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Figen GÜLEŞ¹

OKUL ÖNCESİ ÖĞRETMEN VE YÖNETİCİLERİNİN KURUMLARININ MEVCUT FİZİKSEL ÇEVRE KALİTESİNE İLİŞKİN DEĞERLENDİRMELERİ²

Özet

Öğrenme her yerde oluşabilir. ancak eğitim sistemleri tarafından aranan olumlu öğrenme çıktıları, kaliteli öğrenme ortamlarında oluşur. Öğrenme çevresi, fiziksel, psiko-sosyal ve hizmet sunumu unsurlarını içermektedir. Tüm bu unsurlara ilişkin kalitenin öğrenme üzerinde dolaylı bir etkisi vardır. Dolayısıyla öğrenme ortamında kalite sağlamaya yönelik girişimler etkin bir öğrenim sunmak için büyük önem taşımaktadır. Bu çalışmanın temel amacı okul öncesi eğitim öğretmen ve yöneticilerinin okullarının fiziksel çevre kalitesine yönelik mevcut durum ile ilgili değerlendirmelerini belirlemektir. Araştırmada genel tarama modeli kullanılmış olup, çalışma örneklemini, Konya İl Millî Eğitim Müdürlüğü'ne bağlı Meram, Selçuklu ve Karatay merkez ilçelerin de bulunan toplam 15 bağımsız resmi ve özel okul öncesi eğitim kurumları oluşturmaktadır. Bu kurumlardan 51 öğretmen ve 15 yönetici çalışmaya dahil olmuştur. Fiziksel çevre standartları bağlamında öğretmenlerin (öğretmen ve yönetici) okullarındaki mevcut durumlarına ilişkin yapmış oldukları değerlendirmeler, fiziksel çevre standartları konusunda özellikle iyileştirme yapılması gereken alanları ortaya çıkarmıştır. Elde edilen sonuçlar ışığında fiziksel çevre standartları bağlamında mevcut duruma ilişkin yetersizliklerin iyileştirilmesine yönelik önerilerde bulunulmuştur.

Anahtar sözcükler: Okul öncesi eğitimde kalite standartları, okul öncesi eğitimde fiziksel çevre.

PRE-SCHOOL TEACHERS AND ADMINISTRATORS EVALUATIONS ABOUT THE CURRENT QUALITY OF THEIR INSTITUTIONS PHYSICAL ENVIRONMENT¹

Abstract

Although learning can happen anywhere, the desired positive learning outcomes of education systems can only be achieved in quality learning environments. Learning environment consists of physical, psychosocial and service providing elements. The quality

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of all these parts has a positive effect on learning. Therefore all efforts on enhancing the quality of the learning environment are crucial for providing an effective learning service. The major objective of this study is to determine pre-school teachers and administrators evaluation within the context of their institutions current physical environment quality. General screening model has been used in this study and 15 independent public and private pre- school education institutions located in the central districts of Meram, Selçuklu, Karatay depending on Konya Provincial Directorate of National Education formed the study sample. A total of 51 teachers and 15 administrators from these institutions were included in this study. Assessments about current situations of schools made by trainers (teachers and administrators) within the context of physical environment standards revealed areas particularly in need of improving physical environment standards. In the light of obtained results to recruit inadequacies of the current situation in the context of physical environment standards have been proposed.

Key words: Quality standards of pre-school education. physical environment in pre-school.

INTRODUCTION

Physical environment at pre-school education should be safe with special and well-kept indoor and outdoor materials. The environment should include tools and materials that can enable and facilitate the learning and development for children. The planning of the educational environments created with a careful design within economic limits to address to children's emotions and interests should be as flexible as possible considering that new needs for different spaces may occur with the addition of new activities in the education in the future. Children will feel safer and better in educational environments that can meet their needs and expectations. The quality of education can be better with well-organized environments that can provide parents, staff and children with comfort, health-safety and security (Demiriz, Karadağ and Ulutaş, 2003; NAEYC, 2007; Sevimli, 1997). The physical environment created for children at schools should be appropriate for both psychological needs and physiologies and other developmental characteristics of children. The physical structure of the building and all physical conditions of the school should be planned in accordance with children's interests, needs and health, which is very important for increasing their experiences.

OBJECTIVE AND METHOD

The purpose of the present research is defining teachers' and school administrators' evaluations related to the physical environment quality of schools. The present research adopted general screening model and the work group consists of teachers and administrators serving at state and private schools in Meram, Selçuklu and Karatay central districts of Konya province. selected via simple random sampling method. Teachers and administrators from 8 of 15 independent official pre-schools (36-72 months) and from 7 of 18 pre-school affiliated to private and state primary schools in these districts were included in the research (http://konya.meb.gov.tr/bim/kurumlar/kurumlar_liste.asp.2013). From these schools, 15 administrators and 51 teachers participated in the present research.

Table 1: Participants by Titles (Teachers/Administrators)

Title	N	%
Administrator	15	23
Teacher	51	77
Total	66	100

As presented in Table 1, of the 66 participants of the present research, 23% served as administrators and 77% served as teachers.

Distribution of participants by the type of schools they served at is presented in Table 2.

Table 2: Participants by Type of School

Institution	N	%
Independent State Pre-school	38	57.6
Private Pre-school	28	42.4
Total	66	100

As presented in Table 2, of the 66 participants of the present research, 57.6% served as independent state pre-schools and 42.4% served at private pre-schools.

Data Collection Tools and Data Collection

Considering that statements related to the physical environments can be presented better this way. the data were collected by the researcher through personal interviews (face-to-face). This way, the researcher could clarify the uncertain parts that the participants couldn't understand, and provided them with information on the importance and confidentiality of the research.

Data for the present research were collected with "*Physical Environmental Standards in Pre-school Education Questionnaire*" consisting of 7 sub-scales and 80 items (Table 3). This questionnaire is an assessment tool including statements related to the physical environment that are accepted as "standards" by 95-100% of parents and 94-100% of educators (administrators and teachers). The high rate for acceptance of the items as standards is considered to be resulted from the fact that these items are similar to expressions used in some international scales for assessing pre-school environments (NAEYC (2007), ECERS-R (1998) and CPERS (2012), etc.) and important studies on the quality of physical environment (Güleş and Erişen. 2013).

Table 3: Sub-scales and Number of Items of the Data Collection Tool

Sub-scales	Number of Items
A.1. Location	1-4
A.2. Structure	5-31
B.1. Interior Space	32-48
B.1.1. Interior space educational materials	49-60
B.2. Exterior space (Outdoor Playground)	61-69
B.2.1. Exterior space educational materials	70-72
C. Physical Environment Health	73-80

Data collected for the present research were analysed on “SPSS 16.0” packaged software.

Present condition of the schools was assessed on a five-point likert type scale. The answers for each item are scored between 1.00 to 5.00. On the assumption that the ranges are equal (4/5). the limits for the options are defined as presented in Table 4:

Table 4: Limit Values for Data Interpretation

Limits	Options
(5) 4.20 - 5.00	Completely
(4) 3.40 - 4.19	Very
(3) 2.60 - 3.39	Partially
(2) 1.80 - 2.59	Little
(1) 1.00 - 1.79	None

Resource: Erişen. 2001.

The interpretations related to the average values for the collected data were made on the basis of limits presented in Table 4.

FINDINGS

This part includes teachers'/administrators' evaluations of the present case of their schools in terms of standards related to the location, interior space, exterior space and physical environment health. which form the sub-dimensions of the present research. For each dimension, **the areas considered as non-conforming to the standards** are presented in grey in tables.

Teachers' and administrators' evaluations of their schools in terms of “**location**” are presented in Table 5.

Table 5: Teachers'/Administrators' Evaluations of their Schools in terms of Location

LOCATION	\bar{X}	σ
2. There shouldn't be such areas as cliffs, stream beds, mines and swamps around the building.	4.70	0.93
3. There shouldn't be such facilities as base stations and high voltage areas around the building.	4.62	0.96
4. The building should be away from such areas as cemetery and prison.	4.53	1.03
1. The building should be away from noise and traffic.	4.32	0.95
<i>Notes: (i) n=66. (ii) in the scale 1= Never and 5= Completely. (iii) According to Friedman two-way Anova test $\chi^2=21.838$; $p<0$.results are statistically significant.</i>		

As presented in Table 5, the standard that is applied at the highest rate according to the participants is “There shouldn't be such areas as cliffs, stream beds, mines and swamps around the building.” Additionally, according to participants, all standards related to location are applied.

Teachers' and administrators' evaluations of their schools in terms of “**structure**” are presented in Table 6.

Table 6: Teachers'/Administrators' Evaluations of their Schools in terms of Structure

STRUCTURE	\bar{X}	σ
13. Heating system must be set in accordance with the climatic conditions of the area (floor heating, heaters on the wall, etc.).	4.74	0.51
30. Car park capacity should meet the needs of the staff and parents.	3.32	1.49
26. Swimming pools, ponds, or puddles should be surrounded by fences of at least 120 cm high for preventing children to enter.	2.77	1.63
25. There should be a gym, the walls covered with soft material at 120 cm height, where children can do sport with or without equipment.	2.64	1.61
24. There should be a sick room with a lavatory in, away from activity area.	2.39	1.60
<i>Notes: (i) n=66. (ii) in the scale 1= Never and 5= Completely. (iii) According to Friedman two-way Anova test $\chi^2=21.838$; $p<0$.results are statistically significant.</i>		

As presented in Table 6, the standard that is applied at the highest rate according to the participants is Item 13. Items 30, 26 and 25 are applied partially and item “There should be a sick room with a lavatory in, away from activity area” is applied rarely.

Teachers' and administrators' evaluations of their schools in terms of “**interior space**” are presented in Table 7.

Table 7: Teachers'/Administrators' Evaluations of their Schools in terms of Interior Space

INTERIOR SPACE	\bar{X}	σ
33. The size of the furniture should be appropriate for children. (different sizes for different ages) (When sit on the chair, the feet should touch the ground, the legs should fit under the table, the cupboards and shelves should be at eye-level.	4.67	0.64
41. There should be a special area organized for announcing the activities to children and their parents.	3.39	1.39
48. There should be special furniture, equipment, and arrangements for handicapped children to enable their access to program content and activities.	3.27	1.18
43. There should be special areas arranged for parents where they can monitor their children.	3.23	1.38
35. There should be a strong barrier separating sleeping children or there should be 1m distance between children.	2.94	1.41
<i>Notes: (i) n=66. (ii) in the scale 1= Never and 5= Completely. (iii) According to Friedman two-way Anova test $\chi^2=21.838$; $p<0$.results are statistically significant.</i>		

As presented in Table 7, the standard that is applied at the highest rate according to the participants is “The size of the furniture should be appropriate for children. (different sizes for different ages) (When sit on the chair, the feet should touch the ground, the legs should fit under the table, the cupboards and shelves should be at eye-level.” and Items 41, 48, 43 and 35 are applied partially.

Teachers' and administrators' evaluations of their schools in terms of “**interior space educational materials**” are presented in Table 8.

Table 8: Teachers'/Administrators' Evaluations of their Schools in terms of Interior Space Educational Materials

INTERIOR SPACE EDUCATIONAL MATERIALS	\bar{X}	σ
50. Educational materials should be at a visible and accessible height for children.	4.42	1.16
60. Special equipment and materials required by the handicapped should be ready at the building at all times.	3.25	1.10
<i>Notes: (i) n=66. (ii) in the scale 1= Never and 5= Completely. (iii) According to Friedman two-way Anova test $\chi^2=21.838$; $p<0$.results are statistically significant.</i>		

As presented in Table 8, the standard that is applied at the highest rate according to the participants is Item 50 and the Item “Special equipment and materials required by the handicapped should be ready at the building at all times.” is applied partially.

Teachers' and administrators' evaluations of their schools in terms of “**exterior space**” are presented in Table 9.

Table 9: Teachers'/Administrators' Evaluations of their Schools in terms of Exterior Space

EXTERIOR SPACE (OUTDOOR PLAYGROUND) (AÇIK HAVA OYUN ALANI)	\bar{X}	σ
66. The ground of the outdoor playground should be of natural (soil, grass) or artificial materials, and the playground should be organized naturally with non-poisonous plants, bushes and trees.	4.3 8	0.89
68. The ground should be organized appropriately for animal care and plant breeding.	3.3 6	1.34
<i>Notes: (i) n=66. (ii) in the scale 1= Never and 5= Completely. (iii) According to Friedman two-way Anova test $\chi^2=21.838$; $p<0$.results are statistically significant.</i>		

As presented in Table 9, the standard that is applied at the highest rate according to the participants is Item 66 and the Item “The ground should be organized appropriately for animal care and plant breeding.” is applied partially.

Teachers' and administrators' evaluations of their schools in terms of “**exterior space educational materials**” are presented in Table 10.

Table 10: Teachers'/Administrators' Evaluations of their Schools in terms of Exterior Space Educational Materials

EXTERIOR SPACE EDUCATIONAL MATERIALS	\bar{X}	σ
70. Outdoor playground should include materials for manipulative games and arts activities; and equipment for motor experiences, such as running, climbing, jumping, balance and swinging.	3.68	1.27
71. There should be equipment and materials for animal care and plant breeding.	3.26	1.37
72. There should be a sandbox that is maintained regularly and covered when not used.	3.14	1.21
<i>Notes: (i) n=66. (ii) in the scale 1= Never and 5= Completely. (iii) According to Friedman two-way Anova test $\chi^2=21.838$; $p<0$.results are statistically significant.</i>		

As presented in Table 10, the standard that is applied at the highest rate according to the participants is “Outdoor playground should include materials for manipulative games and arts activities; and equipment for motor experiences, such as running, climbing, jumping, balance and swinging.” and Items 71 and 72 are applied partially.

Teachers' and administrators' evaluations of their schools in terms of "physical environment health" are presented in Table 11.

Table 11: Teachers'/Administrators' Evaluations of their Schools in terms of Physical Environment Health

PHYSICAL ENVIRONMENT HEALTH	\bar{X}	σ
80. There should equipment and supplies for cleaning all spaces in accordance with hygienic rules.	4.47	0.88
78. There should be a lightning rod in the building.	3.27	1.69
<i>Notes: (i) n=66. (ii) in the scale 1= Never and 5= Completely. (iii) According to Friedman two-way Anova test $\chi^2=21.838$; $p<0$.results are statistically significant.</i>		

As presented in Table 11, the standard that is applied at the highest rate according to the participants is "There should equipment and supplies for cleaning all spaces in accordance with hygienic rules." and Item 78 is applied partially.

CONCLUSION AND SUGGESTIONS

The present research revealed the areas that need improvements at schools in terms of physical environment quality through the evaluations of teachers and administrators. For this purpose, assessments were made in accordance with the limit values ("partially" and below) suggested by Erişen (2011) (see: Table 4). In this context, the total of 13 of the items related to the physical environment (4 items; structure, 4 items; interior space, one item; interior space educational materials, one item; exterior space, 2 items; exterior space materials and one item; physical environment health) were evaluated as non-conforming to the standards. These are related to sick room, areas for parents for monitoring, animal care and plant breeding. Items related to handicapped are also included in this category.

In accordance with the findings of the present research, we can suggest that some problems in design and building of schools (sick room, gym, car park, lightning rod, pool, pond, etc.) are mostly about children's health, safety and development, and these areas need improvements. However, as improvements in these areas cost high, most schools cannot realize these. Accordingly, we can suggest the following for improving the physical environment quality of schools;

- Some of the problems related to physical environment at pre-schools are resulted from the transformation of buildings, built for different purposes to educational buildings. For this reason, pre-schools should be planned in accordance with physical environment quality standards with the cooperation of many branches of science (architecture, engineering, child development, educational psychology, economy, etc.), which can minimize problems related to physical environment.
- Problems related to physical environment undoubtedly result in problems in applying of the educational program. However, in accordance with the findings of the present research, it is believed that improvements can be made by administrators and teachers with some applications and area design in areas, which were indicated as problems by the participants of the present research.
- Educators are the most important actors in applying the quality related to physical environment. For this reason, they should attend to some meetings, seminars or conferences at various levels on the quality of physical environment at schools, they

should evaluate the quality of the educational environments and discuss solutions with their colleagues.

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GENİŞ ÖZET

Öğrenme her yerde oluşabilir, ancak eğitim sistemleri tarafından aranan olumlu öğrenme çıktıları, kaliteli öğrenme ortamlarında oluşur. Öğrenme çevresi, fiziksel, psiko-sosyal ve hizmet sunumu unsurlarını içermektedir. Tüm bu unsurlara ilişkin kalitenin öğrenme üzerinde dolaylı bir etkisi vardır. Dolayısıyla öğrenme ortamında kalite sağlamaya yönelik girişimler etkin bir öğrenim sunmak için büyük önem taşımaktadır. Bu çalışmanın temel amacı okul öncesi eğitim öğretmen ve yöneticilerinin okullarının fiziksel çevre kalitesine yönelik mevcut durum ile ilgili değerlendirmelerini belirlemektir. Araştırmada genel tarama modeli kullanılmış olup, çalışma örneklemini, Konya İl Milli Eğitim Müdürlüğü'ne bağlı Meram, Selçuklu ve Karatay merkez ilçelerin de bulunan toplam 15 bağımsız resmi ve özel okul öncesi eğitim kurumları oluşturmaktadır. Bu kurumlardan 51 öğretmen ve 15 yönetici çalışmaya dahil olmuştur. Araştırmada veri toplama aracı olarak; 7 boyut ve 80 maddeden oluşan "**Okul Öncesi Eğitimde Fiziksel Çevreye İlişkin Kalite Standartları Anketi**" kullanılmıştır. Araştırma verileri bizzat araştırmacı tarafından kişisel görüşme yoluyla (yüz yüze görüşme) elde edilmiştir. Fiziksel çevre standartları bağlamında öğretmenlerin (öğretmen ve yönetici) okullarındaki mevcut durumlarına ilişkin yapmış oldukları değerlendirmeler, fiziksel çevre standartları konusunda özellikle iyileştirme yapılması gereken alanları ortaya çıkarmıştır. Bunlar; okullarda hasta çocuk odası, ailelerin bilgi edinebilmeleri için alan, hayvan bakımı ve bitki yetiştirme için gerekli olan alanlara ilişkin yetersizliklerdir. Engellilere ilişkin maddelerin yetersizliği de ortaktır. Elde edilen sonuçlar ışığında fiziksel çevre standartları bağlamında mevcut duruma ilişkin yetersizliklerin iyileştirilmesine yönelik önerilerde bulunulmuştur.