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Abstract

Learning new skills for child development and the play areas where this can happen is a big part of the educational process for early childhood. During the COVID-19 pandemic, children and babies faced challenging times, sometimes even what we would describe as trauma, related to the environment to which they were exposed. Children and babies, like their families, were locked in houses without access to educational buildings like schools, museums or other kinds of children's activities. The only place where children could channel their energies, where they could be physically active, relax or learn something, was at a children's playground because this was the only place where they spent time apart from at home. As a result, children's playgrounds became more important than usual. This study aims to provide a design analysis in an interdisciplinary way, combining architecture, landscape architecture and psychology. The study uses a combination of qualitative and quantitative methodologies through surveys and a discussion of survey results in light of knowledge from previous studies. Data for the study was sourced through two online surveys with parents, which were implemented at different times during the pandemic. All children, regardless of age, gender, language, religion, and race, need environments where they can develop, thrive, and learn, and this is equally true in challenging situations like a pandemic. Since design is an integral part of this process, we wanted to raise awareness of this critical issue.

Keywords: children, play areas, design, Covid-19, Istanbul

1. Introduction

Those living in Istanbul during COVID-19 faced many difficult issues, as did communities worldwide. For the children of Istanbul, the pandemic brought severe impacts: they were required to stay indoors for long periods, had limited access to education, and their opportunities for play were restricted to very limited areas. The only places where children were able to go outside the house during this period were outdoor children's playgrounds. Thus, children's playgrounds became more important than usual.

To understand more, an initial online questionnaire covering the districts of Istanbul, in general, was conducted as a participatory method and answered by 315 people. This survey coincided with

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the beginning of the pandemic, which is still ongoing. The questionnaire explored the relations of parents with the children's playgrounds and gathered their suggestions, if any. Another survey was conducted during the COVID-19 pandemic period, and this time, the online questionnaire was answered by 40 people who were among the users of two playgrounds in the Kozyatagi district of Kadikoy, which had been selected as the pilot region. This region was chosen because it contains two parks with vastly different designs; the users offered thoughts and suggestions about parks that were of opposite characters in terms of design. For this reason, only the users of these two parks were interviewed in the second survey.

As can be understood from the survey results, no design development was undertaken in the children's playgrounds during the COVID-19 pandemic period that would have enabled children to improve themselves, especially in an educational sense. The images in the collage demonstrate this; the children's playgrounds in all districts are largely the same, consisting of a plastic tower slide and swing system, and all have emerged without any changes according to location or user demands. This article will investigate how designs that contribute to the education of children in difficult periods, such as a pandemic, could be implemented at such times and how to create alternatives. In addition, for healthy development, a child requires constant change. If a child resides in the same place and goes to the same park every day, there will be a slight improvement in the child's educational level, which is typically enhanced through play as cognitive behaviour. As a society, we can do better. What can be done is the subject of this article.

The main goal here is not to continue to copy the same design for a children's playground, regardless of where that playground is located or when it is built. Design for children can be created in cooperation with architects and landscape architects, as well as with support from different disciplines such as psychology and sociology. We should be able to design equal spaces for everyone. As the neuroscientist Professor Fred Gage of the Salk Institute for Biological Studies states, "Change the environment, change the brain, change the behaviour" (Techau et al., 2016). So, if changing the environment can have an effect on the human brain and thus on human behaviour, it is worth researching children's play areas as early developmental education places and focusing on their role, in terms of design, during the tough days of a pandemic with the goal of offering our children places to recuperate and lift moods. Interdisciplinary studies are essential in these kinds of studies. The relationship between architecture and sociology is also important for sustainable architecture in terms of safety and prosperity, as well as human perception and human aesthetics (Šafránková, 2006). In addition, architecture can be supported by landscape architecture and other design disciplines in this area of research. Psychology also offers important insights into this topic.

2. A Review of the Impacts of the COVID-19 Pandemic on Children¹

Today, the world is focusing on preventing the spread of COVID-19 and mitigating the economic effects of the pandemic. While this is happening, the media is being dominated by news about the pandemic. A large amount of information on this topic inadvertently flows through to children and thus causes high levels of stress and anxiety. At the same time, the fact that children face severe changes in their daily routines and social activities creates mental challenges for them (Dalton et al., 2020). It is undeniable that the period of the COVID-19 pandemic has affected children as much as it has affected all of us.

The anxiety caused by a pandemic develops differently from other forms of anxiety. With COVID-19, people are disturbed by the feeling of being threatened by a virus. People feel anxious when faced with the unknown, and this pandemic contains many unknowns (Wehrenberg, 2020). According to child development experts, early childhood is an especially important period for adulthood in terms of mental, psychological and emotional development. For this reason, the effects of COVID-19 on children are also significant. Children are being forced out of their everyday routines and exposed to more media due to issues such as the closure of schools, entertainment centres and kindergartens, which causes negative emotions such as boredom, anxiety and fear of becoming sick. For these reasons, families need to behave differently and more carefully. It is important for them to participate in online educational activities, attempt to keep to a normal sleep cycle, undertake regular physical exercise and educate children on hygiene (Singh, Shivam;

Dubey, Saket; Kumar, Nikhil; Goyal, Manish Kumar; Pal, 2020)

In this study, it was investigated how the COVID-19 pandemic has had an impact on children spatially. For this purpose, various surveys and case studies were carried out using quantitative methods and the connection of effects within the context of spatial design was investigated. In order to understand the spatial impact of this process on children, two surveys were conducted on different dates during the pandemic period. The first was held with 315 people across Istanbul between 25 May 2020 and 13 June 2020.

The purpose of this survey was to understand how spatial design could impact children in a challenging period such as a pandemic. The people surveyed were asked about their children at this time and whether they had found any differences in them throughout COVID-19, such as insomnia, apathy or frequent crying. The frequency with which the participants exited their homes during the pandemic was investigated as part of the questions examining this topic. It was determined that the negative differences observed in their children's mental state by participants who never went out during the pandemic were higher than those observed by participants who went out. While investigating how playgrounds had affected children in this process in a design sense, the first understanding the study came to was that the children who could be taken to outdoor children's playgrounds, namely the children's parks, were more protected against the negative effects of the pandemic. In light of this information, outdoor children's playgrounds were further examined in detail, which will be discussed in the next section.

In addition to this, it was revealed by the survey that housing types architecturally were related to the effects of the pandemic period on children. It was determined that children living in detached houses and apartments were less negatively affected by this process than those living in environments such as public housing. Settlements with balconies were also included in the advantageous section. It was also determined that the negative differences observed in the mental state of the children of participants who had a separate room were less than those of the participants who did not have a separate room. Another important finding revealed by the data collected by the survey was that children were happier if they lived in houses where activities with educational impact for children, such as play, were separated by design. In other words, children whose parents had created areas in the home where creative formations using toys, soil or kitchen equipment could occur overcame difficult periods more easily. Based on these findings demonstrating that design affects the mood of children during a pandemic period, we then investigated how to create more preferred spaces with higher quality educational elements such as play and concentrated on the outdoor version of children's playgrounds.

3. Analysing Spatial Changes in Children's Play Areas During the COVID-19 Pandemic in Istanbul

Play is children's natural way of learning (Grieshaber & McArdle, 2010). It is important to see play areas for children as places of education. From this point of view, Istanbul was examined as having spatial changes in the 'past', 'through' and 'anticipations about the future'. Firstly, this paper will examine ongoing general spatial changes, and secondly, it will analyse children's play areas from this perspective.

COVID-19 had many effects on children in Istanbul, but spatially, there was no adaptation or fine-tuning of designs for children, as this paper will demonstrate. The Covid-19 pandemic has been difficult for children. Although not everyone has caught this disease, children have had to miss the time spent in their schools or with friends and loved ones during a transition period that is important for them. On the other hand, play is one of the few things that helps improve children's overall mood. The game is also a period in which children can confront their fears about what is happening and what might happen in the future. Play also has the power to help a child regain a sense of control (Johal, 2021).

The link between childhood and education is something that deserves critical attention. For this, it is necessary to consider what education is, which are the basic questions, and what are the features that should be accommodated in terms of the external environment as a powerful place of education. Therefore, it is necessary to be able to articulate what external messages

give to children. Its elements are data such as space, material, order, organisation, daily routines and interaction (Maynard & Waters, 2014). When it comes to creating a great outdoor space for children, there is a fine line between leaving the environment completely natural and designing in different ways. In order to achieve this balance, it is preferable to know the types of play children engage in and develop a natural design that approaches all of them at an equal distance. These game types and the spaces that support them are various: social play (large spaces just to run, circulate and connect), creative play (mini-stage areas where scenarios can be created), constructive play (areas consisting of sand, grit or soil), experimental play (areas where water games and sand sculptures may be available), exploration (hidden places, paths and bridges), sensory experience (for example, points that activate wind gusts), challenging play (hills, tunnels or routes that include challenging climbs), learning skills (areas with animals or where vegetable and flower beds can be planned and planted) and more. Nature already presents these spaces to us in its own way. The desired final design can be obtained using small touches and arrangements (Scott, 2010).

The contribution of play to a child's education is undeniable. Basically, the benefits of the game can be listed as follows: improving motor skills, sharpening the senses, facilitating the expression of the senses by increasing the ability for empathy, developing the concept of sharing and sequence, learning to delay satisfaction, improving vocabulary, increasing concentration, learning to be flexible and, of course, role-mastering and the development of power (Goldstein, 1994).

3.1 A Critical Review of Children's Play Areas in Istanbul

One of the first results revealed by the survey was that design affected children's mood during the Covid-19 pandemic. As less negative feedback was received from the parents whose children left the home more, the study examined children's playgrounds in Istanbul generally by concentrating on outdoor children's playgrounds during these periods.

In order to have a scaled example pool, different districts from different provinces of Istanbul were chosen. Many different districts were photographed, and playgrounds were selected depending on the level of education they were designed for. The photographs show that children's playgrounds are not a work of place but are repeated in the same pattern. It would be expected that children's playgrounds, the only places that can be visited when access to educational opportunities is limited during times such as a pandemic, would be designed differently in terms of the educational role of the game and hygiene requirements. However, as can be seen, they are copies of each other that have not changed for years before or during the pandemic.

When we look at the photographs taken during the pandemic in the districts of Istanbul, which are very different from each other in terms of demographic structure, we see that playgrounds consist of one plastic material weighted play tower, two swings and one rotating slide, the same design repeated in all parks. In other words, there are duplicate plastic playgrounds all over Istanbul. Neither a difference in neighbourhoods nor a difference in the needs of users has been considered, nor has there been any innovation or optimisation that could contribute to the education of children in open areas during the pandemic. When we examine the opinions of the users on this subject using a participatory method, it can be observed that parents are often uncomfortable with the same issues, as will be seen in the next section.

3.2 Photographs of Children's Play Areas During the COVID-19 Pandemic In Istanbul²

When conducting the study, choosing places in Istanbul with very different demographic and socio-economic characteristics was important. The aim was to obtain homogeneous information and to ensure that it was consistent. For this reason, different districts were selected according to their educational level taken from survey maps (Istanbul Fragility Map – İstanbul Kırılganlık Haritası, 2021). Thus, ten districts that differed from each other in location and socio-economic level were determined, and children's play areas were photographed. The fact that the photographs shown on the next page are completely without children and people was not related to the pandemic. However, it was a measure to protect personal rights by not showing individuals in images. All the play areas were photographed between February and March 2021, a period covered by the

pandemic.

When examining the images critically, the most important observation is that the play areas are wholly duplicated – it sometimes looks as if the photographs were taken in the same place despite being taken in such different locations. In other words, it appears that the spirit of the place has been given no importance, and the opinions of any users of the play areas living in the area have not been sought or considered. The same plastic element has been put into serial production at each point. During the pandemic, the needs of the children have not been taken seriously, and it can be seen that no optimisation was made in these children's play areas to meet their needs at that time. One of the aims of this paper is to draw attention to this failure and to remind us all that the well-being of children should be given more importance in such difficult times

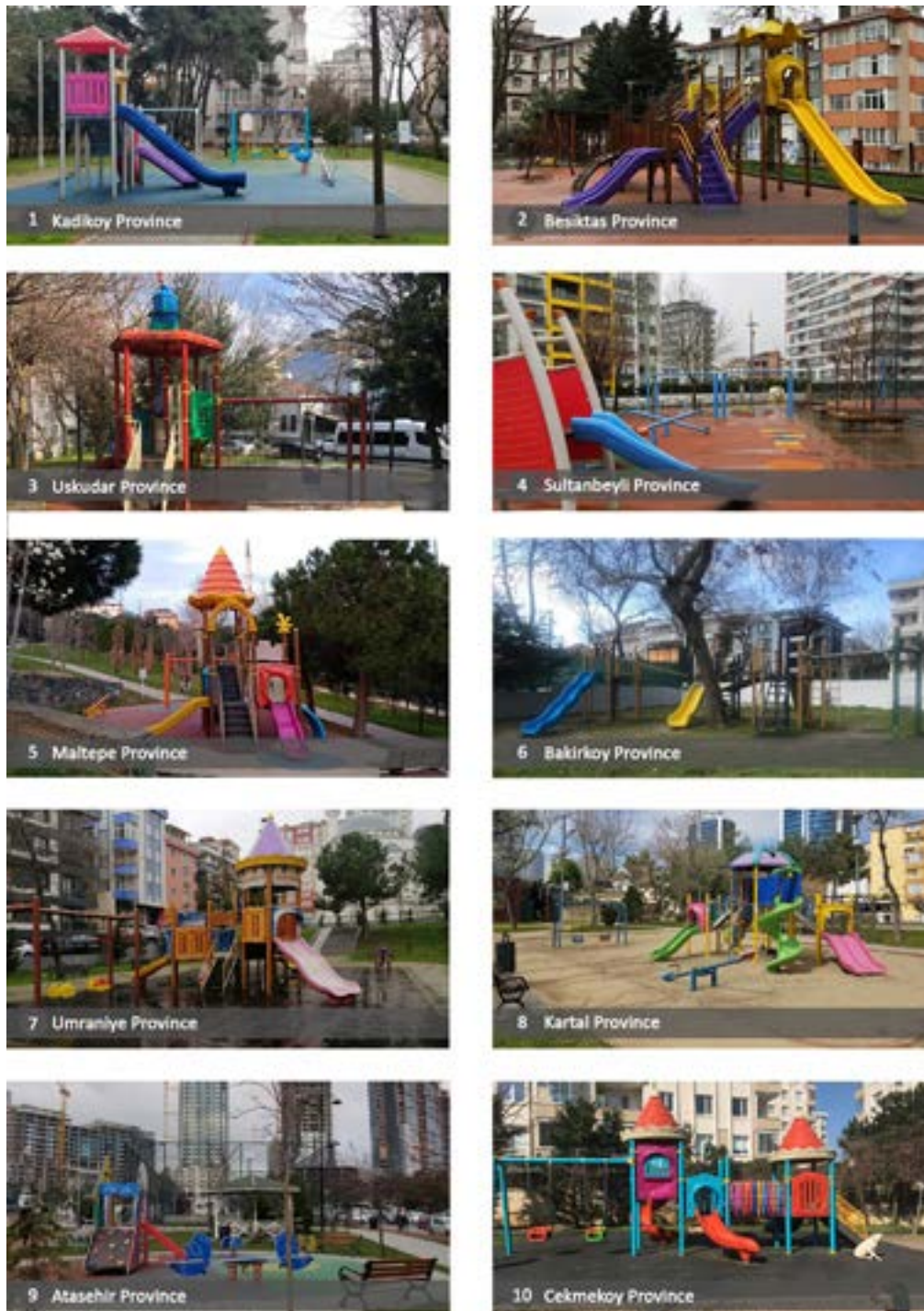


Figure 1. Children's Play Areas in ten different location in Istanbul

3.3 Focusing on Kadikoy Province: 19 Mayıs District Children's Play Areas³



Figure 2. Hurriyet Park and Kuriton Curi Park in Kadikoy Province

Hurriyet Park and Kuriton Curi Park have been selected because they are two playgrounds with entirely different and contrasting features, which will provide more accurate results for comparison in the questionnaire. Hurriyet Park is an example of a children's play area in Istanbul where typical plastic ready-made elements have been used. At the same time, Kuriton Curi Park houses a natural children's play area using greenery.

3.4 Case study: Kadikoy / Kozyatagi District

In order to provide more in-depth information on this topic, two regions were determined rather than all of Istanbul and this time; the survey focused on a more limited number of 40 people and only those who had used the parks between the dates of 12 February 2021 and 6 March

2021 during the pandemic period. While the purpose of the first survey was to investigate the link between psychology and the built environment, the second survey explored the problems of parents related to children's play areas during the days of the pandemic. It was answered by Kozyatagi citizens. The names of the parks are Kuriton Curi and Hurriyet parks.

The results of these two surveys, which were conducted during different periods of the pandemic, support each other. The results of the first questionnaire were echoed in those of the second questionnaire, as following an understanding of the effects on child psychology of the design of the space, it was seen that the positive effects of going out and of the spatial design were manifested in the psychology of the child. The second survey examined the parks in a region in detail and included inviting user suggestions, which was important for a participatory design. The significant difference in the design of the two parks selected is that the park named Kuriton Curi is situated entirely within a large green forest, while Hurriyet Park is designed like the ordinary, typical Istanbul children's park. From the results, the suggestions given by the participants of the survey have been grouped in terms of design conditions, hygienic conditions and administrative conditions. These suggestions were general ideas for both of the two parks.

Design conditions:

-The pandemic and the restrictions that came with it limited children very much. Areas where they can use their imagination and go out in the rain and snow should be created to deal with soil, plants, and playground options under tented areas.

-I think it would be more appropriate for the materials to move away from plastic and turn to steel and wooden products. In addition, there may be a few options designed to be all sand on the park floors. Also, places with tables and benches can be made where children can sit / eat.

-Playgrounds could be arranged according to age groups.

-Pool, splash pad, ball, and bicycle areas protected from traffic could be designed.

-Adults could organise play in the open in the park, there could be shows like theatre.

Hygienic conditions:

-I think that having fountains where hands can be washed for our children's hand hygiene would provide a safer environment.

-I have no idea how often parks are disinfected. A written information board could be created in the park on this subject.

-I think it will be healthier for children if disinfectant points were placed.

Administrative conditions:

-There could be security, thus preventing smokers / smoking parents. They should not take down the mask and should not bother the children.

-Prevent smoking, especially in parks and adults without masks, by providing more control.

The arrival times of the children to the children's park are especially between 15.00 and 18.00. When designing, it is essential to refer to this information for shade–sun needs. The three most engaging play elements in the two parks are swings, slides and climbing towers. Most of the participants were of the opinion that furniture designed for children is lacking. In addition, they agreed that there is no design separation in both parks according to age groups. They believe there is a lack of places where children can plant growing things and develop themselves in areas of clean soil combined with nature. In order to be educative, information about the flora in the area, signs with the names of trees and instructive descriptions about nature should be included but are generally absent. While it was thought that there is enough shade in Kuriton Curi Park, participants pointed to a deficiency in shady areas in Hurriyet Park, as in most traditional children's playgrounds. The use of the parks during rain and snow is minimised since no awnings are provided in sheltered areas. While there are generally no water resources in parks where children can wash their hands or drink clean water, no extra precautions regarding hygiene were taken during the pandemic. In addition, it was revealed that none of the needs in the form of a security officer, camera or first aid club were provided.

While there is a need for designs that reveal the educational side of the play, which is the most critical issue to consider, especially in such open areas during a pandemic period, it emerged that there had been no innovation or differences made to the parks in any way. Rotating exhibitions such as a travelling museum were not considered for any park, which would have been one good solution for this challenging period. To sum up, the research found that during the COVID-19 pandemic, children's parks – which are the only escape point for children when restricted from any closed areas apart from their homes – did not undergo any specialisation or improvement. Children's parks remained the same throughout the pandemic.

4 Conclusion

We are in favour of giving more importance to children and not neglecting them during periods of pandemic and isolation. It is an undeniable fact that 'play' has an important place in the educational life of children. At the same time, children perform a large part of their learning by seeing and imitating each other. During the COVID-19 pandemic, since places such as schools, entertainment centres, kindergartens, and museums have been closed, and many institutions have switched to online education, children's play areas have remained the only places where children can go and play in the open air, without approaching each other but able to watch each other.

First, this study tried to understand whether taking children outside their homes or the spatial design within their homes affected their mood during challenging periods such as a pandemic. Using various quantitative methods, it was revealed that place affected children's mood at such times and that children brought to children's playgrounds experienced more positive moods. Therefore, the design of children's playgrounds was approached with a critical perspective.

The main critical point when dealing with children's playgrounds in Istanbul is that these areas are duplicates. Before the pandemic, they were designed without creating any differences between them and the spirit of the place was not considered in the design. During the pandemic period, the lack of improvement in terms of hygiene or educational designs was the main point found to be problematic. In order to better understand this, case studies were conducted using a participatory perspective.

Based on both the surveys conducted and the opinions we put forward as authors, it is important to design play spaces with a high educational role in periods such as a pandemic. For this reason, considering that the neighbourhood residents generally go to the same children's parks daily, instructional designs that can be displayed in open areas, such as mobile education areas and museums, could be planned in rotation. To avoid restrictions due to weather conditions, the design should be planned to create an environment that children can use in four seasons. Functions utilising water for water games, hygiene and drinking purposes could be included. Since it is known that children develop with different educational game elements at different ages, educational designs should consider these. Instead of over-designing children's parks, designs that reveal what is already in nature can contribute to children's welfare during isolated periods, especially during a pandemic. It is important that designs that are close to nature and nature-friendly are designed in a way that allows children to learn by imitating, watching, exploring and wondering. It is a well-known fact that the spirit of a place is also particularly important. It is, therefore, crucial to understand the needs of the place with a participatory study and to carry out studies according to it, rather than copying completely the same designs and duplicating them in many different places.

As authors, we believe that if greater awareness is not created, the designs for children's play areas will not change, and they will have a limited educational role for children. We suggest giving particular attention to this topic and integrating into parks' open educational areas with the potential for change in response to the needs of the time. Innovation can come in the form of open museum areas, which rotate into children's parks and play areas designed sensitively to the place and the users' needs. Changes such as these will ensure that children have opportunities to leave an enclosed home environment more happily and creatively.

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Conflict of Interests

The author declares no potential conflict of interest was reported by the author.

Endnotes

1. For the first survey questions and statistical output: <https://bit.ly/3a7ioBV>
2. For more information and larger images about Istanbul parks; <https://bit.ly/3wq0Ydq>
3. For more information and larger images of Kozyatagi parks: <https://bit.ly/3rOVe9v>
4. This paper has been presented at the SPACE International Conference 2021 on Architecture and Design Education.

References

- Dalton, L., Rapa, E., & Stein, A. (2020). Protecting the psychological health of children through effective communication about COVID-19. *The Lancet Child and Adolescent Health*, 4(5), 346–347. [https://doi.org/10.1016/S2352-4642\(20\)30097-3](https://doi.org/10.1016/S2352-4642(20)30097-3)
- Goldstein, J. H. (1994). *Toys, Play and Child Development*. Cambridge University Press.
- Grieshaber, Susan; McArdle, F. (2010). *The trouble with...* Open University Press McGraw-Hill Education.
- Johal, D. S. (2021). *Steady - Keeping in a World Gone Viral -A Guide to Better Mental Health Through and Beyond the Coronavirus Pandemic*. Equanimity.
- Maynard, T., & Waters, J. (2014). Edited by Trisha Maynard & Jane Waters *Exploring Outdoor Play in the Early Years Exploring Outdoor Play*. Open University Press.
- Šafránková, J. (2006). *Sociological and Psychological Aspects of Architecture and Urban Space*. Teka Kom. Arch. Urb. Stud. Krajobr. – OL PAN, 15–22.
- Scott, S. (2010). *Architecture for Children*. ACER Press.
- Singh, Shivam; Dubey, Saket; Kumar, Nikhil; Goyal, Manish Kumar; Pal, I. (2020). *Integrated Risk of Pandemic: Covid-19 Impacts, Resilience and Recommendations* (G. A. K. Goyal; Manish Kumar (Ed.); p. 162). Springer.
- Techau, D., Owen, C., Paton, D., & Fay, R. (2016). *Buildings, brains and behaviour*. *Design & Health Scientific Review - World Health Design*, January, 24–37.
- Wehrenberg, M. (2020). *Pandemic Anxiety*. W. W. Norton & Company.

Web References

Istanbul Fragility Map - (2021). <https://kirilganlik.istanbul/analiz/> (Last Access: 04.22.2021)