



A Survey on Children's Role Infantile Space Formation

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ABSTRACT

A child as the most impressible and the least impressive environmental individual, needs a capability to encounter to the spaces being able to accommodate themselves with environment. Children, under cover of surveillance, spending time at home, can't play, chase and explore, not being able to interact with nature. This issue, exposes the importance of infantile space in modern life. To acquire the schematic of better interaction in child with around, drawing and painting have been used for the first human connective approach; in such a way that the groups of thirty children at age of five were asked to draw their favorite kindergarten. In this regard, role of tree factors was prominent in painting based on the most emphasizing agents; playing, naturalism and diversion in light and color. With consideration of behavioral quarters, these agents would be classified in three segments; location, behavior, definition and to modelize children's connection with around at the moment of configuration. What is the most effective means to children's impressibility and impressively is play processing, that they can be permitted to catch up with their particular way of life generating a dynamic and liberal space for themselves. Nature for adventurous children has an eternal charismatic, possessing a vigorous potential of impressibility and impressivity on them based on natural space with their playing. Light and color in terms with visual sense is significant as the most vital interactional sense. Hence, due to this basis, children's behavioral quarters would be defined the moment of confrontation with space.

Keywords: *Infantile Space, Perception, Play, Naturalism, Diversion in Light.*

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1. INTRODUCTION

The research on field of children's hobbies, represents this case if they were able to design their own playing ground, this location would be widely different from people's description. Therefore, designed play grounds by adults don't exactly meet children's satisfactions (Izad Panahi, 2004). Thus, a specified play ground is infrustructured by children applications, and the space being ready for childhood characteristics.

As it expressed, today, in urban environment, a profound fracture has been created between children and past, spending their most time at cramp house. Children's life has got an accurate foundation and control, yet, dedicating less time to play, learn and discovery (Zamani, 2011). This case multiplies the crucial of impressibility and impressivity. The status children have a significant impacton formation is based on imaginary models.

1.1 The importance of this subject

Most parents still guess their children's training initiates from school, whereas primitive sin years is the most sensitive period of human growth, owing to upbringing and accelerative revolutionary in many extends. According to UNICEF statics, half of global population belongs to children, while modern life in secures and constricts environment for their presence (Shahabian, 2011). The more urbanization is extended, the more cities are unsafe and unavailable, the less their needs

would be removed at the same time, connection and dealing with nature are more restricted (Izad Panahi, 2004). Living in and cramp apartment buildings cause to terminate possibilities for playing.

Today's children are obviously going to be future markers which their upcoming mentality is rooted in quality of their upbringing and characteristics basis (Noghrekar, 2011),(Shahabian, 2011). So, to understand the importance of children place and space based on needs, is required to be mentioned.

2. Research method

Current project needs to gain information, surveying many approaches such as; central and library ways, interview the researcher, address by users which depends on considered source including many methods of searching. Ultimately, to make this point sensible, using address and interview and simultaneous investigations qualitatively, intrigues to deliver final model. This research is associated with infantile architectural space, their growth psychology and environmental psychology.

As method of children cognition and conception are different from adults Perception, the common methods of studies don't respond to quest around children's cases due to characteristic attributes and age matters, that is why, some specific paths of new studies are required. In some surveys, child behavior in real situation like being at home or school are spotted. In labs, plausible situations frequently occur, which means their reaction in various comparable environments need to be observed. Children are often interviewed and given demonstrative images or kinds of questionnaires are filled by parents or related trainers. In this research children's paintings

have been used in three groups of thirty people, been interviewed by their trainers, and during this process, we are going to raise some methods including library method in order to analyze some themes of children psychology.

Environmental psychology in a well-rounded field is being understood over library approach. Sensory conception as a profounded environmental psychology, is a function to disclose truth of physical and chemical stimulants in around, ending up with human reaction and mental analysis and causing human to acclimatize with his around (Iravani et al, 1992). Nevertheless, owing to mental complications, scientific experiments should be persuaded. In psychological part of survey, library method has appointed the child as a main addressee, utilizing scientific experiments.

3. Basic Perception in environmental psychology and environmental conception

The discussion about senses and conceptions in modern psychology going by the name of sensory conception is brought up by scientific achievements founded by physiology and experimental psychology. In this science, sensory conception is a procedure that initiates from reality of physical and chemical stimulants in environment, and concludes with quality of human reaction and mental analysis (Iravani et al, 1992). Conception, as a comprehensive process is totally conscious sensory information and external (Panahi Shahri, 2000). There are three procedures in environmental conception:

3.1 Feeling process

Human captures around and is affect by it. In normal status, we need to feel around if this mutual production would be for seen. This action is done by environmental intrigues on sensory organs (J. C. Groter et al., 1996). From descriptive claims by Porteus, it is believed that vision sense is the most fundamental sense of others, conserving information from around and transferring to brain. The experiences of lower senses such as touch, olfactory and taste don't sustain the aesthetic purpose of human as well as superior ones like vision and hearing senses. Therefore, two of vision and hearing are more privileged in aesthetics qualities than other senses (Lang, 2002).

3.2 Perception process

Perception definition has got a widened impact and articulated meaning. In psychology, Perception as a mental process is committed to systematize sensory information, encompassing potentially on some of them futherly (Iravani et al, 1992). Investigations show that former data and sensory experiments of human pose him to reply to final response (Iravani et al, 1992). Other agents, influencing an Perception are individual psychological factors (sorrow, joy), physical environmental (crowd, loneliness) and cultural agent that are mentionable, affecting individually on senses from around, in a way that two people might have different perceptions within different culture and mutual infrastructures, from identical environment, or a person could possibly have a different feeling from a unique place, relies on various time zones and psychological factors, (sorrow, joy and so on ...).

3.3 Cognitive process

The final path after obtaining information of Perception and construction is cognition process (Mortazavi, 2004). This process, itself, as a prominent psychological basis, has a close-knit with Perception. These twos haven't got a certain distinct territory to each other. Cognition is a function of conserving, retrieving, processing, knowledge and information. This instruction happens when we distinguish of a perfect and perceived information, being related to what the object is, and how to relate to reaction (Barati et al., 2013).

Above contexts are said that three phases of feeling, Perception and cognition include of complicated procedures phases and impressive agents that we can indeed claim when human identified perceptible facts through sensory, he finds out of

indoor and outdoor facts by sensory receivers. After this explanation, these feelings expose to interpret and understand cosmetic phenomena (Iravani et al., 1992).

4. Artistic addressee and their impressibility

The case of addressee with the point of interpretation is constantly considered by aesthetics; but how to notify the artful message over the sensations and how to ignore some communal theories in favor of addressee configuration, or underestimate any element as compared with addressee's take on, is an outlook in artistic field that is our argument. There are two different artistic and aesthetic guidelines. First guideline in traduces and artful works through transferring to sensory or transmit to an understandable sign-noted arrangement. In this view, to comprehend the works, it is either irrelevant to historical conditions or thought to be incredible. Thus artistic works could provide an ultra-historical connection. This item only spotted on mundane-experimental manner of human in terms of formation with the works (Ahmadi, 1995).

Here is a question: doesn't this explanatory have an inevitable field of construction? Doesn't a scientific reason alternating an artistic works have the field of construction, being introduced by oral explanation in frame of linguistical signs? According to artistic explanatory, the result is a creator; that doesn't last regarding sensory cognition and existential. The works continually construes, interpret and define based on historical conditions and addressee's receptions. This instruction obviously depends on interpretation (Ahmadi, 1995).

As we enjoy sense of Sohrab's death, each work is a phenomenon existing in individual hidden in it, which is apart from architectural construction. An artistic works that is distincted from creator, forms a connective manner (Ahmadi, 1995). In this subject, the child who is an architectural motivation, encounters with causative works with his mental expectation. Takes impression and affects on it.

In philosophy conversation of art, the high light of discussion is constructiveness and this creativity is conclusion of conversation and facing up [Ahmadi, 1995]; (Zamiran, 2000). About this basis, artistic works would be activated provided that addressee face up to works. Likewise, an architectural structure won't be described if the addressee doesn't estimate how to live in there. That is why when we visit an old place, abandoned with no inhabitant, old memories could be touched, as though everything talks and is enlivened the past. The fireplace is on and the heat is felt. This is the constructivity of Babak Ahmadi, keeping firebox on in an old uninhabitant house, and this is beauty. The role of mutual functional theory in environment is to clarify what people pay attention and take credit (Lang, 2002).

5. Children and Space

Environmental cognition background is hidden in childhood. As it is said, children see objects and take adventure generally, then try to distinct them; however, children's relationship with around is positioned. In this relation, instead of distance, dimensions, angles, and squares, relations such as intimacy, farness, symmetry and cohesion are remarkable for children (Vatankhahan, 2012). A child notifies primitive symmetrical system that is continual and enrich children's environment, gaining experiences and mental instructive activities (Vatankhahan, 2012).

5.1 Role of environment on children's mental functions

The potentiality of socialization in association with a specified space for researchers is an authentic tie between human and his around. In other hand, the question remained untold is that if a child is able to improve his social occasions with physical environment? Although, many experimental studies explain such these relations which are unsuitable with topic, there are

different definitions about child-space that the most illustrative items are:

- Dependence on a place in around
- To identify a place
- Attachment on a place

An appropriate explain for children places is a space where they are pleased and or unsatisfied. Leaving there and feeling desperate during departure (Stankovic, 2004). Despite this, true reason for their reliance is the space includes of some traits which remove the outmost tendencies that were not meaningful beforehand.

If children lose by, standing on their own and environmental resources. The meaning of consciousness of places as a general Perception, comprises of three different child-space relation as follow; dependence on an space recognizing a particular place. Children deadly tend to special place when the importance of physical environment raises, while the attachment to family will be vitiated by passage of time. The child feels satisfactions and happiness when the place meets their physical necessities, and also mental needs ought to be supplied (Stankovic, 2004).

Knowledge of children Perception is provided through projecting regions and infantile space designing. However, this knowledge is founded by adult definition and might not be relevant to children's activities. Formation, figuration, colored actions are parameters that impress on internal and external spaces. Value of space relies on its quality not formation and color; in other words, adults sense the space mostly due to formation and aesthetic; whereas children sense due to its function (Christensen, 2003).

5.2 Children experience of place and architecture

Children's physical motions means scan ology and social interaction that are directly influenced by space and around. This reflection contains of pervasive sensory performances and motional functions. Conceptual responses (vision, touching, hearing, smelling, tasting) and movement imply a lot of information. It means to obtain an active experience for the child to take over movement. We need to comprehend how to more around. This is a psychological perceptual framework of

environment introduced by several environmental psychologists (Sener, 2006).

As children possess conceptional and motional abilities, applying locational schemes by them is an appropriate fit, therefore, architectural projects need to inaugurated with the introduction of Perception about space and around. For instance, Sener (Sener, 2006) discovered that architectural projects compose of architect's attempt in order to participate children as unique addressee to generate inventive and innovative designs, which exist by triggering conceptional sense on children to structure environmental. The view and architecture should be scheduled principally on nurturing children sensory and aesthetic needs. For instance; hospital wardens are cultured to improve health and its garden and playground are to take rest and to play. A fabricated place provides a space for children to give them caution about outer stimulants over movement, exploration and social activities (Chawla, 1992). According to Moor and Young (Moore et al., 1978) opinions, children's attachment exists in three ways:

- Cognitiveal
- Emotional
- Assessment (Chawla, 1992).

Cognitiveal, experience is to build thinking proficiencies and finding solution. Emotional experience is feeling and sensational capacities and the last option is assessment experience comprises of values, beliefs and outlooks to around. For example: after two days spending and playing in hospital garden. The child feels depended, tending reback to the hospital in case of being sick.

As it is said, painting has been used as an interactional means for children in order to reach to a desirable space. To acquire deductive results, they, children with talent of drawing were needed, but the picture of space should not be built in their mind yet. For this reason, three groups of thirty children at the age of five were selected, been asked to draw their ideal kindergarten. The trainer was asked to note down their claims during painting. According to statically chart, eight elements have been reviewed. All eight elements can be repeated in two fields of drawing and emphasizing in their claims

Table 1: Emphasizing indicators of factors in children's painting with location and number of repetition.

Location	Mentioned factors on painting	Drawn items on painting	Emphasized items in children
Place	Nature and space	78	35
Behavior	Play and toys	69	27
Meaning	Color	78 various colors	38
Meaning	Weather	3	12
Place	The route to the space	1	16
Meaning	Diversion (variety)	28 various drawings	4
Place	Cosyness	3	0
Behavior	Socializing	17	2

We can say that three factors have characterized role in painting. Play processing, naturalism and diversion in light and color. With definition of Behavioral setting, these three factors can be seated in three position of locations behavioral and meaning, modelizing children connectivity with space at the moment of adapting themselves with around (based on Babak Ahmadi (Ahmadi, 1995) point of view).

6. Children's operation at their early time

In aspect of growth and development, Mc Devit and Ormrod (2002) assume that in the early time of childhood, there is an unbelievable, fantasy, outstanding and playable period for a child. They found the world as a complex (A. R. Olds, 1987). Being founded by drama and fancy, and need to try to promote

new roles, challenging to integrate themselves with playing. Children progress by language speed and conversational talents through sensory and motional activities. Their physical movements are mostly affected exceptional function that their indoor communication are with furniture and toys (A. R. Olds, 1987) and the other side is outdoor communication with plants and animals. For example; experimental study by said depicts this fact that admitted children in the hospital reluctantly react to unknown situation, however, when they play in the garden, mostly get familiar with animals and insects presence, which this subject implies their improvement in cognitiveal function.

In the middle of childhood, they genetically program with nature, probing the world and around (Cobb, 1969). Learning how to figure out their world by hazardous and probable, been

visible. They can understand natural world overplaying (Moore et al., 1978). Play thoroughly provokes their conceptual faculties such as; vision, touch, taste, and smell. Children, as a manner of emotion are touched by created setting in playground, relating through touching connection. This matter manages them to ahead forward to discover rational truths about objects and environmental realities. To form a playground, we need to pay attention that play is a part of interactional process with around and the target is to value their Perception in terms of discovering phenomena in environmental and to project the playground should not be necessarily a place to spoil the time, but also should be somewhere to nourish characteristic structure.

7. Children in three outlines: physical, conceptual and social

An active experience encourages children to from logic thought in order to take on logic facts about this world. Direct touch with specialties, impressions, connections and environmental agents permit them to quest, fantasize and explore (A. R. Olds, 1989). Accordingly relate spaces need to be conformed with their physical, cognitive, social and raising functions. Physical functions are practical movements like motion, jumping, rolling, running and leaping. Puberty is a model of physical growth involving transaction with arounds, indoors and outdoors. Conceptual functions are comprehensive responses of children about space and relevant equipment. Visual, audio and touching dealings help them extend cognitive growth. Cognitive growth studies about regulated alternations in ration, perception, memory and language of children, talking about transaction between them and adult exposes to attract and accommodate themselves with others, and social growth revises about changes in children's feeling, finding guidelines to interact with peers. In addition, "children form around and been formed by it (Striniste et al., 1989). " to understand this knowledge, architects take plunge to design a building and view to enjoy of three physical, cognitive and social functions.



Figure 1: Play process, is a linked zone to a child constructively.

7.1.2 Attributes and playing level

Psychologists believe that, an activity is shown as a play to own five attributes:

1. To be intrinsically inspiring and to be motivate.
2. Participating should be optional not compulsory.
3. Participating should be a potential activity.
4. Should be enjoyable and enlivening.
5. Should be with level of simulation and imagination powers.

Supposedly, most children activities are not likely to be quailed, considering these five attributes, and it is unlike adult's ideas that children can have fun by taking part in different sport classes (gharebigloo, 2012). The target to build playground is to amass an occasion for physical and mental challenges, making possible for them to click with nature (Izad Panahi, 2004). If the playground has got solo-purposed gadgets same as traditional playground, children won't be able to swap and falicify around according to their desire. Although traditional playground are safe and secured as compared to the past, it doesn't have any creativity elements owning to static and fixed operation (Izad Panahi, 2004). Children's experience in the early 20th century,

7.1 Playing process in children Spaces

After children conceptual essentials, their impressibility and impressivity ought to be contemplated by some facilities; the ones their both statuses are relatively less and too much out of environment. The most influential architectural means to penetrate on them and take the effect from them is playing process. All in all, playing process goes by the name of a profitable condition for children to enjoy and being entertained (Vatankhahan, 2012). Playing is counted as a mastered maitanance in childhood. It is the most remarkable means to be understood how to apply it, and will be addressed on further sections.

7.1.1 Importance of play process in children space

Asking children to do something apart from playing is an example of a fool person to shake an apple tree to get one inspiring. He not only doesn't get any apple, but also deprives himself of an effort to touch and sense the world, trying to control and being introduced (quoted by Edward Kelapert, (gharebigloo, 2012)). Children own an exclusive life called playing. They are always dominating life by playing. Therefore, one of the most important visual and practical motivations of children conduce finding this exclusive life- playing, discovering their around (gharebigloo, 2012).

They communicate with around by playing and get excited to find out the world. During playing, they learn experiences and enjoy without any direct training. These can be an expanded mainstream of moving, building, pretending, testing, hiding, throwing, soil playing, water playing and so on. While, it is a mess for adults. They are vital and crucial parts of playing that are noted as growing supplementary (Izad Panahi, 2004).

There is difference between what they say and what to be understood. They normally feel more rather than what they say. Playing is equal to adult's talking. It is a facility to express feelings and to discover relationships. They live by playing in their cozy world, imagining what they want, and act like a smart artist. They picturize a corner of a room as a spooky as a magnificent mansion or the rained them.

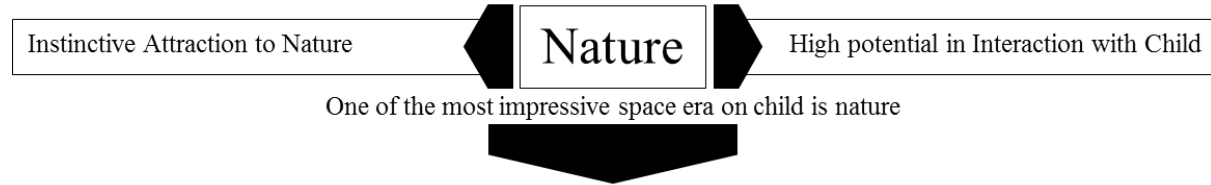
have shown that to apply natural elements including water, soil, texture, natural colors develop them to have positive conclusions in adulthood which are educative (Izad Panahi, 2004). To establish a wided playground regarding to pristine nature, it triggers children to act and react due to a found attraction. Merging nature and architecture increase their creativity. The more playgrounds are built in natural spaces, the more outcomes would be represented. Water is one of natural elements that they are keen of it.

7.2 Naturalism in children space

Human being genetically has got sensational and congenital tendency to nature and other creatures. It means he needs both human to human and human to nature ties. Children also tend intensively to nature. They prefer a virgin natural view to designed ones. Research shows internal natural around are affective on stress reduction and mental hears (Zamani, 2011). Nature is a competent field to occupy children for several hours. They feel coldness and heat on skin, know the ground walking on, hear sounds and smell scenes, feel the light coming with high speed, and as they choose how to move, try to get to

know dimension, distance, physiological measurement and time dimension. So, their pleasant places are laden with

natural elements; flora, fauna, water, soil an etc. (gharebigloo, 2012). By and large, their five sense are involved, using natural elements in playgrounds.



In the regard of interaction between playing and nature, we can point to the space where has got an eminent potential on child's transaction.

Figure 2: Nature's position in children role in space configuration

In the early life, if there is not possibilities for human's instinctive attraction to be flourished, lack of instinctive attraction will be probably happen in their inner part (Zamani, 2011). Natural environment persuades them to shift around (Zamani, 2011). In childhood, we firm a sharp dependence to the place we are brought up, and this will be registered in mind ever after.

To feel the place, more direct connection with natural qualities such as; location, soil, land scape and wild life need to be required. Thus feelings are less sensed in urban spaces that nature diverted to an abandoned small sections (Zamani, 2011). Nature has a permanent gravity for adventurous child. Digging ground, to balance on rocks, rolling on steeps full of grass are their instinctive and intrinsical traits. Then, expanded natural grounds need to be utilized in designed places, so that children can earn experiences and play liberally far from parents cautions.

7.3 Light and color variety

Light and color as inseparable factors in architecture, have got great amount of penetration on users mood and behavior; as though, their mental and emotional statuses are shocked by light and color. Optional and mental effects of light and color are owed to darkness, lightness, coldness, warmth, quality, quality and location. Plus, other agents same as figure, fabric, level and light impress on color and light. Color has got and outstanding effect on children's mood, particularly the child obtains more impression than adults.

Color and light due to intensive transaction with optional sense, specifically in children and as the most significant sense in architecture, have idealistic roles in playground. Using fundamental colors of colorful lights or of object and colorful furniture, can suitably involve their visual sense. Totally, this item can be individually applied in coordination of two impressibilities and impressivity elements. As it was observed, variety was also an exceeded element in children drawing and speaking; even can be observed in color selection in their paintings. It could be possibly because of painting devices.

7.3.1 Impression of color on children's mood and behavior

The colors of environment, equipment and factors, can either increase freshness, vitality, mental disposition and motion, or aggravate lethargy tacklessness, stationary, anger, anxiety and depression. As it is claimed, these effects can be developed on children more. Some colors impressions are as bellow according to kindergarten designed guidelines book:

- Red: Provocative, stimulating. Has got influence power and drew attention.
- Orange: It has got merely red qualities. Fruitful and attractive.
- Yellow: The brightes and the most cheerful color. Mellow than red, is provocative. Deep yellow intrigues mental power.
- Green: It is cold and soothing. Feel calmness and suitable for relaxation. It causes human to think deeply and would be used in places for concentration.
- Blue: The coldest and the most sedative color. It instills security and comfort in saturation mode.
- Violet: Expresses concern and anxiety.
- White: Cheerful and inspirational.
- Grey: This color either show happiness if closes to white or shows sorrow if closes to black.

In total, the more colors tend to black, the more represent grief and the more tend to white, the more represent happiness. Furthermore, color coordination in around brings comfort, and vice versa, controversy creates excitement and movement.

Conclusion

Current survey speaks that children as the most impossible and the least impressive individual in architectural location, can adapt themselves to figure deeper architectural places in association with places, behavior and meaning. Incorporating three factors play process, naturalism and color and light diversion as predominants in children's painting, configure modelization structure for impressibility and impressively.

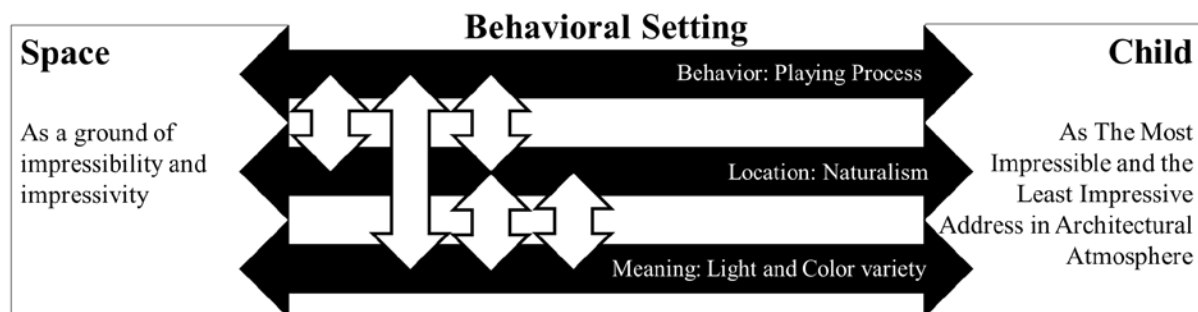


Figure 3: Centralizing on playing process, naturalism and color diversity and light in Behavioral setting definition.

As it is claimed, the most verified method to stimulate children is playing process. We can produce a dynamic and extended place for them to find their distinctive life, communicating with environment. Nature has got an inexorable attraction with this potential to attract children in association with nature and this playing. Color and colorful lights in terms with optional sense, can trigger children to deal with around based on Jean Piaget (Piaget, 1987) theory. In this principal, Behavioral setting is the moment of child's confrontation with around regarding to playing process in nature using color and light.

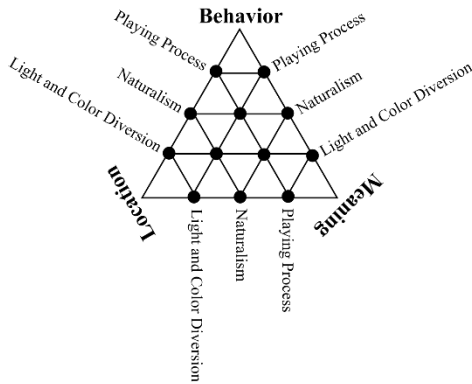


Figure 4: Trinity of behavioral oral quarters increasing impressibility and impressivity

Regarding to influential factors, raising impressibility and impressivity of children to encounter with playgrounds and particularly three factors; play, nature, light and color, and based on Behavioral setting's instruction, we can reach to a trinity model that each angle contains of impressive factors and the peaks include of location, behavior and meaning. This structure demonstrates various guidelines. These guidelines conclude of a result or more. Clearly, this structure is alternative by adding other factors.

9. Acknowledgements

Essentially, Behavioral setting, which is combined of naturalism, natural elements, playing process, cooperation, light and color, has got a huge adaptation with outcomes resulted from Minoo Shafahi research, interesting four factors of children instructive locations. For example, in her research, four factors; combination and stability of internal and external locations, free conception, applying natural elements and involving architectural space with nature. Though, what are unseen in Shafahi survey are. Light and color and playing process. Although among exhibited investigation, these two factors have been obviously spotted.

As it is pointed out, specified model in research, customizes appropriate instructions due to children and environmental transaction that is required new idea and scheme. Contributing multicolored filters against sunlight, expanding internal places and nature, proposing internal walls to be portable as puzzle

and applying concrete and miscellaneous natural colors in architectural structure are the proposals to investigate in theme of children locations.

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