlar ortaya çıkaracaktır. Bu çalışmada ilk adım olarak yapısal kalite göstergeleri üzerinde durulmuştur. "International Association for the Evaluation of the Educational Achievement (IEA) Preprimary Project, Phase 2" projesi için gelişime uygun

**Assist. Prof. Dr.*, Baskent University, Faculty of Education, tekmen@baskent.edu.tr
a: Bu çalışma 1-3 Eylül 2014 tarihinde İstanbul'da düzenlenen "YILDIZ International Conference on Educational Research and Social Sciences" kapsamında sözlü bildiri olarak sunulmuştur.

programlar yaklaşımına uygun olarak geliştirilen ve uluslararası kullanıma uygun olarak hazırlanan, *Provider Survey –Organized Facility (Group Setting)* Bölüm I: Yönetici Anketi ve Bölüm II: Öğretmen Anketi veri toplama araçları olarak kullanılmıştır. Ankara ilinde farklı bölgelerde yer alan elli beş okul öncesi eğitim kurumundan elde edilen veriler betimsel analiz yöntemiyle analiz edilmiş ve değerlendirilmiştir.

Anahtar kelimeler: Okul öncesi eğitim kurumları, yapısal kalite, işlevsel kalite, kalite göstergeleri, gelişime uygun programlar.

INTRODUCTION

One of the important frameworks for studying quality in early childhood education and care is *developmentally appropriateness, which* is both a philosophy and a guideline to support the development of the whole child. Based on theories of Dewey, Vygotsky, Piaget, and Erikson, developmentally appropriate practices reflect an interactive, constructivist view of learning (Bredekamp, 1987). Key to this approach is the principle that the child constructs his or her own knowledge through interactions with the social and physical environment. The child is viewed as intrinsically motivated and self-directed. Effective teaching capitalizes on the child's motivation to explore, experiment, and to make sense of his or her experience (Novick, 1996).

By the emergence of new theories, ideas and issues relating to the education and care of young children and the quest to provide educationally and developmentally appropriate programs keep challenging early childhood professionals to determine what is best for young children and their families (Morrison, 1991). Ecological systems theory is one of these theories that view the child in an ecological perspective, in which an individual's experience is nested within inter-connected systems (Bronfenbrenner, 1989). Briefly, in this theory, microsystems, such as families and child-care centers, are characterized by face- to-face connections among individuals. Mesosystems consist of two or more microsystems and the linkages or processes that combine or connect them. These mesosystems exist within the larger context of the exosystem, those centers in which the child does not directly participate but that influence the lives of parents and other adults in the child's world, such as a parent's workplace, educational institutions that train child-care teachers and providers, and government agencies that set regulations for child-care facilities or establish welfare-reform policies. The mesosystems and exosystems operate within the context of macro system of societal and cultural beliefs and practices. These systems are not static, but may change over time.

Using ecological systems theory as a framework, to study in the early childhood education field there should be an understanding of links between structural indicators of quality and children's development and also need to understand the mechanisms by which structural quality affects process quality, which requires examining what actually happens in the early childhood education care centers. Structural characteristics include the staff: child ratio (the number of children per teacher), the group size (number of children in the center), and the education and specialized training of teachers, principals and other staff working in this field. The features of structural quality can be regulated, but on the other hand, process quality refers to the nature of the care that children experience-the warmth, sensitivity, and responsiveness of the caregivers; the emotional tone of the setting; the activities available to children; the developmental appropriateness of activities; and the learning opportunities available to children.

In her study, Olmsted (2002) described the framework of quality in early childhood programs as a complex concept influenced by values and beliefs and closely bound up with culture and contexts. It is also a dynamic concept, with definitions evolving and changing over time. Within this complex and dynamic context, it is still possible to identify certain indicators of quality that are of interest to most countries. These include input indicators, process indicators, and outcome indicators. Input indicators,

which refer to the structural characteristics of early childhood settings or informal services, include such things as training and qualifications of staff and availability of materials and equipment. In formal settings, input indicators may also include group size and staff: child ratio. Process indicators include the actual happenings within a setting. These may include communication styles, interpersonal relationships, and the experiences of children in settings. Outcome indicators refer to the impact of the program in terms of effectiveness and include children's health, developmental status, and school adjustment (Olmsted and Montie, 2001).

In the study of Ceglowski (2004), Parents most frequently mentioned a structured environment that provides culturally responsive care (45%) as a hallmark of quality childcare programs. Parents also indicated that programs that welcome and support parents (24%) are important. Parents discussed safety and adequate facilities in 18% of the responses. Like parents, family and center-based childcare staff most frequently mentioned a structured environment that provides culturally responsive care as characteristics of quality programs (36%). They also indicated that communicating and supporting parents (27%) and a safe, well-equipped facility (18%) were important factors. Program administrators and teacher educators most frequently mentioned group size and teacher/ child ratios as the most important characteristics of quality child care programs (28%). They also frequently discussed safety and facilities (21%) and communicating with and supporting parents (20%). Resource and referral staffs' responses were similar to parents and providers in most frequently discussing a structured environment that provides culturally responsive care as characteristics of quality programs (37%). They also indicated that safety and facilities (30%) and group size and teacher/child ratios (16%) were important factors. Childcare licensers discussed a structured environment that provides culturally responsive care (52%) as characteristics of quality programs. They also indicated that communicating and supporting parents (23%) and accreditation and salaries (16%) were important characteristics of quality programs.

There is a body of literature that examines the impact of structural characteristics on early childhood education and process quality. This impact is of special interest since many structural characteristics, such as staff: child ratios or teacher qualifications are considered responsible to regulation and can thus be used to influence the quality of care and education provided by the early childhood education programs.

The examination of structural characteristics in early education and care settings is important for both practical and theoretical reasons. Structural characteristics are of practical importance because most are easy to measure objectively and thus serve as standards that can be monitored. They also provide the foundation for the more subjective features such as the dynamics of the interaction between teacher and the child (Love, Schochet & Meckstroth, 1996). Child-care quality has been positively related to cognitive development and social competence of preschoolers in studies that controlled family background characteristics such as socioeconomic status, maternal education, or family structure (McCartney, Scarr, Phillips, Grajek, and Schwarz, 1982 cited in Ceglowski, 2004).

METHODOLOGY

A survey research is conducted to gather information about the structural characteristics of the Early Childhood Education and Care (ECEC) Centers. The questionnaire was developed by the IEA Preprimary Project researchers. It was used in the IEA Phase 2 study in 15 countries which were Belgium, China, Finland, Greece, Hong Kong, Indonesia, Ireland, Italy, Nigeria, Poland, Romania, Slovenia, Spain, Thailand, and United States to investigate the structure characteristics of child care centers. It has 34 questions under 11 headings, which are: Fee Structure, Meals and Transportation, Supervision or Licensing, Admission Policy, Physical Description, Staff structure and Role

Differentiation, Teacher Training and Experience, In-service Training, Patterns of Operation, Availability of ancillary services and outside resources and Parent Involvement.

The questionnaire was translated to Turkish by the researcher. Then, it was translated back by a professional translator and the necessary changes were made. In order to assure its validity and reliability, one expert in the field of Turkish language and two experts in the field of early childhood education reviewed the questionnaire and necessary changes were made. For the pilot study, an initial pilot testing was conducted with 8 principals and teachers who were also studying in the early childhood education field in order to examine the reliability of the questionnaire. They were asked to fill out the questionnaire and make comments about the statements themselves for clarity.

The subjects of this study involved fifty-five principals of ECEC centers located in central Ankara. They were selected by convenience sampling and data was gathered by the senior class students of 2012-2013 spring semester of preschool education program at Baskent University. The study was limited to the information obtained by self-reports of the participants.

FINDINGS

The original provider survey questionnaire developed by The High/Scope Educational Research Foundation and the International Association for Evaluation of Educational Achievement (2007), used in the preprimary project includes many subtitles and needs a theme to collect data and analyze. In this study, seven headings of the questionnaire are used to be translated and collect data with. For further research, it is planned to expand the research with other headings included in the survey. Results of the analyzed criteria are given in the following paragraphs.

For the criteria of supervision and licensing, percentages of the responses given to the criteria considered before a license given were: Availability of physical space and facilities 90.2%, curriculum and the activities 89%, child care and food program 88%, health regulations 88%, amount and nature of equipment 80.3%, teacher and caregiver characteristics 80.1%,; staffing 77.9%, staff child ratio 77.7%, management 71%, safety regulation was 73.9% and fee structure 67%. During the observations in the centers in both types, it was observed that having a well-planned curriculum does not always mean that the children will experience proper activities. It is much more related with the teacher characteristics.

For the criteria of admission policy, percentages of the responses given to the selection of the children were: Age of the child 90%, special needs of the children 53%, ability to care for their own 40.5%, motor developmental skills 34.9%, and understanding and speaking skills 26.4%. Statuses of the families that have priority for enrolment were: Working parents 64.5%, single-parent families 15.5%, student parents 11%, high-income families 9.3% and low-income families 7.7%. Centers mainly enroll children at 3-6 year old and rated the “age of the child” as the most important factor of the admission. Many of the principals who rated the criteria “Ability for care themselves” also noted that toilet skill was important for enrollment.

For the physical description, Have an outdoor play area 85.3%, have an indoor play 78.5%, detached building 49.7%, single floor building 32%, and double floor building 18.2%. In addition, all the centers participated in the study reported that their centers were furnished and structured for use by children which includes, child sized tables and chairs, child sized toilet and sinks, shelves long enough for children to reach safely and books/toys/equipment appropriate for children served at the center. During data collection, centers constructed by joining two flats of an apartment, outdoor play area with unsafe floors were also observed.

The equipment for safety and health criterion were: Kitchen 100%, wash basins/flush toilet (indoor) 100%, refrigerator 99%, heating system 99%, first aid supplies 95%, fire extinguisher 84.5%, fire alarm system 71%, fire extinguisher system 61%, car in working order 64%, air conditioner 54%, water tank 43 %, electric generator 7.3% and bath/shower 39.1%. Having first aid supply available at the center is also an important criterion to consider, although the number is little, there were centers without first aid supplies.

For the criteria of availability of ancillary services and outside resources, percentages of the "available" responses given to the availability of ancillary services criterion were as follows: Child developmental assessment 85%, educational evaluation of the children 80%, psychological services 29.2%, medical services 63%, nutritional services 48%, parent training 35.7%, special education 34%, second language training 58% and social work services 17%. Percentages of the "available once in a week" responses given to the availability of outside resources criterion were: Drama teacher 60%, music teacher 42%, dance teacher 39%, local field trips/community helpers 32.9%, art teacher 16%, librarian 3.2%, athletics 15% and swimming 13%. For the ancillary services availability at the centers, the interesting point is that developmental and educational assessment of the child got the most common answer from the both types of the centers, but social work service and special education got the least.

For the criteria of parent involvement, percentages of the "once in a week" responses given were as follows: Individual notes or phone calls to parents 86%, newsletters or general notes to parents 58%, meetings with individual parents at the center 45%, home visits with parents 10.8%, parent participation on the advisory board 9%, parent volunteering on special occasions 11% and parent group meetings were 4%.

The last criteria of teacher training showed that only 5% of the teachers had master's degree and 32 % of them were graduated from a 4-year university. Rest of them was high-school or 2-year faculty graduates. Experience of the teachers' criteria indicated that nearly 64% of them had up to ten years of experience.

SUGGESTIONS

Throughout the world, governments at both the local and national levels, as well as the voluntary agencies, are spending large amounts of money and effort on programs and projects of different types to support early childhood education. The process of defining quality for the various stakeholder groups is an important area for future early childhood research. Although there is not a magical recipe for an early education and care program which is effective and beneficial for all age ranges, cultures, and needs, it is widely accepted that the high quality early childhood education and care should take into consideration the family, the community and the professionals.

Although the quality of space and materials is dictated by cultural, geographic, and economic realities in different nations, environments for children should always reflect concern for all aspects of child development; physical, cognitive, social, and emotional which means the whole child. Space and materials for preschoolers should enhance sociality, support a sense of emotional safety, and reflect respect for the familial and cultural experiences of the child. The physical environment of the preschool setting should reflect knowledge of and respect for the safety, physical well-being, intellectual stimulation, and social support of the child. Materials should be closely connected to the desired outcomes of quality preschool education, which are universally required for the full development of the child for later school success and competence in adult life.

On the other hand, more emphasis should be given to the educational and developmental evaluation of the children enrolled in the ECEC centers, to understand the effect of the education and care received from the center. By having an objective and professional look at the development of children, the effect of the quality of the center can be understood.

In addition, a study on the criteria of the selection of the ECEC centers from the parents view will be noteworthy. Investigation on which characteristics of the centers they predict the quality of the centers, and their other perceptions and expectations of education and care that their children receive will help to reach a better level of quality of early childhood education and care for the benefit of children.

REFERENCES

Bredekamp, S. (Ed.) (1987). Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8. Washington, DC: NAEYC.

Bronfenbrenner, U. (1989). Contexts of child rearing: Problems and prospects. *American Psychologist, 34*, 844-850.

Ceglowski, D., (2004). How Stake Holder Groups Define Quality in Child Care. *Early Childhood Education Journal/.32,(2),*101-111.

Love, J. M., Schochet, P. Z., & Meckstroth, A. L. (1996). Are they in any real danger? What search does and doesn't tell us about child care quality and children's well-being. Princeton, NJ: Mathematica Policy Research Inc.

Morrison, G. (1991). Early Childhood Education Today. 5th edition, Macmillian Publishing Company: NY.

Novick R. (1996). Developmentally appropriate and culturally responsive programs: Theory in Practice. Portland: Northwest ed. Laboratory.

Olmsted, P.P. (2002). Data collection and system monitoring in early childhood programs: UNESCO Early Childhood and Family Policy Series *5.*

Olmsted P.P., & Montie, J. (Eds.) (2001). Early Childhood Settings in 15 countries: What are their structural characteristics? Ypsilanti, MI: High/Scope Press.

Tekmen, B. (2005). A study on the structural and process quality of early childhood education and care centers in Ankara. Master Thesis submitted to METU.