

Impact of kindergartens on Early childhood in Algerian city

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Abstract

Early childhood greatly affects an individual's life in the future, whether it is in terms of the ability to succeed in life, or physical or emotional health, and it is true that genes greatly affect the way a child's brain develops, but the quality of the environment in which he lives during early childhood, this also affects this, so a supportive environment for children is one of the most contributing factors to their successful transition to school, which in turn leads to better results in and outside school. Kindergarten (accommodating children from 3 to 6 years old of age) plays an important role in building up the child's personality and in preparing him for school. But does the design of kindergarten spaces respond to the needs of early childhood in Algerian cities? Do their equipping and management respond to the requirements of the child development and ensure his safety and a good education? The research paper seeks to find out the impact of kindergarten design on children abilities and the extent of responding to their needs. Statistics analysis and Field research was adopted as the investigation method to study these spaces using the following techniques: participant observation, questionnaires addressed to educators and parents, and the sample consisted of 15 kindergartens and was selected by sample by clusters or grappes. The study concluded that the design of kindergarten spaces do not mostly respond to the needs of children and have a negative effects on them at this sensitive stage of their lives (early childhood).

Key words: Child's Needs, Early Childhood; Kindergarten; Preschool Child; Algerian city.

INTRODUCTION

The early childhood stage has a great importance in the life and development of the child. It is the first stage in which the child moves from the family environment to childcare 'kindergarten', where his personality as a child is developed. New knowledge is acquired through educational and recreational activities programmed for him, as well as through the acquisition of some behaviors by integrating with other children and caregivers. Many psychological and educational studies that track changes occurring to children at this stage, have been carried out in an attempt to meet children different needs in childcare facilities 'kindergartens' through the development of caregivers training, educational curricula, and appropriate recreational activities in childcare facilities.

As well as the absence of criteria for designing, furnishing, and setting up these places, despite their significant impact on the child physically, psychologically, socially and educationally. As a result, the following questions have been raised: In Algeria, is preschool childcare 'kindergarten' functional and fulfilling the architectural specifications to accommodate and supervise preschool children? To what extent does it meet their needs and requirements for their development at this stage of childhood (early childhood)?

RESEARCH METHODS AND TOOLS

The research paper is a concurrent architectural study that integrates with previous studies. It relies on the survey method with its various techniques and tools as Statistics analysis, by following investigation procedures applied to real kindergartens that receive preschool children from the age of 3 to 6 years. These children are sent to this type of place because during the day their parents are occupied with work or other daily issues. Children in early childhood stage or what is known to us as of preprimary 'preparatory' education were chosen as a research population, and a cluster sampling was conducted based on three characteristics: the type of the kindergarten building, its management, and its location at the city level. As a result, five clusters were formed, from each cluster three accredited representative of kindergartens were taken, so that the sample size was 15 kindergartens representing the whole research population.

Questionnaire forms were distributed to all caregivers and parents of these kindergartens children to collect the required facts and data, which then sorted out and processed. As for the research interview, it was addressed to the managers

of kindergartens to obtain information regarding their roles in managing these places. Children are the dependent variable that the study looks for the effect of form, design, and content of kindergarten spaces on them, the children. Many visits were conducted to kindergartens under study, where contacts were made with children by meeting them. Observation of kindergarten spaces at different times of the day was one of the most important research tools. The use of participatory and open observation was to elicit all information on the ground, as these spaces are a physical and tangible environment and their effects on their users, including children, caregivers, and the rest of kindergarten community are visible and certain. In addition, we analyzed some statistics about women's work in Algerian society due to its direct relationship to kindergarten.

The research paper is also based on a theoretical part related to the concept of childhood and its stages, the child and his needs, the kindergarten and his role. This theoretical part was the basis for the field study of kindergartens with their internal spaces, their characteristics and their impact on children development.

The Concept of Childhood

Childhood is defined by sociologists as the early period of human lifespan in which the individual is completely dependent on his parents in order to preserve his life. The childhood stage represents a bridge through which the child crosses towards physiological, psychological, social, cognitive, and spiritual maturity in order to establish himself as a social being. Psychologists have shortened the definition of childhood into two meanings: a general meaning and it is given to the individual from birth till sexual maturity, and a special meaning and is given to the age from newborn till adolescence. (Shafshuk, El Nashif, 2000.p.43)

The Early Childhood Stage

The early childhood stage can be defined as: the stage that extends from the end of the infancy stage until the stage of entering school, and some of them call it the pre-school stage. The early childhood stage is one of the most important educational stages that a person goes through, as the child at this stage is distinguished by his direct dependence on those around him, and at the same time tends to autonomy and independence. (Djirar, February 19 th, 2019)

The Concept of Pre-School Age Child

Preschool is a stage of development in the early childhood, it starts from the end of second year of a child's life and continuing until the beginning of the sixth year. It is one of the most important stages of child development, as his growth is rapid, especially mental growth. (Bahrou, 2012. P.3)

This stage witnesses a series of changes that occur to the child due to the surrounding environment; rapid progress in language, development in learning things from parents, formation of social notions, the emergence of the self, the distinction between right and wrong, the beginning of self-growth and increase of clarity in personality differences until it become clear at the end of the stage. (Sheridan, 2014. P.5)

Stages of childhood

The childhood period can be divided according to the most important references into several stages as follows:

a-The lactation stage (from 2 weeks to 2 years old),

b-Early childhood stage (from 2 to 6 years old),

c-Middle childhood stage (from 6 to 9 years old),

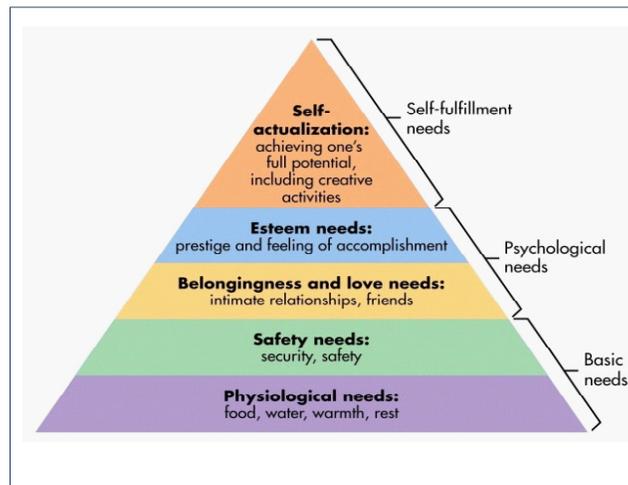
d-Late childhood stage (from 9 to 12 years old),

e-Then comes the period of adolescence with its stages. (Zahran, 1986. P.121) The current study concerns the stage (b), where each stage has her Characteristics and needs.

The Needs of the Child

A need is a state of deficiency and lack, accompanied by a kind of tension and distress that soon disappears when the need is satisfied, whether this deficiency is material or moral, internal or external. One of the most famous theories of human needs is Maslow's Hierarchy of Needs Theory, created by the American psychologist Maslow. This hierarchy of needs is often portrayed in the shape of a pyramid, with the largest, most fundamental needs at the bottom, and the need for self-actualization and perfection at the top. In other words, the idea is that individuals' most basic needs must

be met before they become motivated to achieve higher-level needs (Figure. 01). This different types of needs that a child requires in order to grow in a healthy and balanced manner and that can have positive effects on him from a psychological, physical and social means.(Kameel, Shahata, 2000. P. 135)



Source: <https://www.simplypsychology.org/maslow-pyramid.jpg>

Figure 1. Maslow's Hierarchy of Needs

The Importance of Play (Most Important Need) for the Child

Play has great importance and role in education, diagnosis and treatment, and it is one of the most important method for the child in understanding the environment around him. Play is also one of the ways by which the child expresses himself, and is what some consider the child's profession.(Sheridan, 2002. P.13)

The Kindergarten and its Design

Kindergarten is a term coined by the German scientist Friedrich Froebel to refer to educational institutions related to children before they enter schools, as a social experience for the transition of children from home to school setting; in order to take care of them. The role of Kindergarten is to introduce children to a larger society than they were accustomed to at the beginning of their lives, and to provide them with the skill of mixing with others, in addition to educating them through playing and engaging in activities. Despite the difference in the age of enrolment in kindergartens between countries, most of them depend in their enrollment system on the age between three and five years old.(Okla, November 13th, 2018)

Kindergarten building

It is the main social institution supporting the family as an educational environment consisting of children in the age group from three to six years, and female teachers with cultural and professional characteristics suitable for working with children, an administrative and supervisory body, and a building located in an environment with defined properties and qualities. This institution is subject to certain specifications corresponding to the objectives of the educational environment in kindergartens and the characteristics and needs of children growth. The building contains items and components that make it able to provide the appropriate educational environment for this category of children, including halls, activity rooms, and places for entertainment and play, both internally and externally. The building also contains various forms of furniture, educational tools, devices, and others. The components of kindergarten as an educational environment distinct from other environments in raising the child are completed with the appropriate approach in dealing with children at this stage within the suitably prepared environment. (Djad, 2014, pp. 114-115)

Characteristics of Kindergarten Curricula and its General Design

Kindergarten curricula are based on understanding early childhood development and integrating efforts between home and kindergarten to build child's personality and growth physically, socially, and psychologically; following principles and attitudes of early childhood development. Therefore, the adopted curriculum of the kindergarten should serve as a broad introduction or a presentation of continuous experience from extracts of knowledge and tangible scientific skills, in a way that benefits the mental, physical, and health development of the child, through his free activity away from any restriction of rigid educational programs.(Photo 01)



Source: https://mawdoo3.com/لافطال_ضايِر_مَوْفَم

Photo 01. An example of a good kindergarten design and activities.

The kindergarten or nursery school must be entitled to a 'play school' in which it must have the following:

- * Playing tools must be provided such as: sand basins, cubes and various toys, drawing tools, picture books, large boards, clay, suitable chairs for children, etc.
- * There must be opportunities or spaces for physical activity such as climbing, running, balance and other things that benefit the child's physical motor development and muscle skill.
- * The child must learn through direct and observational experiences, as happens in trips and exploratory visits. (Zahran, 1986. pp. 203)

RESULTS AND DISCUSSION

Impact Of Woman's Work on the Child in the Algerian Society

Evolution of the Percentage of Working Women in Algeria

From (figure 02), it is noticed an increase in the percentage of women's participation in the labor force in Algeria from 5.23% in 1977 to a maximum of 19.02% in 2013, then a slightly decrease in 2016 to 17.63% and then a rise to 18.10% in 2017. This is a result of the policy adopted in Algeria to empower women in all fields and in public and private economic sectors. It seems that this percentage will continue to increase due to the same endeavor and to the changes taking place in the Algerian society with women going out to work and participate in the development of various fields. This fact will be reflected on the society's needs with regard to special spaces and facilities to receive children of early childhood period, generated by working women's preoccupation with their children. Thus, forcing these women to place their children in kindergartens, nurseries or multi-reception institutions for their care and protection during the day.

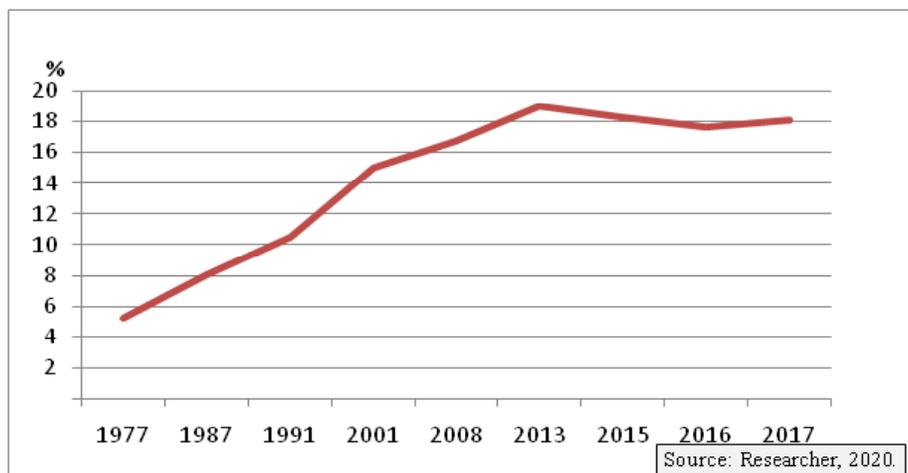


Figure 2. The evolution of the percentage of female workers in relation to the total employed in Algeria.

Evolution of the Number of Working Women in the Wilaya of Batna (Exemple)

Compared to international figures, the percent of working women in Algeria in general is far from that of working men (Figure 02). However, it is noticed from (Figure 03) that the gap between the two has decreased significantly from year to year at the national level, and the wilaya of Batna for exemple is no exception. It is expected in the future that the working percent of both genders will be equal and may of women will outweigh that of men in this wilaya. This means that the wilaya of Batna will face now and in the future societal developments that require certain preparation to respond to urgent needs in terms of childcare and education.

As a result, it is essential to provide open areas for entertainment and play of children and other spaces worthy of receiving them, embracing them, protecting and caring for them, while their parents are busy working during the day.

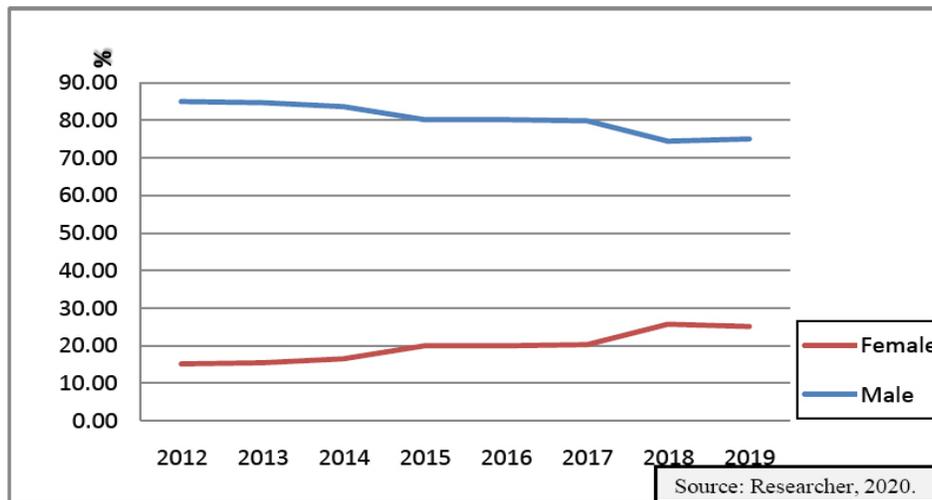


Figure 3. Evolution of the percentages of working women in relation to men working in the state of Batna (exemple).

The Reality of Kindergarten Spaces in Algerian City and its Impact on Children

Parents in Batna city place their children in childcare and preschool institutions. Each type of these institution has a propre characteristics, sothe study sample is distributed across the city as follows:**Kindergarten as a proper place;**

An apartment converted into a kindergarten;

A house converted into a Kindergarten;

Multiple garages converted into a Kindergarten;

And a family villa converted into a kindergarten.

The Functional and Technical Dimensions of Kindergarten

Surfaces of Kindergarten spaces compared to the number of children

Converting residential buildings into kindergartens without following architectural norms, which means changing the original function of the spaces to contain specific activities for the child can lead to inconvenient spaces. This can result in the non-respect of the different spaces surfaces, such as the reduction in the necessary surface for each child, which allows the child to move freely and be active. For example, in one of the case studies, more than 30 children were received in an area not exceeding 20 square meters; this does not allow children to move freely nor to perform the required activities in suitable conditions (Photo 02).

The quality and scale of the furniture of kindergartens

Some kindergartens still use old style of tables and chairs, which can cause health damage to the child because they are not suitable for his size. Others tables and chairs are unsafe as a result of the way they are made of sharp corners and iron elements prominent in them. The way of organizing tables and chairs and directing them to the walls in some spaces or aligning them and attaching them in other spaces, creates many difficulties for the child to move. Thus, forcing the child to stay in one place for long hours, which hinders his activities and limits his movement and negatively affects his health and psyche. (Photos 03)



Photo 2. The problem of surfaces of kindergarten spaces. **Photo3.** The size, quality of furnishing of of the kindergartens.

The Lack of Ventilation in Kindergartens

The lack of ventilation is well noticed in almost all kindergartens of the study, especially with the large number of children and the small area of the spaces, so the percent of air volume for each child decreases. For example, in the case study of garages converted to a kindergarten, the doors are considered the only source of ventilation, and after they are closed, ventilation decreases in great amount, so it is impossible to renew the air in these spaces.

Lack and Danger Heating

In most case studies, heaters are not regularly distributed through spaces, and with the lack of ventilation and high humidity, an unhealthy environment for the child is generated. In addition, the presence of a gas heater within the reach of a child imposes a danger in many Kindergartens cases.

Insolation and Natural and Artificial Lighting

It is noted that in the design and organization of the kindergarten spaces, climatic factors are not taken into considerations, such as natural lighting and sunshine. For example, in (Photo 04), the way of organizing the furniture and the placement of the blackboard are completely incompatible with the source of sunlight from the small window. Since the source and the direction of sunlight is of a great importance for the child's vision. In other kindergartens, natural lighting is greatly reduced due to the small size of windows compared to the surface of spaces.



Photo 4. Natural lighting and solarizationin kindergarten.

Interior Design of Spaces of the Kindergartens

Lack of Multi-Activity Space

It is noticed the absence of multiactivity room in most kindergartens despite its importance, and if it existed, the activities that are carried in it, are limited to drawing, coloring and handicrafts. Other activities such as music, theater and other weekly program are generally cancelled and replaced with songs and cartoon videos. In other cases, they are replaced with lessons especially for preparatory classes. Generally, these activities are carried out in the learning class or in the playing room.

Bedrooms and the child's need to sleep

Despite that in the kindergarten, all children need to sleep and rest, yet some of them can be deprived of both, as the existing bedrooms are allocated for infants and toddlers only or for children of 3 to 4 years old also. Thus, children of preparatory education at the age of 5 years old are forced to sit in their section on chairs for more than 4 hours without a period of sleep, rest or play. Generally, children of 4 to 5 years old have only one hour for their midday break before continuing the afternoon period with classes and activities. Therefore, some parents have to take their children home and suffice with one period a day, the morning period.

Poor Design and Equipment of the Play Space

In most kindergartens, there is no well-equipped playing space, although it is the most important space in this stage of childhood, and if it exists, the priority in using it, is for children of 3 to 4 years old. As for children of preparatory education, they are only given half an hour a day to play, although play is the best and the most effective way to educate and entertain them. Despite the need for play for this group of children for long hours and their strong desire to do so, the play is only limited in the classroom because there is no alternative space. This is carried out by regrouping tables and chairs on one side and playing on the other side of the class or by keeping the furniture in its place and using it for play. As for the toys and playing tools, they are sometimes not available or their use is limited to infants, and other times they are not suitable for the age of the child in form and content. The child at this stage needs fewer complex toys and games, and as for the floor, most of them are of ordinary tiles. If the playing space existed in a kindergarten, it is generally with small surface that limits playing requirements of all attended children. Despite the importance of this space in a kindergarten, it was not given sufficient care in terms of presence, space, equipment and its educational role.

Meals and Dining Room

In some kindergartens the dining room is assigned for children aged more than 3 to 5 years old and even for primary school children who are received in the kindergarten during their midday break from school. This contact among different groups of children is difficult to control. In other kindergartens the classroom is used as an eating place and same tables are used for writing and for eating. While in other kindergartens, the dining room does not exist and the feeding service for a child is limited to allowing the child to bring his lunch with him. Some of the children do not need such a space because the child attended the kindergarten only in the morning period from 8.00am to midday. Children of primary school who come to kindergarten during their midday break from school to have lunch and to rest are generally children who cannot go home because of some reasons such as that their homes are far away from school or their parents are not at home during that time of the day.

Toilets and Washbasins Scales

It is noticed in most kindergartens that toilets and washbasins are available, but they are not appropriate standards for the age, size and number of children. As an independent part, this space is generally faraway from sunlight and ventilation, and sometimes occupy a small area in the feeding room or in the classroom of children at the preparatory level. In the latter case, each time a child uses the toilet, the whole class is disturbed.

Lack or Non-Existent of Outdoor Playground

Through field observations, it is found that the outdoor playground is almost non-existent in all kindergartens, there are no outside play areas such as nature themed playgrounds, freestanding playgrounds, or fitness playgrounds. The exception is found in one kindergarten, as it is shown in (Photo 05), its playground is neglected and its equipment is not safe. According to the questionnaire directed to the educators, the outside activities mainly sport is practiced in the playroom or in the multiactivity room, and there are those who use the rooftop of the house for such activity with some arrangements. The sport activity, if it existed, is practiced for only one hour each week. Few kindergartens contain a courtyard space; yet, this space generally is of small surface, narrow and is inappropriate and unsafe for children to play in. Few kindergartens contain a courtyard space; yet, this space generally is of small surface, narrow and is inappropriate and unsafe for children to play in. Despite that outdoor play environment offers children much needed exercise, sunshine and the opportunity to practice motor skills in a different setting, it is totally absent in this type of preschool buildings.



Photo 5. Situation of the outdoor spaces of a public kindergarten.

The Architectural Aesthetics of Kindergarten Studied

All case studies of kindergarten show a lack of aesthetic qualities in their architectural design, unsuitability of their interior decoration, and colors incoherence of their spaces. The drawings on walls are not useful, and they are limited to some cartoon characters, ceilings and floors are totally excluded from the decoration, and the furniture is not in harmony with this type of spaces. As for the external facades of the kindergartens and their entrances, it does not suggest that they are intended to welcome children. It can be noted that the decoration of these spaces was not based on specific knowledge of interior design that aims at creating a positive learning environment for children. The interior design of all kindergartens does not meet the physical and mental requirements of children in order to create a good learning and living environment. The artistic atmosphere of these interior environments is almost absent. (All photos)

Child's Health and Safety in Kindergarten

The health, safety, and wellbeing of the child is one of his most important needs and one of the main tasks of childcare providers. However, it is found that kindergartens of the study sample do not take health, safety and wellbeing measures seriously; for example, often infectious diseases are transmitted among children, especially the common cold, since there is no space for isolating the infected child. In addition, the layout of the buildings often does not even allow children evacuation in the case of major hazards such as fire, since they do not include evacuation routes and safe assembly places. In most kindergartens studied for example, it can be noticed that the cleaning products are in reach of children, since they are not stored in a safe place, but put in a corner that is open to other spaces.

Child's Scale and Kindergarten Furnishing

Equipping and furnishing early childhood facilities depend on careful selection of child's scale furniture, which is based on scale standards related to the child age and his physical growth in terms of height and weight. Child sized furniture allows children to be independent to engage in their environment by using materials without the assistance of an adult, and since it is smaller, it provides more space in this type of institutions. The furniture should be safe, comfortable, movable and consistent with space design. However, what is noticed through the study is that despite some attempts to implement these furniture standards to equip childcare facilities, the results were feeble (**Photo 03**). The types of furniture were not fully convenient and satisfying to children's comfort and wellbeing, and did not help in avoiding accidents and injuries that have actually occurred to some children in these facilities.

Effects of Qualifications of Kindergarten Educators on Children

From (Fig 04), it can be noticed that the qualifications of kindergarten educators in the study sample with regard to their formation as educators do not exceed 43.24%, while 56.76% are practicing this profession without possessing this qualification, and that 81.08% did not receive even a training course in childcare, as well as 59.46% do not know how to provide even first aid for children in an emergency situation. Also 81.92% of these childhood educators do not have any other qualification related to childcare, while 18.92% of those who said they have another qualification; it ranged between specializations related to psychology and sociology, and the one that have no relation at all to this profession such as having a university degree in mechanical engineering, aviation science, and others.

The reality of the kindergarten educators as qualified persons who deal with children does not match the Algerian laws (Decree No.08-287) related to the management of kindergartens and does not correspond with the needs of children. Even the choice of these educators and childcare workers for this job was motivated by the lack or the absence of work

in their specialties or the related ones. This means that the kindergarten is a place for those who do not have a job. As a result, these childcare workers are dealing with children incompetently, through experimentation that can result in a number of errors. These errors caused negative psychological effects that some children still suffer from till today, according to some interviewed parents.

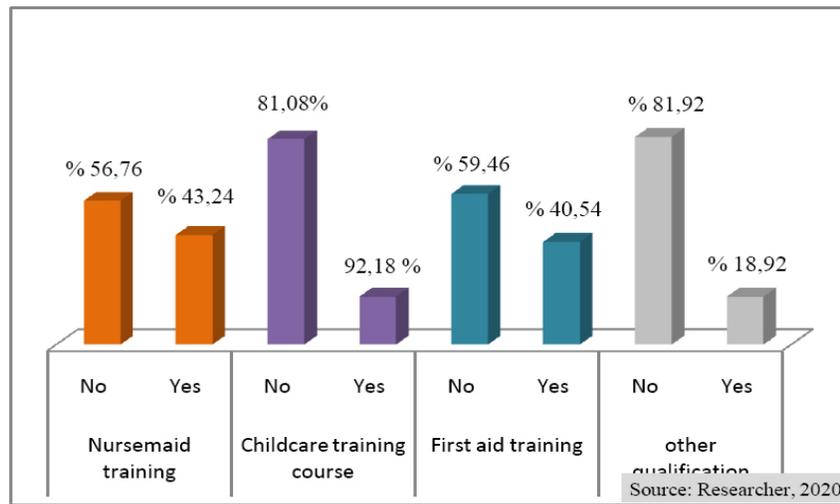


Figure 04. Kindergarten nursemaid qualifications (the sample)

CONCLUSION

Despite the attempts of kindergartens owners at the city level to cover the deficit in this sector, whose needs are increasing with the development and change of Algerian society; in terms of quality these childcare facilities do not meet the architectural, functional, aesthetic and environmental conditions appropriate to the needs of the child and the requirements for his growth in its various dimensions: physical, mental, educational, and emotional. In contrast, these kindergartens can contribute negatively to the growth, development, and educational aptitudes of the child. Among the findings of the study are the following:

- The locations of kindergartens in the city are not well considered and are not convenient, either because they are situated in isolated places or they are proximate to heavily traveled roadways.
- Most childcare facilities were not designed as kindergartens in the first place, but are residential buildings converted into kindergartens. Thus, lacking most architectural design criteria of a childcare facility.
- Failure to respect the surface area required per child; in the internal spaces there must be at least from 1.5 to 2 square meters of unobstructed floor space for each child. Failure to respect occupant capacity of a space.
- The absence of some important internal spaces in most kindergartens such as spaces for playing, drawing, theater and the outdoor playground.
- Spatial organization of internal spaces of these buildings does not respond to the multiple functional needs of children, and the pattern of arrangement of various spaces does not support safety and necessities of children.
- Importance is not given to the design of flooring of kindergarten spaces in terms of the quality of the covering material which, in most cases is unhealthy, uncomfortable, and unsafe, or in term of its educational role, and as an attractive element of a living space.
- Neglecting the design of the ceiling in kindergarten spaces, in terms of its high, and its decorative elements of colors and lighting fixture.
- Inadequate of ventilation, solarization, natural lighting, and heating in most case studies, they don't meet the minimum standards required to ensure the wellbeing of children at this stage.
- Furniture and equipment of all kindergartens at the city level are not compatible with standards of quality, safety, comfort, and age of the child.
- Most spaces lack the aesthetic qualities in their architectural design, unsuitability of their decoration, and incoherence

of their colors. The external aspects of these kindergartens do not hint at welcoming children.

- Employing non-specialized and unqualified educational staff to deal with the kindergarten child, to develop his various abilities and to build his social and academic skills.
- The absence of health services including child psychologist, as a result the absence of preventive, curative, advisory, and counselling services for children and for kindergarten community, as well as for parents. Health services are in the form of medical visits only in some cases.
- The absence or lack of outdoor playground in most kindergartens, this means that the child is not provided with spaces and outdoor equipment to explore, experiment, and discover. Thus, he could not be active and healthy nor be able to develop his cognitive and physical potentials.

In general, it can be stated that in the Algerian city, the childcare facility for early childhood (3 -6 years) does not correspond nor respond to the needs and requirements of a child at this stage; whether this facility is architecturally designed and designated as a kindergarten, and there are very few, or it is a residential or other type of a building that has been converted into a kindergarten to meet the urgent need of society for this type of facility. Early childhood is considered the sensitive stage in child lifespan, and a kindergarten that does not respond to the architectural and aesthetic specifications of the internal design, and to the availability and the appropriate organization of its spaces can have harmful effects on the child, which cannot be treated or controlled in his future. Despite the presence of some positive educational effects that cannot be denied.

BIBLIOGRAPHY

1. Bahrou Somaya (2012). *Early Childhood: Child Psychology*. Cairo, Egypt: House of the Arab British Academy for Higher Education.
2. Djad Mona (2014). *Environmental education in early childhood and its applications* (6th ed.). Amman, Jordan: Dar Al Masirah.
3. El-Sherbiny Zakaria, Sadek Yousria (2000). *The development of children's scientific concepts: a suggested program and experiments for a preschool child*. Cairo, Egypt: Arab Thought House.
4. Harding, J. & Smith, L. M. (1996). *How to Make Observations and Assessments*. London, UK: Hodder Education.
5. Kameel Suhair, Shehata Suleiman (2000). *Child upbringing and needs between theory and practice*. Alexandria, Egypt, Alexandria Book Center.
6. Sheridan M. D. (2002). *Play in early childhood: from birth to six years*. Al Ain, UAE: University Book House.
7. Sheridan M. D. (2014). *From Birth to Five Years: Children's Developmental Progress* (4th ed.). New York, USA : Routledge.
8. Shufshuk Mahmoud, Al-Nushef Hoda (2000). *Classroom management*. Cairo, Egypt: Arab Thought House.
9. Zahran Hamed Abdel Salam (1986). *Developmental Psychology (Childhood and Adolescence)*, 4th Edition. Cairo, Egypt: House of Knowledge.
10. Djirar Alaa (February 2019). Early childhood stages. detailed website: [https://mawdoo3.com/لحرم_لفوفطال_لفوفطال_لفوفطال](https://mawdoo3.com/لحرم_لفطال_لفوفطال_لفوفطال). Visit in 25-03-2020 at 11:30GMT
11. EL OKLA Ihcene (November, 2018). Kindergarten creation. detailed website: https://mawdoo3.com/لفوفطال_لفوفطال_لفوفطال. Visit in 26-03-2020 at 10:25 GMT

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