The Effect of Semi-floor Houses on Educational Growth of Children

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ABSTRACT

The aim of the present article is to study the relationship between the semi-floor houses and children’s educational growth. In order to inform about the relation, five families have been selected. The families included in the study lived at least for 25 years in semi-floor houses and at least one of their children has lived in this type of houses from the elementary since high school education. Research instrument included the questionnaire and analysis of the house spaces and their environmental effect on children at the growth period. The results of the study showed that (with studying these five cases, one cannot claim the relation and it is needed to study more cases) the children who had rooms up stairs and were out of sight and had less emotional relationship with parents, have less educational satisfaction at the older age.

INTRODUCTION

In recent years, the scientists of social science had increasing sensitivity about the environmental condition which affects the human behavior or is due to the human behavior. So, the psychology and its branches such as social psychology had been developed with pre-planned programs.

Definition of environmental psychology is the psychological study in the heart of the daily life [2,14].

According to the mentioned definition, it can be concluded that the educational behavior of the children which forms at school and home, can be affected by these two environments. Different psychological books and different psychologists such as Bine, Veksler, Gardner have studied the effect of school and educational environment on learning and growth of the children and also the heredity nature of the intellects. In this term, quadratic taxonomy of Piaget has been used in teaching methods:

1. Presentation methods
2. Intuitional methods
3. Active methods
4. Planning methods [6].

However, the present study focuses on biological determinants along with the environmental ones and tries to deal with the home as one of the environmental factors.

The present study aims at investigating the relationship between the behavioral places in a semi-floor house and children education.

The theoretical bases of the present study have been divided into four parts using the taxonomy of Piaget about the effective factors in cognitive development of children.

“According to Piaget, four important factors are involved in cognitive development of children including: 1) maturation, 2) environmental experience, 3) social interaction, 4) seeking balance” (Ginsburg and Oppen, 1969).

Piaget points to the biological maturation of an individual during the time and heritage in cognitive development. Although he considered the biological maturation as an important issue, but states that cognitive abilities of a child is the result of his interaction with the environment. Piaget is interested in understanding the mental activities and wants to know that how a person react to the world around him. The cognitive stages according to Piaget include:

1. Sensorimotor- birth to 18 month
2. Pre-operating – 3-7 years old
3. Mental operation- 7 to 11 years old
4. Abstract operation- 11 years old and higher [4].
Considering the taxonomy of Piaget, the focus of the study is more on the second factor that is the environmental experiences and the third and fourth periods of the cognitive development.

The research hypotheses include:
- The children who lose parental control due to the internal condition of the house, are in the educational condition with lower desirability
- Parental control and the internal environment of the house are directly related.

1. **General Points**

1.1 **Statement of the Problem:**
1. What is the effect of environmental factors including parents and home on the education of children?
2. Does the parental control have any effect on the educational efficiency of the children? And if yes, how does the design of the home affect the parental control on children?
3. Does the improper separation of the practical spaces in the houses affect the parental control on the children?
4. Does the improper separation of the practical spaces in the houses affect the educational efficiency of the children?

Since the educational system is so that the children have to do some homework at home and present it at school, these homework take a part of their free time in the house and doing homework has direct effect on the advancement of the students. The space which is devoted for doing homework is their room. This room can be the living room along with the common activities of the house.

Closeness of the rooms to the common activities of the house causes better control of the parents on children and monitoring their performance (which in theoretical base and 2-6 and 2-7 we deal with the effect of parents on children from the view of the theorists such as Piage, Ericsson and Freud in different ages). On the other hand, children need to be attracted and being with their parents to feel security and safety for better activities.

In the houses which do not have the special separation based on the culture and common systems, some problems are found inside the families. In the semi-floor houses due to separation of the practical spaces, it is seen that the children and parents rooms are upstairs and far from the daily chores spaces such as kitchen (according to our culture mothers activities are more inside the kitchen).

Now, separating the children form the activity environment and away from the parents through architectural designs will be studied.

1.2 **Research title:**
The effect of semi-floor homes on the educational growth of the children

1.3 **Research Hypothesis:**
1. The environmental factors including the house and parents affect the educational efficiency of Children.
2. Children being with parents not only is effective in physical terms but also through the visual and emotional relationship through correct designs of a house can affect the educational efficiency of children.
3. Semi-floor houses cannot meet the educational needs of children through separating the performances.

4.1 **Research Background:**
Research method in the theoretical base, was in bibliography and logical reasoning and analysis of the related texts but it is phenomenological and the research method is in form of studying the hypothesis. The information is gathered through the questionnaire and completing it by the participants. A list of the activities and adjectives are organized in the questionnaire and testees are asked to select the adjectives and items [8].

Studying the plans of the homes related to the questionnaire is done in field form.

Questionnaire includes the families which lived for at least 25 years in these houses so that the effect of this type of houses can be found through questionnaire and analysis of the plans.

General conclusion is done through the results of the questionnaires and considering the field understandings and finally the main conclusion which is used for approval or refusal of the hypothesis.

1.6 **Method of Analysis:**
Analysis of the children and considering the social norms and defining society is due to the educational success. Studying the point that children have income or not and in case of having income, it was through their profession or not, was important.

On the other hand, the analysis on the plans of the houses is done and the analysis show where children were studying during their education and in which room and what was the relationship between the rooms and general spaces of the house.
1.7. Case Study:
Case study is the study of the house plans and the questionnaires are filled by parents or children. However, the families have to live at least for 25 years in these houses.

2. Theoretical Bases:
In providing a simple definition of the educational psychology, one can say that: educational psychology is one of the branches of psychology which studies the characteristics of learners, learning condition and teaching methods [4].

2.2. formation of educational psychology:
Educational psychology began in Harvard university by Edward Thorndike one of the students of William James. Thorndike was interested in learning and started his studies by testing and experimenting on animals but his main focus was on how to learn by human being and at the beginning of 20th century did a lot of research about learning in human being by the help of Wordsworth the results of which was organized in a book titled as the theories of official order. At the same time, another book of Thorndike called the mental and social measuring was written to explain the way of using the statistical methods education. After that, Thorndike wrote about 500 books in the fields of learning, memory, readiness, testing and different tests. The effect of Thorndike on educational psychology was the result of 40 years of studying and education about the teaching methods and teacher in Colombia University.

In addition, the children psychological studies especially the attempts of Stanley Hall in the center of children studies in the Clark University was made the other scholars to pay attention to the scientific psychology.

Different tests of talent, educational advancement, personal traits and interests were also effective in developing the psychology for the educational studies. In the 2nd and 3rd decades of the 20th century, the educational psychology flourished and the psychological schools were developed under the effect of John Dewey in psychology and continued by the theories of Watson and acceptance of the science in psychology.

The ideas of Dewey caused the development of science and learning issues and emphasized on the active role of the learners during learning prepared the field for accepting Gestalt psychology which was formed in Germany.

The ideas of Piaget helped the educational psychologists to have a correct understanding of the mental abilities of the students and affect their learning and preparing the lesson plans and curriculum.

2.3. What is learning?
Learning is defined as the changes which are obtained due to experience. However, these changes should not be mistaken with the physical changes and temporal ones due to the use of motivations and different medicines.

Since each person is always learns, so a definition of learning should be provided but what is correct definition of learning? The expressions used by the psychologists are very precise and by studying more in this field the theories are defined. According to Travers (1972) learning happens when the environmental condition and factors such as response and motivation which another person created change permanently. But in some cases learning can happen as a response by the learners.

Psychologists define learning as the potential changes in behavior which is obtained as the result of exercise and repetition. Most of the psychologists gave different definitions of learning since they separate the permanent changes in motivation and learning.

2.4 learning and growth:
Growth means the changing factor of behavior and is one of the greatest rivals of learning. By the help of growth and learning, the reasonable changes happen without the help of exercise. If education does not cause the changes in behavior or does not change it, it has been ineffective in learning. Generally, learning emphasizes on obtaining knowledge and most of the factors are defined by genes while the factors affecting learning are determined by the experiences of the person [3].

The factors which directly affect learning can be divided into school and home. At school, teacher plays the important role and at home parents. In many books the school and teaching factors have been studied. The present study tries to study the effect of houses on children learning and how the houses can provide the condition for parents to affect their learning.

2.5 Environmental factors against the biological factors:
It is obvious that most of the human behaviors are affected by two forces of maturation and learning. Maturation is defined as the changes which happen apart from learning and exercise; while learning is the changes based on experience [1].
Some of the psychologists emphasize on maturation and believe that personal differences are due to the biological differences. One the other hand, the environmentalists emphasizes on growth factors and defines the changes due to growth to the environmental factors. In this case, the personal changes are due to different environmental facilities.

As all the theorists emphasize the internal and external role, but the degree of importance given to them is different. In this field, behaviorists gave most importance to the external factors. In this view, environment forms the human behavior. Most of the roles are for unconscious elements and according to Skinner, considering the internal factors for learning and growth is not wise and prevents scientific study of psychology.

Although considering the internal factors or external ones both are extremists but most the theorists base their ideas on them. During the last years, the emphasis of the psychologists on the external and internal factors has been changed [4].

The active nature of the child against his passive nature:

The most challenging point in the theories is the nature of the child. Does the personality of the child is formed by experience as John Locke says? Or based on the theory of Piaget it is formed by experimental activity. The first hypothesis was the theory of Watson, Skinner and Bandura who believed that the personality of children is formed by environment. Environmental factors include the factors which can have punishment and rewarding values and the patterns that children can follow them. Although Freud was not a learning theorists but he believed that children are led by the biological and internal factors.

Accepting the fact that children are active causes the child to have more control on his growth and consider some social limits. A four-year-old child asks questions about his believes and even if he is not aware of these issues, the active view of the child says that children are looking for the facts and some questions happen for the, The questions asked by a 10-year-old child are not same as a 4-year-old child.

2.6. Cognitive development and performance according to Piaget:

Piaget divides the cognitive process into four stages: 1: sensorimotor stage, 2. Pre-operation stage, 3. Subjective operation stage, 4. Abstract thinking stage.

According to Piaget, development of human cognition happens during the processes that are qualitatively and quantitatively different from each other. Each of the stages had its own structure and one is based on the other one. That is stage is the beginning and end of another stage. Going from one stage to the other follows a general rule which is a harmonious process.

The starting structure is a part of the next stage. Each of the stages appears with order and timely manner. The order in development stages is fixed and same in everyone but each person has his own special general development and developmental features.

Now, four stages of cognitive development of Piaget are considered:

1. The Sensorimotor stage: according to Piaget the mental activities at the first stage of the development start with the sensorimotor activities and that is the human being is the origin of movement. First, the child behavior is reflection. He recognizes the environment but he cannot think about it. According to Piaget, reflection affects the child experience during the first days and at this stage, talent is completely practical but these actions form the bases of the next mental activities.

After the end of the first year, child behavior is more specified and he organizes his experiences in a way that instead of using the mental patterns, he can use new strategies for the special goals.

2. Pre-operational Stage: this stage starts at the age of 2 and its basic feature is dominance over the symbols and using the words for objects. This feature lets the child to use what he did in action, in his mind [1].

3. The objective operation: at the age of 7 or 8 years old, another stage starts and child can simultaneously think about different aspects of a phenomenon and understand the relationship between the objects. He understands that the objects can be combined as separated without change in their weight and level that is the mind of children is reversible. The mental action of the child is limited to the objects he had in his hand and can directly analyze them. That is, what a child learns is related with objects. Piaget called this stage as the objective operation and this stage shows that how mind deals with its origin which is physical. This fact that thinking comes from action leads to the conclusion that intellect even in excellent operation which work by help of thinking tools, includes performing and harmonizing the action at the level of mental process [10,11].

4. Abstract Thinking Period: as a child develops, his way of interaction with environment is affected by his thinking. The issues which are solved at one stage need to be dealt with in higher level due to more complexity. If child does not grow more, he cannot have better organization and cannot deal with the abstract issues. The abstract issue points to the thinking structure of the child that is developed. This term also deals with the teenagers and considers the logical issues.

Abstract intelligence develops the mind of teenagers. Teenager can think more and give his idea about issues and use some forces even if sometimes, he missuses it [4].
We can use last two stages for our study. Specially, the abstract stage when the teenagers can do some extremes in their rooms and away from their parents. At this age, they need to be alone and competing this period needs control. The main question is that whether a room upstairs can be a good choice or a room at first floor is better.

2.7. Social-mental development process according to Ericsson and Freud:

Ericsson believed that the personal development happens during the life and he has tried to enrich the Freud theory. Table 2.7.1 is the comparison of the Ericsson and Freud’s opinion about the developmental stages. The mental-social development according to Ericsson is 8 stages the 4 first stage of which are same as Freud’s. that is, in each stage according to being successful or not, the change will be positive or negative.

<table>
<thead>
<tr>
<th>Social-mental stages according to Ericsson</th>
<th>Age range</th>
<th>Mental-sexual stages according to Freud</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Trust against lack of trust, real care causes the child to consider the world as trustful and insufficient care causes lack of trust</td>
<td>Birth-1 year old</td>
<td>Oral stage: oral area and its activities create satisfaction and bad experiences cause the fixation of this stage and led to possessiveness, aggressiveness and greed</td>
</tr>
<tr>
<td>2. Independence of idea against doubt. If the child has the chance to use its skills with correct ways he can have independence and if the care is more than its limit it can affect the child’s ability to control himself and the world around him</td>
<td>2-3</td>
<td>Rectal stage: at this stage the rectum creates more joy and bad experiences cause sloppyness, whim and saving a lot</td>
</tr>
<tr>
<td>3. Innovation about feeling guilty. If the child is free in doing the activities, he will have sense of innovation. Limiting the activities and responding his question in a way that bothers him creates feeling guilty.</td>
<td>4-5</td>
<td>Oedipus stage: child considers the parent of opposite sex as the tool for satisfying their need and so compete with the parent at the same sex and unsuccessful experiences led to being competitive</td>
</tr>
<tr>
<td>4. Constructing against feeling humiliated. If he is let to do something and make something and is encouraged, the sense of constructing is created and if he is criticized, he would feel humiliated</td>
<td>6-11</td>
<td>Hidden stage: at this stage, the Oedipus complex is solved by resembling with parents and satisfying his needs</td>
</tr>
<tr>
<td>5. Finding identity against the unrest of role. When the child recognizes consistency in his role, in spite of being in different conditions and facing different people, does not have the ability to create the personal understanding.</td>
<td>11-14</td>
<td>Maturation: emotional tendencies are integrated and sexual demands emerge</td>
</tr>
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</table>

Considering the research of us which is related to the educational growth and depends on the homework, this description is at stage 4 and 5 of Ericsson’s taxonomy, since children in Iran go to school at the age of 7, so we consider the stage 4 and 5.

<table>
<thead>
<tr>
<th>Social-mental stages</th>
<th>Age</th>
<th>Positive consequences</th>
<th>Negative consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust against lack of trust</td>
<td>1</td>
<td>Self-trust and trusting others, optimism</td>
<td>Lack of trust to self and others, pessimism</td>
</tr>
<tr>
<td>Independence of idea against doubt</td>
<td>3-2</td>
<td>Controlling the will, self and selection</td>
<td>Serious consciousness, doubt, lack of flexibility, conscious guilt</td>
</tr>
<tr>
<td>Innovation against guilt</td>
<td>5-2</td>
<td>Enjoying development, activity, leading and goal orientation</td>
<td>Feeling guilty about the developments</td>
</tr>
<tr>
<td>Constructing against humiliated</td>
<td>Hidden period</td>
<td>Attraction to productive task, feeling proud</td>
<td>Feeling disable and humiliated</td>
</tr>
<tr>
<td>Identity against role unrest</td>
<td>Teenage</td>
<td>Trusting continuance and unique personality, job demanding</td>
<td>Disability in playing the role, lack of behavioral factors and feeling abnormal</td>
</tr>
<tr>
<td>Intimacy against isolation</td>
<td>Early in adulthood</td>
<td>Mutual intimacy, common thoughts, feeling and work</td>
<td>Avoiding intimate relations</td>
</tr>
<tr>
<td>Production against isolation</td>
<td>Middle of adulthood</td>
<td>Ability of have complete focus to work and others</td>
<td>Losing interest to work and weak relationship with others</td>
</tr>
<tr>
<td>Perfection against disappointment</td>
<td>End of adulthood</td>
<td>Feeling meaning and order, feeling satisfaction about what is done</td>
<td>Fear of death, disappointment about life and what has happened and not happened</td>
</tr>
</tbody>
</table>

Stage 4 of the development according to Ericsson:

After assimilating with mother of father and solving the problems of this stage, child in this stage should forget the past desires and imagination and follow the social norms and rules. At this stage, child can recognize through action and the danger of this stage is feeling humility. If child is encouraged to do things and can end what he starts, the result is success. If the attempts of him are considered as bother, he feels humiliated [1].
So, children need to have a close relationship with parents. So, is such a relationship formed in a semi-floor house?

Stage 5 of the development according to Ericsson:
The most important issue of teenagers is formation of identity. He believes that teenagers soon face the responsibilities of adults in the society and worry about their position and compare themselves with others. In other words, identity takes two aspect:
One: the self-measurement and then the personal description which are provided by others for him.
Self-concept, according to Sullivan is due to the evaluation of others and the concept of self in a baby is affected by behavior of people who care about them. If parents like him and provide his comfort. Feeling of a child about himself is so positive. But if they are stressful and not wise, baby feels angry about himself. Positive thoughts are effectively created when child and parent understood each other and their feelings. When the child enters school, the reactions of teachers and students became important for him [1]. The acceptance and support for him help the child to have a positive concept about him.
Those who work with children should share feeling with him until he can experience three social based which include: family, peers’ group and school [4].
How family which teenager spends his time with should, be formed to have the highest efficiency? Is it true that the teenager can feel positive control of his parents through communicating with them? May be a room upstairs which is near the family daily activities and opening the doors of it is easily possible can be used for better visual communication.

3. Questionnaire:
The questionnaire includes a time interval of 25 years and the families who are included in this questionnaire has had at least one child who has lived in the house from the beginning of elementary school to the end of high school.
The families have been selected that did not have high changes and had enough income so that by fixing the parameters of income and non-divorce, the effective parameters can be studied.

Mother or Father Interviewee:
1. The date coming to the house
2. Period of staying
3. The year leaving the house (in case of leaving or in case of movements for more than 1 year)
4. Father’s job
5. Mother’s job
6. Income (weak, middle, good, excellent)
7. Father’s educational level
8. Mother’s educational level
9. Number of children and their age
10. The children’s present job and the university in which they study
11. The satisfaction level of parents about the job and education of their children
   Insufficient satisfaction
   Sufficient satisfaction
   Ideal position
12. The children satisfaction about job and education
13. The spaces which parents provide for their children at the elementary school level
14. The spaces which parents provide for their children at junior high school level
15. The spaces which parents provide for their children at senior high school level

REFERENCE