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Anaokulu Dış Mekan Politikalarının ve Fiziksel Ortamların Çocukların Oyun Oynama Olanaklarına Etkisi*

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ÖZET

Anaokulunun dış mekân fiziksel ortamlarının ve pedagojik politikaların kalite göstergelerinin varlığı, çocukların oyunlarına ve motor ve sosyo-duygusallığını etkileyen farklı oyun olanaklarını teşvik etmektedir. Bu makale 19 anaokulunun dış mekân fiziksel ortamlarının ve pedagojik politikalarının kalitesini analiz etmeyi amaçlayan doktora projesinde kullanılacak olan yöntemi sunmaktadır. Gondomar'da (Portekiz) okul öncesi çocukların oyun olanakları üzerindeki etkilerini belirlemek için iki aşamada kapsamlı karma yöntem uygulanmıştır. İlk aşamada in-loco gözlem ölçeği ve anaokulunun yöneticileri ve eğitimcileri tarafından cevaplanan anketler, dış mekân fiziksel çevresi ve pedagojik politikaların kalitesini değerlendirmek için kullanılmıştır. İkinci aşamada 2 anaokulu seçilmiştir (biri yüksek, diğeri düşük puanlı). Her birinde oyun alanı seçimleri, oyun türleri ve akranlarla etkileşim RFDI sensörleri, katılımcı ve sistematik gözlem ve video kayıtları aracılığıyla analiz edilmiştir. Çocukların motor ve sosyo-duygusal yeterliliği standartlaştırılmış değerlendirme bataryası aracılığıyla değerlendirilecektir. Çocukların anaokulu dış mekânı hakkındaki algıları da çizimler ve röportajlar aracılığıyla analiz edilmiştir. Anketler eğitimciler ve ebeveynler tarafından açık havada oyun hakkındaki algılarını değerlendirmek için cevaplanmıştır. Çalışma çocukların oyun davranışları üzerindeki etkilerini değerlendirerek, açık hava fiziksel ortamı ve anaokullarının pedagojik uygulamaları ile ilgili kalite göstergeleri hakkında bilimsel bilginin artırılmasına katkıda bulunmayı amaçlamaktadır. Problem durumu açık havada oyun davranışlarının ve hareketlerinin daha kısıtlı olduğu ve kaçınılmaz olarak değiştiği COVID-19 salgınının neden olduğu uzun bir kapanma döneminden sonra özel bir öneme sahiptir.

Keywords: Dış mekân, çocuk yuvası, politikalar, fiziki çevre, olanaklılık, çocuklar, oyun.

Makale Türü: Araştırma Makalesi

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The Impact of Kindergarten Outdoor Policies and Physical Environments on Children's Affordances to Play

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ABSTRACT

The existence of specific quality indicators of kindergarten outdoor physical environments and pedagogical policies seems to promote different affordances to play, which has impacts on children's play behavior, and on their motor and socio-emotional development. This article presents a methodology to be used in a PhD project, which aims to analyze the quality of the outdoor physical environments and pedagogical policies of 19 kindergartens in Gondomar (Portugal), to determine their impact on preschool children's play affordances. A comprehensive mixed methodology will be applied in two stages. At the first stage, an in-loco observation scale, and surveys completed by the kindergarten's directors and educators will be used to assess the quality of outdoor physical environment and pedagogical policies. In the second stage, 2 kindergartens will be selected (one with high scores and one with low scores on the quality assessment). In each of them; the play yard choices, types of play and interaction with the peers will be analysed through RFDI sensors, participant and systematic observation, and video records. Children's motor and socio-emotional competence will be assessed through standardized assessment batteries. Children's perception of the kindergarten outdoor space will also be analyzed through drawings and interviews. Surveys will be completed by educators and parents to assess their perceptions of outdoor play. This study aims to contribute to the increase in the amount of scientific knowledge about the quality indicators regarding the outdoors physical environment and pedagogical practices of kindergartens, assessing their impact on children's play behavior. This issue has particular importance after a long period of lockdown caused by the COVID-19 pandemic, in which outdoor play behaviors and movement were more restricted and have inevitably changed (Graber et al., 2020; S. A. Moore et al., 2020; Pombo, Luz, Rodrigues, & Cordovil, 2020).

Keywords: Outdoor, kindergarten, policies, physical environment, affordances, children, play.

Article Type: Research Article

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1.INTRODUCTION

According to Waller et al. (2017), in order to better understand children's outdoors play and the possible variables that influence it, it is important to consider Gibson's ecological theory of affordances (Gibson, 1979). Specifically, affordances in the kindergarten outdoor refer to the different opportunities that this environment provides for children to play and explore, which is perceived in relation to their abilities, needs, interests, and motivation (Kyttä, 2003; Raymond et al., 2017). These opportunities for action may arise both from the features of the socio-physical space of the outdoor space (e.g., the way it is set up and designed, the materials it has, the areas it has, number of children to interact with), and from the pedagogical practices implemented by the staff, which may either enhance or inhibit the exploration of these opportunities for action (Barker, 1968; Farinha et al., 2019; Kyttä, 2002; Lopes et al., 2018).

The Portuguese Orientations for Preschool Education (Silva et al., 2016) highlight that the outdoors is a privileged space for children to explore their play, social interactions, physical skills, and also to connect with nature. For this reason, the same document alerts for the importance of educators to reflect on the potential of outdoor spaces in order to use them as a complement to indoor spaces and to consider their use to enrich and diversify the educational challenges.

According to Sandseter et al. (2020); Portuguese educators mentioned the poor play facilities as the main reason for not allowing children to play outside, followed by the weather conditions and the lack of play spaces. In fact, Bilton (2010) highlighted the importance of ensuring that the outdoor physical environment is appropriate to respond to the child's developmental needs and also to support the pedagogical policies.

Additionally, as Kyttä (2004) points out, it is important that the outdoor physical environment and the pedagogical policies implemented on outdoor space promote the active play through movement. So, letting children interact with the environment through movement (e.g., jumping, running, rolling, climbing) is also very

important so that they can explore the affordances around them and continuously actualize and improve their opportunities to play.

Over time, several studies have been helping to define some quality indicators of the physical environment and to make pedagogical policies on the outdoor space that can contribute to an increase in the number of opportunities for active play (Houser et al., 2016; McWilliams et al., 2009; Moore, 1986; 2012). Regarding the physical environment of the outdoor space, G.T. Moore (2012) underlines that it should be a space that children perceive and feel familiar with (e.g., looks like home, it's cozy, like a farm), and it should have a natural and intimate character, so that the child can feel more involved and safer to play and explore. The same author refers that a good definition of the play areas seems to have a positive influence on the concentration and involvement of children in the games they play. Kantrowitz and Evans (2004) emphasize that the size of the playground should be proportional to the number of kids, otherwise it will promote violence or isolation and fights among peers. Having natural materials and surfaces available to children seems also relevant to contribute to the increase of physical activity (Määttä et al., 2019), risk perception, creativity, problem-solving capacity, self-esteem, and self-confidence (Berti et al., 2019b; Maxwell et al., 2008; Waller et al., 2017). It has also been related to improvements in the child's mental health, well-being, and quality of life (Brussoni et al., 2017). For these reasons, it is really paramount that outdoor space has conditions to be used all year around, so these opportunities could take place throughout the year (Bilton, 2010).

Regarding the pedagogical policies for active outdoor play, the National Association for Sport and Physical Education (NASPE, 2002) defined the high-quality practices to promote active play and physical activity in outdoor space, namely: having appropriate equipment to be able to go outside in all seasons, playing outside two times or more per day, staying outside for 90 minutes or more, having the materials always available for children to explore, and also providing training in outdoor play and learning for educators at least twice a year.

After three months of being in lockdown due to the COVID-19 pandemic, Portuguese kindergartens reopened in June 2020, following the guidelines from the Portuguese National Institute of Health (DGS) (Direção Geral da Educação, 2020) defined together with Association for Early Childhood Teachers (APEI). The reopening implied changes in the management of these spaces in order to reduce the risk of contamination such as the increased use of the outdoor space, the promotion of physical distance, and the increase of disinfection procedures. These restrictions led to changes in the organization of the outdoor physical environment, pedagogical policies, and therefore in the opportunities for active play.

Considering the research showing that during the lockdown children had fewer opportunities for active play and its serious consequences for their physical and mental health (Graber et al., 2020; Pombo et al., 2020), it is clear that when children return to kindergartens, safe and challenging outdoor spaces must be made available to compensate for this health menace.

To date, there have been no known studies in Portugal that have characterized the quality of the outdoor spaces and pedagogical policies in kindergartens after this period of lockdown. This type of literature at an international level is also rather scarce, namely, when research employing a mix-methodology data collection approach with an ecological framework is considered. For this reason, in this study, we present the methods of a PhD project that aims to analyze the impact of the quality of the kindergartens' outdoor physical environments and pedagogical policies on preschool children's play affordances.

2.METHODOLOGY

2.1 Procedures And Instruments

This study uses a mixed methodology and it is organized in two stages. In the first stage, nineteen preschools (17 public and 2 private) from Gondomar (Porto area in Portugal) accepted to participate. The quality of the physical environment would be assessed through the Escala de Avaliação dos Envolvimentos Físicos para Crianças (EAEFC) (Moreira et al., 2020). This scale is the Portuguese version of the Children's Physical Environments Rating Scale (CPERS5), which has high inter-rater reliability (r=0.84) and test-retest reliability (r=0.91), good internal consistency in most subscales (Chronbach's $\alpha > 0.7$), and good construct and content validity (G. T. Moore & Sugiyama 2007). The EAEFC assesses the characteristics of physical environment of early childhood centers as a whole, and is divided into 124 items, distributed through 14 subscales, which in turn are divided in 4 parts. The Part A: Planning assesses the center size and modules; the Part B: Building as a whole evaluates the qualities of aesthetics, scale, circulation, indoor environment, safety and security; Part C: Children's Indoor Spaces measures the characteristics of the indoor spaces for care and activities, and finally Part D: Outdoor Areas (the only part that will be considered in this research) assesses the quality of outdoor spaces through 3 different subscales which are the play yards functional needs (subscale 12, with 8 items), related to the useable area for play,

weather protection, type of structures and place for storage (e.g., There are roofed areas that protect children's activities in most local weather conditions; There is a large accessible storage room for outdoor play equipment.); the play yards developmental needs (subscale 13, with 8 items), assesses the character of the space, the variety of the surfaces, areas and elements, and the balance between safety and risk (e.g., The play yard(s) provides enough diversity, such as a variety of surfaces for different types of play, to be interesting for children such as grass, hard surfaces, sand, etc.; Some of the play yards are smaller and have a friendly feeling with intimate character, natural elements, etc.; Some of the play yards contain contours that are safe yet challenging enough for children to play on.); and the location and site of the kindergarten (subscale 14, with 11 items), which measures its accessibility and community link, the natural features, position to the light and sun of the site, and the outdoor protection from noise & noxious elements (e.g., The site is sufficiently far away from noxious elements such as heavy industry, manufacturing, high power tension wires, sources of pollution, major arterial roads, air craft noise to be safe; The site is located within a short and safe walking distance of public transportation). All of these items in outdoor subscales are assessed on a scale ranging from 0 (does not meet the criterion) to 4 (complies with excellence). It is possible to meet a quality score about the whole kindergarten physical environment, varying between 0.00-1.00=bad; 1.01-2.00=fair; 2.01-3.00=good and 3.01-4.00=excellent (Moreira et al., 2020), but for this study we will only measure the quality score for each subscale of part D, which varies according to the same parameters as the overall score. The EAEFC will be filled in-loco in a visit of one of the researchers to each preschool with the duration of 120 min.

Later, the quality of the pedagogical policies related to outdoor active play will be assessed in the same kindergartens through the Portuguese version of the original American Environment and Policy Assessment and Observation - Self-Report (EPAO-SR), which has shown a range of reliability and validity evidence (see Ward et al., 2016). The EPAO-SR construction was inspired in the Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) best practice standards (Ammerman et al., 2007) and aims to evaluate the quality of the child care's nutrition and physical activity environments (Ward, Mazzucca, Mcwilliams, & Hales, 2016). For that, it is divided into three surveys: Director General Survey (completed by the director in only one day), Staff General Survey and Staff Daily Survey, both completed by classroom educators, but while the general is filled in a single day, the daily survey is completed in two alternate and separate days by the same educator. Each survey item is presented in a checklist's format. Regarding the data scoring, individual item responses are used to derive variables assessing compliance with nutrition and physical activity best practices (BP's). Separate SAS programs are provided for the three EPAO-SR surveys and to combine scores from the individual surveys. Therefore, it is possible to evaluate only the survey's items about specific evaluation goals (Ward et al., 2016). For this study, we will only measure the outdoor play time best practices. Thus, the General Director Survey will be completed by directors about policies around outdoor physical activity and staff training in outdoor play and learning. The items that will be assessed are: Does your physical activity policy include statements (i) providing preschool children with outdoor playtime 3 or more times a day? (ii) providing preschool children with 90 minutes or more of outdoor playtime each day? (iii) having children and adults wear shoes and clothes that allow them to participate in outdoor play during all seasons? (iv) having teachers and staff participate in professional development about children's outdoor play and learning 2 or more times a year?. The Staff General Survey will be completed by classroom educators and is about the outdoor fixed and portable play equipment, and how often they are available for all children to use at outdoor anytime. The items that will be measured are: A10. Which of the following types of fixed play equipment are present in your center for use by children? A12. Which of the following types of portable play equipment are present for use by children outside? A13.How often is portable play equipment limited in your center, for example, times when not all children have some type of equipment to play with? The Staff Daily Survey, will also be completed by classroom educators, who will report daily on the number of occasions and the amount of outdoor play time; the level of children's physical activity at the outdoor time, and the type of the outdoor time. The items that will be measured are: B1. Did children play outside this morning? If no, why was there no outdoor time? B2. How many total minutes was your class outside this morning? B5. How would you describe the outdoor play session(s)? B3. How many times did your class go outside to play this morning? B7. On the scale below, from 1- most siting to 7- mostly vigorous activities (running), please rate the activity level of most children in your class while they were outside this morning; F1. Did children play outside after lunch? If no, why was there no outdoor time? F2. How many total minutes was your class outside after lunch? How many times did your class go outside to play after lunch? F5. How would you describe the outdoor play session(s)? F7. On the scale below, from 1- most siting to 7- mostly vigorous activities (running), please rate the activity level of most children in your class while they were outside this morning.

Regarding the second stage, two of the nineteen kindergartens will be selected according to different criteria in the quality of the outdoor physical environment and pedagogical policies (one with high scores quality and another with low scores).

To gain a more ecological and holistic comprehension about the outdoor play behavior in these kindergartens, we will observe and assess in-loco how children use, perceive, and shape the affordances in the outdoor spaces. Hence, 50 children (25 from one class in each kindergarten) without any known neurodevelopmental disorder will be selected.

Play outdoor behavior observations will be conducted during school recesses and will last 30 minutes. Each child will be recorded 6 times, 3 minutes each, and his/her behavior will be coded through a systematic play observation, using the software OBSERVIDEO (c.f., Veiga et al., 2017). Only one type of play will be scored per segment of 15 seconds. The play behavior will be coded to distinguish between (1) fantasy play, where child performs pretend actions towards objects which are playfully and symbolically transformed into representations of other things (e.g. playing with a doll); (2) role play, where the child represents non-literal events and assumes symbolic roles transformed into representations of other things (e.g. pretending to be a dragon); (3) exercise play, where the child engages in exaggerated, active and moderate to vigorous physical activities in the context of play (e.g. jumping and running); (4) rough-and-tumble play, where the child engages in active playful behaviors, which appear to be aggressive, except that they are performed with a 'play face' (i.e. a face indicating that the child is not really feeling angry or aggressive) and involve capture/rescue, submit/vanquish or attack/flee (e.g. chasing and play fighting); and finally (5) other play that occurs when the child is engaged in a play activity that does not correspond into one of the above categories (e.g. constructive type activities).

Children's outdoor play areas and peers' interactions will be collected at the same recess time and also for a period of 30 minutes using proximity-sensing RFID badges attached to each individual child and to fixed play areas (e.g., play area with trees, slide area, sand play area). A receiving station for the RFID sensors will be placed at the center of the playground. If at some moment a child wearing a badge approaches another child with another badge, in proximity radius of 1.5 meters or less, the receiving station detects this proximity and registers it. The contact will only be registered as an interaction if the two children stablish a contact for more than 1 second. These procedures have been tested in Veiga et al.'s (2017) study in Portugal.

The individual perception of each child about his/her individual outdoor play experience will be collected through participatory methodologies, which according to O'Kane (2008) are the best approach to understand how children look and feel the phenomenon under study, recognizing them as active participants. Hence, in line with instruments that will be used as the drawings and the semi-structured interview, following the same procedures of other studies (Birbili, 2019; Kesicioglu et al., 2019).

Drawing is considered the best visual method to illustrate young children's thoughts, feelings and identities in research contexts (Barley & Russell, 2019). In this study, a researcher will provide one A4 white sheet and color pencils for each individual child who will be asked to make a drawing about how he/she plays at the outdoor space of the kindergarten. Afterwards, the researcher will conduct semi-structured interviews with children in pairs using their drawings to feed the conversation among the group members. Also, the presence of two children will contribute to a more friendly dialogue setting and more opened_to spontaneous communication and to shared meanings regarding the interview topics. The main purpose of this approach is to gain a deeper understanding of how the interviewed children play outdoors.

By not following a pre-established order in the formulation of the questions, this semi-structured interview ensures a greater flexibility regarding the way in which the themes are addressed, giving children greater freedom to express themselves (Meirinhos & Osório, 2010). Thus, it is expected that the questions will arise naturally according to the dialogue established with the children, but with previously planned focus topics (Cameron, 2005), such as for example which materials are present in the outdoor play yards, which ones can or cannot be used, which "characters" are drawn, whether peers or adults, what kind of interactions take place in each play space, the time and frequency of the games, the feelings associated to each game that occurs in a certain space, which are the most and less used play spaces or equipments, and eventually, if children have any suggestions to change any of those spaces.

The interviews are expected to last between 30 and 45 minutes. Following the guidelines of qualitative data analysis (Kuckartz & Rädiker, 2019) each interview will be videotaped to help the researcher to be more comfortable and involved in the conversation, and to ensure a more real transcript of the collected content, both verbal and non-verbal. Children will be allowed to choose the place to do the drawings and the interviews, so they feel they are in a familiar space and therefore can be more spontaneous. The researcher will use simple language to facilitate the child's understanding of what is being asked, as well as appropriate non-verbal language, with an open posture and attentive gaze, as suggested by Cameron (2015).

Field notes and participant observation will also be used to complement the information from the interviews and drawings of each child's play behavior in the outdoor playground.

The play behavior observations, the interactions, and the perceptions of the child about the outdoor space will also be associated to their motor, emotional and social competence.

Their motor and emotional competence will be individually assessed through standardized assessment batteries, namely the Motor Competence Assessment (MCA), which is validated for the Portuguese population (Luz et al., 2016; Rodrigues et al., 2019) and the protocol for the evaluation of emotional functioning, translated and adapted to Portuguese by (Veiga et al., 2016). The MCA evaluates the stabilization, locomotion and manipulative skills based on 6 different motor tasks, and in this study it will be applied individually, taking approximately 15 minutes per child (Luz et al., 2016). The emotional functioning protocol aims to assess Theory of Mind (Rieffe et al., 2001), discrimination of emotions based on facial expression flashcards, and the ability to attribute a particular emotion to a situation occurring in a specific context, through 6 individual tasks, applied in about 20 minutes.

Children's social competence will be assessed using the Portuguese version of the Strengths and Difficulties Questionnaire (SDQ; Goodman (1997). The SDQ has 25 items that are grouped in 5 scales of 5 items each (hyperactivity scale, emotional symptoms scale, conduct problems scale, peer problems scale, and prosocial scale). Parents characterize the behavior of their children rating each item in a 3-point scale, from 1 (not true) to 3 (certainly true), and the total score is obtained by computing the mean score of all items. The internal consistency of this scale is good (Cronbach's alpha= .80).

The perception that educators and parents have about outdoor play will also be reported through specific surveys, inspired on that ones that were developed in the Moving and Learning Outside-MLO project (Cordovil & Lopes, 2020).

The categorical/thematic analysis of the interviews, drawings, field notes and participant observation, will be carried out using the MAXQDA software, as suggested by similar studies (Hayball & Pawlowski, 2018; Kesicioglu et al., 2019; Lopes et al., 2019).

3.FINDINGS

With this study we presented a comprehensive methodology that can be used to increase the scientific knowledge about the quality indicators of kindergartens. More specifically, this methodology focuses on quality indicators regarding the outdoors physical environment and pedagogical practices by assessing their impact on the opportunities that children have to play outdoors, and also on the way that children experience those spaces according to their individual needs, interests and meanings.

4. RESULTS, DISCUSSION AND RECOMMENDATIONS

Following this methodology, in future studies, we hope to be able to answer questions such as: What is the relationship between the quality of the kindergarten, and the child's perception and exploration of the affordances for play? How can the child's perception, motor and socio-emotional competence influence their play behavior in different kindergartens? How can educators' and parents' perception on outdoor playing impact this relationship?

To conclude, by using this methodology in future endeavours, we hope to help the educational staff and even political agents to perceive what the best options to plan and organize "child friendly" spaces are. This has always been an important concern, but now, after a long period of lockdown caused by COVID-19 pandemic, where active play outdoor behaviors were more restricted, and have inevitably changed (Graber et al., 2020; S. A. Moore et al., 2020; Pombo et al., 2020), it is even more important to redefine the outdoor spaces and the pedagogical practices that have an impact on their use.

Research and Publication Ethics Statement

Manuscript named "The Impact of Kindergarten Outdoor Policies and Physical Environments on Children's Affordances to Play." was presented as a paper at the Inretnational Congress of Early Childhood Outdoor Practices. The permissions for the research were obtained from the institution where the research was conducted.

Contribution Rates of Authors to the Article

M.M., G.V., F.L. and R.C. contributed to the design and implementation of the research, to the analysis of the results and to the writing of the manuscript.

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Statement of Interest

The authors declare no conflict of interest.

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6.GENİŞLETİLMİŞ ÖZET

Çocukların dış mekânda oyun oynaması, fiziksel aktivitenin artması için büyük bir öneme sahiptir ve bu da fiziksel ve zihinsel sağlık, psikososyal beceriler, anaokuluna daha iyi uyum, akademik performans ve yaşam kalitesi açısından birçok olumlu faydaya sahiptir (Biddle vd., 2004). Anaokulunda dış mekân oyununu daha iyi anlamak için ihtiyaçlar, ilgi alanları, motivasyonlar ve becerilere göre çevre tarafından her çocuğa sunulan eylem olanaklarını ifade eden yeterlilikler kavramını dikkate almak önemlidir. (Gibson, 1979; Kyttä, 2002; Waller vd., 2017). Bu olanağın sağlanması sosyo-fiziksel çevrenin özelliklerinden kaynaklanır, ancak aynı zamanda kendi kurumları içindeki eğitim personeli tarafından sıklıkla uygulanan kültürel unsurlar, normlar ve politikalar tarafından da sınırlandırılır. (Moreira vd., 2020a). Bu kısıtlı eylemler alanı, çocukların onu kullanma iznini, özellikle çocukların oyun fırsatlarını keşfetmeleri, gerçekleştirmeleri ve iyileştirmeleri için çok önemli olan hareket ve aktif oyunla ilgili olanları düzenler. (Kyttä, 2004). Çeşitli araştırmalar anaokulunun dış mekân fiziksel ortamlarının ve pedagojik politikaların belirli kalite göstergelerinin varlığının, çocukların oyun, motor ve sosyo-duygusal davranışları üzerinde etkisi olan aktif oyun için farklı olanakları teşvik ettiğini ve arttırdığını göstermiştir. (Berti vd., 2019a; 2019b; Houser vd., 2019; Kyttä, 2004; McWilliams vd., 2009; G. T. Moore vd., 2015). Portekiz anaokulları COVID-19 salgını nedeniyle üç ay kapalı kaldıktan sonra Portekiz Ulusal Sağlık Enstitüsü'nün yönergelerini izleyerek Haziran 2020'de yeniden açıldı (Direção Geral da Educação, 2020). COVID-19 yayılmasını

önlemek için, bu kılavuzlar dış mekân fiziksel ortamının organizasyonunda, pedagojik politikalarda ve dolayısıyla aktif oyun fırsatlarında değişiklikler gerektirmiştir. Kapanma sırasında çocukların aktif oyun için daha az fırsata sahip olduğunu ve bunun fiziksel ve zihinsel sağlık için ciddi sonuçlara yol açtığını gösteren araştırma göz önüne alındığında (Graber vd., 2020; Pombo vd., 2020), pandemi döneminde aktif oyunları teşvik etmek için çocuklara hangi fiziksel ve sosyal olanakların sunulduğunu anlamak çok önemli görünüyor. Bu makale anaokulunun dış mekân fiziksel ortamlarının kalitesinin etkisini ve okul öncesi çocukların oyun davranışları üzerindeki etkilerini belirlemek için pedagojik politikaları analiz etmeyi amaçlayan bir doktora projesinde kullanılacak olan bir metodolojiyi sunmaktadır. İki aşamada kapsamlı bir karma metodoloji uygulanacaktır. İlk aşamada Gondomar'dan (Portekiz) 19 anaokulu katılmaya davet edilmiştir. Her birinde, fiziksel çevrenin kalitesi in-locu gözlem ölçeği Escala de Avaliação dos Envolvimentos Físicos para Crianças (EAEFC) (Moreira vd., 2020b) ile ve dış mekânda aktif oyun pedagojik politikalarının kalitesi, anaokulu yöneticileri ve eğitimciler tarafından tamamlanan Amerikan Çevre ve Politika Değerlendirme ve Gözlem- Öz Rapor anketlerinin (EPAO-SR) (Ward vd., 2016) Portekiz versiyonu aracılığıyla değerlendirilecektir. İkinci aşamada 2 anaokulu seçilecektir (biri yüksek puanlı diğeri düşük puanlı kalite değerlendirmesinde). Her birinde 25 çocuğun (toplam 50 çocuk) dış mekân seçimleri, oyun türleri ve akranlarıyla etkileşimleri RFDI sensörleri, sistematik gözlem ve video kayıtları aracılığıyla analiz edilmiştir. Çocukların anaokulunun dış mekanlarına ilişkin algıları da çizimler ve röportajlar aracılığıyla analiz edilmiş ve saha notları ve katılımcı gözlemi tamamlanmıştır. Çocukların motor ve sosyo-duygusal yeterliliği, Motor Yeterlilik Değerlendirmesi (Luz vd., 2016) ve Duygusal İşlevselliğin Değerlendirilmesi Protokolü'nün Portekiz versiyonu gibi standartlaştırılmış değerlendirme bataryaları aracılığıyla değerlendirilecektir (Veiga vd., 2016). Çocukların sosyal yeterliliği, Güçlü Yönler ve Zorluklar Anketinin (SDQ) (Goodman, 1997) ebeveynler tarafından derecelendirilen Portekizce versiyonu kullanılarak değerlendirilmiştir. Çocukların oyun davranışları OBSERVIDEO yazılımı kullanılarak sistematik bir oyun gözlemiyle kodlanacaktır. Görüşmelerin, çizimlerin, saha notlarının ve katılımcı gözlemlerinin kategorik / tematik analizi MAXQDA yazılımı kullanılarak yapılmıştır. Anaokulları arasındaki verileri SPSS24 aracılığıyla karşılaştırmak için ANOVA veya Kruskal-Wallis testleri kullanılmıştır. Bu yöntem kullanılarak eğitim personeline ve siyasi temsilcilere "çocuk dostu" alanları planlamak ve organize etmek için en iyi seçenekleri belirlemelerine yardımcı olmak- hedeflenmiştir. Bu durum her zaman endişe verici olmuştur ancak aktif oyun dış mekân davranışlarının daha kısıtlı olduğu COVID-19 salgınının neden olduğu uzun bir kapanma döneminden sonra (Graber vd., 2020; SA Moore vd., 2020; Pombo vd., 2020), dış mekânları ve kullanımlarını etkileyen pedagojik uygulamaları yeniden tanımlamak daha da önemlidir.