

Influence of the Physical Environment on Instruction Process and Behavior Management: Early Childhood Teachers' Perceptions¹

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Abstract

The purpose of this study is to describe the perceptions of early childhood teachers about the influence of physical environment on their instruction process and behavior management practices. Twenty-two female early childhood teachers participated in the study; eleven teachers from the public sector and eleven from private schools. A researcher-developed semi-structured interview protocol was used to collect data. After data analysis, 3 main themes were determined: (1) factors influencing classroom management, (2) physical environment and (3) the influence of physical environment on instruction and behavior management practices. The findings of the study show that there are some differences between private and public school teachers' perceptions related to the factors influencing classroom management, the physical environment of their classrooms and effect of the physical environment on teachers' instruction and behavior management practices.

Key Words: physical environment, instruction, behavior management, teachers' perceptions, early childhood teachers

Özet

Bu çalışmanın amacı, sınıfın fiziksel özelliklerinin öğretim süreci ve davranış yönetimi üzerindeki etkisi ile ilgili okul öncesi öğretmenlerinin algılarını ortaya koymaktır. Araştırmanın çalışma grubunu 11'i özel okul öncesi eğitim kurumlarında, 11'i ise devlet okullarında çalışan 22 bayan okul öncesi öğretmeni oluşturmaktadır. Veri toplamak amacıyla araştırmacılar tarafından hazırlanan yarı yapılandırılmış bir görüşme formu kullanılmıştır. Veri analizi sonucunda, 3 ana tema belirlenmiştir: (1) sınıf yönetimini etkileyen faktörler, (2) sınıfın fiziksel özellikleri ve (3) sınıfın fiziksel özelliklerinin öğretmenlerin öğretim süreci ve davranış yönetimi uygulamaları üzerindeki etkisi. Bulgular, sınıf yönetimini etkileyen faktörler, sınıfların fiziksel özellikleri ve bu özelliklerin sınıftaki öğretim süreci ve davranış yönetimi üzerindeki etkileri ile ilgili olarak, devlet okulu ve özel okul öğretmenlerinin algıları arasında bazı farklılıklar olduğunu ortaya koymuştur.

Anahtar Sözcükler: sınıfın fiziksel özellikleri, öğretim süreci, davranış yönetimi, öğretmen algıları, okul öncesi öğretmenleri

INTRODUCTION

A good physical environment is important in early childhood classrooms since it supports academic skills of children (Evertson & Weinstein, 2006; Finn, Pannozzo & Achilles, 2003) and reduce their disruptive behaviors (Bullard, 2009; Guardino & Fullerton, 2010). Similarly, Sahin, Erden and Akar (2011) stated that a well organized classroom physical environment promoted children's positive behavior and teachers' effective behavior management.

While classroom management is defined as a complex construct which includes teachers' practices to achieve effective instruction and maintain classroom order by Doyle (1980) and Brophy (1999), some researchers (Burden & Byrd, 1994; Burden, 2003; Martin & Shoho, 1999; Sahin, 2011; Weinstein and Novodvorsky, 2011) have presented different

¹ This study was presented as a poster at the 3rd International Congress of Early Childhood Education, Adana, TURKEY.

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dimensions (actions) of classroom management such as: 1) choosing a philosophical model of classroom management and discipline, (2) facilitating classroom safety and wellness, (3) the organization of physical environment, (4) student behavior management, (5) management of relation and communication, (6) management of planning and programming activities, (7) time management and (8) interacting with colleagues, parents and others to achieve classroom management goals. Although some of these researchers only stressed some of the dimensions, others considered that classroom management includes all of these dimensions. However, all of them agreed that the organization of physical environment was a dimension of classroom management and it was important for effective classroom management in literature. However, there is limited research related to influence of physical environment on classroom management in Turkish early childhood classrooms. In particular, teachers' perceptions are usually ignored in studies related to physical environment of the classroom. Also, in the literature there is little research about comparison of public and private early childhood teachers' perceptions related to the influence of physical environment on their instruction and behavior management. Thus, the purpose of this study was to describe the perceptions of early childhood teachers about the influence of physical environment on their instruction and behavior management practices. For this purpose, this study will try to answer following research questions:

1. What are their perceptions about the physical environment of their classroom?
2. What are their perceptions about how physical environment of their classroom influences their instruction?
3. What are their perceptions about how physical environment of their classrooms influences their behavior management practices?

METHODOLOGY

Research design

Basic qualitative research was used to describe the perceptions of early childhood teachers about the influence of physical environment on their instruction and behavior management practices in this study. The aim of basic qualitative research is to understand and describe the meaning of a phenomenon for participants, and interviews, observations and document reviews are used to collect data (Merriam, 2009). Basic qualitative research was chosen in this study since the aim of the study was to describe the perceptions of early childhood teachers about the influence of physical environment on their instruction and behavior management practices via semi-structured interviews.

Participants

Purposeful sampling method was used to select the 22 early childhood female teachers who participated in the study; 11 from public and 11 from private early childhood institutions under the supervision of the Ministry of National Education in Tokat. Most of them (n=12, 54.5%) graduated from department of early childhood education. Also, there were some teachers who graduated from child development (n=8, 36.3%) and preschool education (n=2, 9%) departments.

While public schools teachers' work experience varied from 1.5 years to 15 years, the work experience of the private school teachers was between 2 years and 6 years. The teachers in the study taught students from age 3 to 6 (as shown in Table 1).

Table 1. Age groups taught by teachers

Age(s)	Private School	Public School
6	2	6
5- 6	1	3
5-	2	X
4-	6	1
3-4	X	1
Total	11	11

There were 14-17 children in most of the classrooms (n=14, 63.6 %). Some of them also included eleven (n=4, 18.1%) or more than twenty (n=4, 18.1 %) children.

Instrument and data collection

A researcher-developed semi-structured interview protocol was used to describe the perceptions of early childhood teachers about the influence of physical environment on their instruction and behavior management practices. It included 11 main and 3 sub questions related to teachers' perceptions.

Researchers contacted with teachers via school secretaries and informed them about the study. Then, volunteer teachers signed consent forms. While interviews were conducted in one-to-one settings in appropriate places of the schools, a tape-recorder was used with the permission of teachers. The duration of interviews varied between 20 and 45 minutes.

Data analysis

Transcripts of the interviews were prepared by one researcher for data analysis. Two researchers read interview documents carefully several times and separately began the coding process consisting of determining word repetitions (Ryan and Bernard, 2003). Then, they discussed and agreed upon any differing codes. After examining all the thematic codes, 3 main themes were determined: (1) factors influencing classroom management, (2) physical environment and (3) the influence of physical environment on instruction and behavior management practices.

FINDINGS

Factors influencing classroom management

When teachers were asked about factors influencing classroom management, physical environment of the classroom (n=15), age and experiences of children (n=6), behavior management (n=5), characteristics of the teacher (n=4), instruction process (n=3), parent involvement (n=3), inclusive children (n=2) and management of relationship (n=1) were stated by the teachers.

As related to physical environment, teachers said that number (n=8) and appropriateness (n=4) of the materials, class size (n=7) and movement area (n=3), interest area (n=3) and temperature/noise/safety (n=2) in the classroom influenced the management. Most of the teachers (n=9) who stated that physical environment as a factor were from public schools. Also, only one public school teacher stressed age and experiences of children as a factor influencing classroom management and said:

"Some of the children start school too early. Thus, they get bored activities easily and do not want to participate. Also, they interrupt their friends' activities."

As related to behavior management, rules (n=3) and discipline (n=2) in the classroom were mentioned as factors. One of the teachers said:

"Classroom management develops over time. Firstly, children learn classroom and school rules. Especially flexible rules considering children's individual differences are important for effective classroom management." (Private school)

As another factor influencing classroom management, characteristics of the teacher such as experience (n=3) and educational background (n=1) were mostly stated by public school teachers (n=3).

Teachers stressed that classroom management was influenced by activities (n=2) and teaching methods (n=1) as related to instruction process. Instruction process (n=2) and parent involvement (n=2) were mostly said by private school teachers. One public and one private school teacher mentioned inclusive children as a factor, only one public school teacher stated that management of relationship in the classroom influenced classroom management.

Physical environment

In order to understand their perceptions about the physical environment of their classrooms, the preschool teachers were asked to describe them. Their responses mainly included physical features, furniture and materials, decoration of walls and learning areas.

As related to physical features of the classroom, three of the teachers stated that arrangement of their classroom was appropriate. Also, according to some private school teachers (n=2), movement area of their classroom is large enough for children to move and play. However, only one private school teacher stressed that her class size was appropriate.

In terms of furniture and materials, teachers stated that there were basic furniture (chairs, tables and cupboards) (n=8), television (n=4), computer (n=3) and teacher desk (n=2) in their classroom. Whereas number of public and private school teachers who said they had basic furniture in their classroom was equal, only public school teachers mentioned that they had a television and a teacher desk.

As related to decoration of walls, most of the teachers (n=13) said that there were concept maps on the walls such as numbers, shapes and colors while calendars (n=2) and months of the years (n=2) were pasted to the walls in some classrooms. Also, some teachers (n=7) stated that only children's works were exhibited on the walls of their classrooms. Concept maps (n=8) and children's works (n=5) were mostly mentioned by public school teachers. Lastly, in terms of learning areas, preschool teachers said that there were science (n=16), puppet (n=12), dramatic play (n=11), blocks (n=11), book (n=11), Ataturk (n=11), music (n=10), project (n=4) and art (n=2) areas in their classrooms. Puppet (n=8), dramatic play (n=7), blocks (n=7), book (n=7), Ataturk (n=7) and music (n=6) areas were mostly mentioned by public school teachers but project and art areas were mentioned by only private school teachers.

The influence of physical environment on instruction and behavior management practice

The influence of physical environment on instruction

When teachers were asked about the influence of physical environment on instruction, they said that movement area and class size (n=21), number of the material (n=8), and

arrangement of furniture and materials (n=8) influenced instruction in the classroom. In terms of movement area and class size, teachers stressed that large movement area and appropriate class size provided ease of practice (n=13), more efficient activities (n=8) and active participation of children (n=7). Active participation of children were mostly stressed by public school teachers (n=5). One private school teacher said:

"When movement area of the classroom is large enough, children can use all learning areas actively and effectively. Therefore, the teacher can easily conduct her activities and have much time to observe children."

According to another teacher:

"In small and crowded classrooms, children cannot show their skills and may not be eager to participate in the activities. Especially they prefer following their friends rather than being the leader." (Public schools)

Two private school teachers also stated that large movement area and appropriate class size increased children's motivation to participate in the activities. One of them said:

"In classrooms with large movement area and fewer children, activities can be conducted easily. Also, children's motivation is high because in small classrooms, children cannot move and play freely and can get bored. Therefore, they do not want to continue the activity."

As related to number of the material, teachers mentioned that enough materials facilitated activities (n=6), and prevented time loss (n=1). Most of the teachers (n=4) who stated that enough materials facilitated activities were from public school teachers while only a public school teachers stressed that time loss was prevented by enough materials. According to one teacher:

"When there are no enough materials for the activity, the teacher has to change her plan or divide the children into small groups or find materials to complete the activity. It will cause time loss. Also, children will lose their motivation while waiting." (Public school)

In terms of arrangement of furniture and materials, while some teachers (n=7) stressed that appropriate arrangement of furniture and materials in the classroom facilitated activities, most of them (n=5) were public school teachers. One of them said:

"Arrangement of furniture and materials should not prevent children from playing and using various learning areas. Also, furniture and materials should be arranged in a way that children will not interrupt each other's activities. Otherwise, the teacher has to focus on physical environment rather than activity and children." (Public school)

The influence of physical environment on behavior management practices

When teachers were asked about the influence of physical environment on behavior management practices, teachers mentioned effects of movement area (n=11) and lighting (n=4) of the classroom.

As related to movement area, teachers said that small movement area of the classroom limited children movement and play (n=5), increased intervention of teachers with children's behaviors (n=3) and decreased teacher's motivation (n=2). Most of the teachers who said that it limited children's movement (n=4) and all teachers who stressed increase of teachers' intervention with children's behaviors (n=2) were from private schools. However, two private school teachers stated that small movement area facilitated control of children. One of them said:

"Small movement area may prevent conducting effective activities but it is appropriate to control children and manage their behaviors. In large classrooms, the teacher cannot control all of them and more misbehavior."

In terms of lighting of the classroom, teachers expressed that well-lit classrooms increased children's motivation (n=3) and facilitated teacher-children relationship (n=1). One of them said:

"In well-lit and large classrooms, children are more comfortable and free. Therefore, we can establish a good relationship and do more effective activities. Also, since children focus on their works, less misbehavior occurs." (Public school)

DISCUSSION

Findings of the study showed that some factors stressed by teachers as influencing classroom management were dimensions of it. For instance, physical environment of the classroom, behavior management, instruction process and management of relationship were stated as dimensions of classroom management in literature (Burden & Byrd, 1994; Burden, 2003; Martin & Shoho, 1999; Sahin, 2011; Weinstein and Novodvorsky, 2011). Also, they expressed different factors related to children, parents and teachers. When it is considered that children, parents and teachers are main components of education process and there is an important interaction between them, these responses of teachers can result from their experiences.

Findings also showed that most of preschool teachers who emphasized that physical environment were important on classroom management were public school teachers. It may result from differences of physical environment of public and private schools in Turkey. Physical characteristics of private schools are better than public schools'. It is consistent with teachers' responses. Findings showed that private school teachers were more satisfied with their classroom environment.

According to findings, preschool teachers were aware of that physical environment had an important role for promoting instruction and managing children's behaviors effectively. Also, especially their responses related to the influence of class size and movement area on activities and instruction were consistent with literature (Finn, Gerber & Boyd-Zaharias, 2005; Finn, Pannozzo & Achilles, 2003). It can be stated that Turkish teachers' perceptions related to the influence of class size and movement area on instruction and behavior management practices are parallel with American teachers in Finn, Pannozzo and Achilles' study (2003).

Lastly, teachers' responses related to physical environment and behavior management were consistent with literature. Some studies especially stressed that small movement area and inadequate lightning caused some problems related to behavior management (Blatchford, Moriarty, Edmonds & Martin, 2002; Finn, Pannozzo & Achilles, 2003). Interestingly, some teachers stated that small movement area facilitated control of children. It is parallel with the findings of Sahin's study (2011). Although teachers generally prefer large movement area in their classrooms, early childhood teachers who emphasized the positive influence of small class area on behavior management may have an anxiety related to their classroom management skills.

CONCLUSION

The findings of the study show that there are some differences between private and public school teachers' perceptions related to the factors influencing classroom management, the physical environment of their classrooms and effect of the physical environment on teachers' instruction and behavior management practices.

This study contributes to raising the awareness in teachers and school administrators' of the importance of the physical environment in early childhood classrooms in terms of instruction and behavior management. Also, by understanding the teachers' perceptions of the physical environment, the Ministry of National Education can determine how to construct new classrooms and rearrange existing early childhood classroom spaces.

This study can be developed by using a larger number of participants, applying quantitative data collection methods and determining whether different teacher characteristics such as; educational background, age and gender affect their perceptions of the physical environment of their classroom in terms of their instruction and behavior management practices.

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Sınıfın Fiziksel Özelliklerinin Öğretim Süreci ve Davranış Yönetimi Üzerindeki Etkisi: Okul Öncesi Öğretmenlerinin Algıları

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Geniş Özet

GİRİŞ

Sınıf yöntemi farklı boyutlardan oluşan karmaşık bir süreçtir. Bu süreçte öğretmen, bir yandan sınıf düzenini sağlamayı amaçlarken diğer taraftan eğitim-öğretim sürecini etkili bir şekilde devam ettirmeye çalışmaktadır. Bu nedenle sınıf yönetimi, öğrencilerin davranışlarının kontrol edilmesinden fazlasını içermektedir. Bazı araştırmacılar sınıf yönetiminin sınıfın fiziksel özelliklerinin düzenlenmesi ve sınıf kurallarının belirlenmesi gibi boyutları kapsadığını vurgularken bazıları da, etkili bir sınıf yönetimi için sınıfın fiziksel ortamının düzenlenmesinin, çocukların davranışlarının yönetilmesinin, sınıf içerisinde sağlıklı bir ilişki ve iletişim sürecinin olmasının, etkinliklerin uygun şekilde planlanıp uygulanmasının ve öğretmenin hem meslektaşları hem de ailelerle iletişim içerisinde olmasının önemini vurgulamışlardır. Literatürde ifade edilen sınıf yönetimi boyutlarının tamamının ortak noktası, bu süreçte sınıfların fiziksel özelliklerinin uygun şekilde düzenlenmesinin önemini vurgulamalarıdır. Bu nedenle bu çalışmanın amacı, sınıfın fiziksel özelliklerinin öğretim süreci ve davranış yönetimi üzerindeki etkisi ile ilgili okul öncesi öğretmenlerinin algılarını ortaya koymaktır.

YÖNTEM

Bu araştırma, okul öncesi öğretmenlerinin sınıfın fiziksel özelliklerinin öğretim süreci ve davranış yönetimi üzerindeki etkisi ile ilgili algılarını incelemeye yönelik nitel bir çalışmadır. Araştırmanın çalışma grubunu 22 bayan okul öncesi öğretmeni oluşturmaktadır. Veri toplamak amacıyla araştırmacılar tarafından, 11'i ana soru, 3'ü alt soru olmak üzere toplam 14 sorudan oluşan bir yarı yapılandırılmış görüşme formu hazırlanmıştır. Çalışmaya gönüllü olarak katılan öğretmenlerle okulların uygun bölümlerinde birebir görüşmeler yapılmıştır. Veri analizi için, bilgisayarda yazıya aktarılan dokümanlar iki araştırmacı tarafından birkaç kez okunmuş ve kodlanmıştır. Araştırmacılar verileri ayrı ayrı kodlamışlar ve bu süreçte kelime tekrarlarına odaklanmışlardır. Ardından farklı kodlar üzerinde tartışılarak bir anlaşmaya varılmıştır.

BULGULAR

Veri analizi sonucunda, 3 ana tema belirlenmiştir: (1) sınıf yönetimini etkileyen faktörler, (2) sınıfın fiziksel özellikleri ve (3) sınıfın fiziksel özelliklerinin öğretmenlerin öğretim süreci ve davranış yönetimi uygulamaları üzerindeki etkisi. Bulgulara göre öğretmenler, sınıf yönetimini etkileyen faktörler ile ilgili olarak, sınıfların fiziksel özelliklerini, çocukların yaş ve okul deneyimlerini, öğretmenlerin davranış yönetimi uygulamalarını, öğretmen özelliklerini, öğretim sürecini, aile katılımını, kaynaştırma öğrencilerini ve sınıf

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içerisindeki ilişki yönetimini dile getirmişlerdir. Sınıfların fiziksel özelliklerinin öğretim süreci üzerindeki etkisi ile ilgili olarak, sınıf mevcudu, hareket alanı, materyal sayısı, materyal ve mobilyaların düzenlenmesinin önemi vurgulanmıştır. Sınıfın fiziksel özelliklerin davranış yönetimi üzerindeki etkisi ile ilgili olarak ise, sınıfın hareket alanı ve aydınlatması dile getirilmiştir. Ayrıca çalışmanın bulguları, sınıf yönetimini etkileyen faktörler, sınıfların fiziksel özellikleri ve bu özelliklerin sınıftaki öğretim süreci ve davranış yönetimi üzerindeki etkileri ile ilgili olarak, devlet okulu ve özel okul öğretmenlerinin algıları arasında bazı farklılıklar olduğunu ortaya koymuştur.

TARTIŞMA

Çalışmanın bulguları, sınıf yönetiminin bazı boyutlarının öğretmenler tarafından sınıf yönetimini etkileyen faktörler olarak görüldüğünü ortaya koymuştur. Örneğin; sınıfın fiziksel ortamı, sınıfta davranış yönetimi, öğretim süreci ve ilişki yönetimi literatürde ifade edilen sınıf yönetimi boyutlarındandır. Bunun dışında, çocuklar, aileler ve öğretmenlerle ilgili bazı faktörlerin de sınıf yönetimini etkilediği öğretmenler tarafından dile getirilmiştir. Bu 3 grubun eğitim sürecindeki önemi ve etkileşimleri göz önünde bulundurulursa, öğretmenlerin bu algısı kendi deneyimlerinden kaynaklanıyor olabilir.

SONUÇ VE ÖNERİLER

Çalışmanın bulgularının, hem okul öncesi öğretmenlerinin hem de okul yöneticilerinin, sınıfların fiziksel özelliklerinin öğretim süreci ve davranış yönetimi uygulamaları üzerindeki önemli etkisine ilişkin farkındalıklarını artırması beklenmektedir. Ayrıca, öğretmenlerin sınıfların fiziksel özellikleri ile ilgili ortaya koyularak, Milli Eğitim Bakanlığı'na yeni okul öncesi eğitim sınıfları inşa etme ve varolanları yeniden düzenleme sürecinde katkıda bulunulması amaçlanmaktadır. Bu çalışma, katılımcı sayısı artırılarak, nicel veri toplama yöntemleri kullanılarak, öğretmenlerin eğitim durumu, yaş, cinsiyet gibi özelliklerinin sınıfın fiziksel özellikleri ve bu özelliklerin farklı uygulamalar üzerindeki etkilerine ilişkin algılarına etkileri incelenerek zenginleştirilebilir.