A Case Study of Preschool Children Using Props Outdoor
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It is a very unfortunate thing that the children cannot design the environments and setting of their outdoor playing facilities. This suppresses the preferences of children as they are forced to play and interact in the environments designed by the adults (Plummer, 2007). The key objective of this research will be to examine and analyze the role of outdoor activities provided to the pre-school children and the effectiveness of these activities in grooming the personalities of such children. The research will also uncover the causes behind pre-school children meager visits to outdoor playing areas due to the busy schedules of their adults. What is the role of outdoor play in children’s learning? What is the quality level of outdoor play provided to young children by early childhood education organizations?What improvements and modifications can be made to ameliorate the contemporary outdoor play in the educational sector? What steps or processes can help in boosting the confidence and satisfaction levels of children so that they can enthusiastically take part in outdoor play? In this research study these questions are addressed by an analysis of recent research and design suggestions. The results of recent research studies indicate that the importance of outdoor activities including playing and other similar physical engagements is emphasized by the researchers that work on the behaviors and nourishment of early childhood souls. They are of the view that outdoors activities are equally important like indoor activities which usually involve paper reading or board instructions, whereas the outdoor activities provide the pre-school children with abilities to develop their natural behaviors in accordance with their surroundings.
Introduction

The research study presented aims to highlight the major dimensions of outdoor playing that contribute effectively to the learning and healthy development of preschool children along with highlighting the role of education professionals in the provision and promotion of outdoor health experiences for young children ‘s educational environment. When children are provided with the opportunity to experiment from an early age it enhances their abilities and help them to decide what to do, how to do, creating self-esteem, and autonomy (Suggate, 2017).

The outdoor time spent by pre-school children is totally in contrast with the time they spend in indoor spaces. The exposure, learning and sensory experiences are entirely different in the outdoor environments as many of the prohibited actions in the indoors are tolerable in the outdoors. Children have freedom of wandering, running, shouting, interacting and manipulating their surroundings with a free hand to do all the messy activities they want (Fähndrich, 1987). This boosts their confidence in themselves as well as their surroundings which in turn aids in the development and grooming of sophisticated personalities that can contribute actively to the progress and development of whole society. The children are more likely to develop positive feelings for their fellow beings and surroundings when they play in the outdoor playing facilities. Such outdoor environments are also crucial for the development of a sense of independence and autonomy for children. These outdoor spaces enable the children to try new and innovative experimentations and learning interactions with a decreased dependence on some adult or caretaker. Though the children develop much independence from toddlerhood to early childhood in the indoor spaces, the outdoor playing facilities greatly augment their abilities to learn and interact with more diversified and challenging surroundings.

The outdoor playing and time spending is an important constituent of a child’s day (Durant, 2009). Planning outdoor space and activities play a major role in the development and growth of the young souls. Vigorous outdoor activities make the children more confident and invigorated by providing them opportunities to test their physical abilities and caliber. It also builds coordination by stimulating the imagination of the children engaged in outdoor playing. The pre-school children also need new learning which is delivered by the interactions with natural materials including scents, voices and textures of the outdoor materials with which they interact. This learning acts as a base for nourishing the natural abilities of children that might help them in the coming life. The variation in the pace is also of key importance as the children are encouraged to walk, run, jump and even climb things present in the outdoor playing facilities. Similarly, the variations in the outdoor scenery are equally valuable as they help the children to explore more natural phenomena in new ways for example exposure to sunlight and shade aids children in knowing and learning more about their natural surroundings.

The research questions that informed this study are:

1. What is the role of outdoor playing facilities in the education of pre-school children?
2. How the outdoor areas ameliorate the learning experiences and natural constructive abilities of pre-school children?

3. Is the quality of facilities and equipment provided in the outdoor playing areas of kindergartens up to the satisfactory level?

4. What steps or processes can help in boosting the confidence and satisfaction levels of children so that they can enthusiastically take part in outdoor play?

The influence of time and space in the playing and outdoor experiences is acknowledged by the special contribution of the outdoor play environment in catering to the needs of young children through free play. The outdoor environment provides several playing opportunities which have distinct features and health benefits such as breathing fresh air in their lungs, exploring by digging in the soil, observing the natural elements around, listening to birds chirping and other environmental sounds, touching and feeling things such as the snow, and experience smells present in the atmosphere after the rain falls, all of which are difficult to be replicated in other unnatural environments. The activities in green or natural surroundings are considered to be effective contributors to higher level attention and well-being of human health (Ribeiro, 2017).

Contemporary Status of Outdoor Play in Educational Environments

Outdoor is a vast and open environment which changes continuously and provides all children with the freedom of experiencing and interacting with many natural phenomena. The children benefit from the outdoors when playing or participating in activities by being exposed to sunlight and natural elements which helps in the development of strong bones and better immune system (Krauksta, 2016). The increased physical activities in children also contribute to keeping their minds alert besides making their bodies physically strong and sturdy, also, the open and natural environment in outdoor play contains air that is free from pollutants and is beneficial for the respiratory health of children (Krauksta, 2016).

Young children need to be physically strong and active in their early years and providing them with the opportunities to play outdoor help their muscles to grow stronger. According to Waite (2016), there are countries which are lacking in providing their children with outdoor physical engagement programs and they have greater percentages of children being overweight and obese. The onset of the process of globalization, increased technology and urbanization have contributed to the diminishing of outdoor playing activities from educational schedules and are replaced with more modern engagements which add to children decreased rate of physical activities. The growing culture of fear imparted by occurring or possible accidents has played a negative role in the promotion of outdoor activities for children as parents now tend to keep their children engaged in indoor activities. This makes the children feel restricted as they become occupied with structured phenomena and are supervised by adults (Waite, 2016).

Apprehensions related to outdoor play are often caused by misinterpretations of the activities involved in it and parents have become more concerned about the safety of their children and factors such as traffic issues and interactions with strangers are frequently highlighted by parents.
as the reason behind their loss of confidence in outdoor playing. The apprehensions can be eliminated by proper guidance and knowledge circulation among parents or caretakers of young children. The educational systems providing these outdoor facilities must also play their role in making them safe and suitable for the students so that the parents can regain the confidence in outdoor play (Little, 2013).

Studies show that early childhood education largely centers on what happens inside the classrooms and considers the outdoor playing facilities merely a source of spending recess time for the children to engage their muscles for some time (Gillard, 2016). In this perspective, there is a dire need to promote awareness for the children’s right to play outdoor and to highlight the potential of their learning and development. Outdoor playing facilities create greater learning opportunities and help to teach children about citizenship, socialization and teamwork. Children can learn many new lessons and life experiences that are useful for their growth and development, they will understand the role of rain and snow in different weather conditions, and they can observe different birds and their eggs hatching in the spring (Shaari, 2016).

The indoor educational facilities mainly in the form of textual stories or lessons and learning centers can only enhance the learning of children at representational levels but the outdoor facilities provide real and natural experiences to the children which contributes to learning being a fun and interesting process. The contact with nature is not the only requirement of children to develop an understanding of and interact with the natural world; the role of parents and caretakers is also much crucial as it is binding to support children in developing relationships with the natural world (Shaari, 2016).

When children interact and play in different outdoor environments it also results in helping them to create new innovative things (Engelen, 2017). Playing and interaction also equip young children with the knowledge of working in combined and collaborative environments. The children will become acquainted with sharing and the extent of their roles and participation in different scenarios can help to foster unity and team work. The increased opportunities for children to interact with the natural environment are the major apparatus of high quality outdoor playing facilities. The outdoor play setting should be capable of supporting multiple variations of play which can engage the children in natural developmental activities and increase learning. The specialists, as well as professionals from various educational settings who support and value the outdoor activities for proper development and learning of children duly affirm the need for intense playing opportunities in the form of organized zones or activity areas.

**Different Types of Outdoor Play Settings**

There are different types of outdoor playing activities and settings available in early childhood education programs. Factors such as educational backgrounds, career objectives, and children’s choice also influence the type and organization of educational outdoor play. There is a general concept which is followed by some of the outdoor areas in which a space with multiple playing equipment and settings is available. The fencing helps in securing the area from external
interferences of traffic, people or animals so that valuable play space is provided to the children. The multiple forms of outdoor playing areas encourage children to move and prefer one playing setting over the other according to their age demands and choices. It also develops a sense of decision making in the children and their skills get ameliorated when they move from one activity to the other by making their own selections from the multiple choices available for the next activity.

Well designed and efficiently implemented flow with the outdoor play environment can aid in the development of spatial awareness among children (Dismore, 2005). This particular awareness is characterized by the understanding of how to navigate within a setting from one equipment to another with special consideration and emphasis on the distances between points within a particular space. The Heft and Play settings are based on affordances, a term originally used by Gibson in his famous theory of perception. Affordances are real environments which are given their definition by the person perceiving them for example, a cut-off or fallen tree is seen by the children as a source or equipment on which to climb and practice balancing which is in fact not the purpose linked with a fallen tree.

Similarly, the understanding of the affordances available in a play environment, as observed by children, plays a vital role in the provision of an exciting setting for the outdoor playing area. The study and analysis of affordances offered with a playing environment consider children, present components, the way different components fit together and their role in the learning and recreation of the children. The ‘within settings’ and ‘between settings’ components of the outdoor playing areas play key roles in making them useful and preferable for the children to use. The ‘within settings’ are related to the various things such as group sizes, peers, densities of children, time allocated for the playing activities, and the ‘between settings’ are related to the issues encountered by the children in outdoor environments such as culture, gender, socioeconomic preferences and the designs of the environment.

The ‘within’ as well as ‘between’ settings both impact the ways in which the children observe the nature and components of outdoor play spaces. Due to this impact, the outdoor play settings become the reasons behind variations in the affordances by their designer or implementers keeping the preferences of children in view. The affordances provided by ‘between’ settings vary for each age group of children which impact their play as a result. Also, the wide range of selections accessible to children impacts their aesthetics as the children appreciate the aesthetic experiences undergone while being engaged in different playing environments.

**Historical Background**

Children and adults interact differently in natural outdoor environments. Adults are less fascinated by the things that are fascinating for young children as they are already aware of them while some children experience them for the first time. Kaplan and Ryan, two famous sociologists proposed that the impact and effect of the aesthetics of environment depend on the perspective of each individual experiencing that environment. The levels of attraction and
interest vary and are primarily based on the ways in which they interpret and explore their surroundings. Senses of sight, smell, hearing, taste, and touch play important role in the learning of young children, especially in the outdoor environments (Rengel, 2014). The Reggio approach to early childhood education suggests natural beauty in the terms of shapes, colors, texture and other factors linked to children’s experiences that are shown in their outdoor as well as indoor environments (Rengel, 2014), which results in the essence of playing associated with the learning opportunities to recreate aesthetic pleasures. The outdoor playing environment are consistent with evoking an aesthetic response by the children having an urge to reach and experience the activities that are to be performed there. Rengel (2014) informs us that children loved running and jumping since the time immemorial and archaeologists have found footprints’ patterns of children circling and zigzagging while footprints of adults were plodding placidly usually in straight paths.

According to Gillard (2016), Plato observed the model of playfulness in the perspective of human and animal and the need to wander and leap. Children need opportunities to play outdoor and to articulate and engage themselves physically in the outdoor environments. Outdoor play opportunities can include trees for climbing, big rocky stumps for jumping, swings and slides, sports items like balls to kick, throw, catch, bounce and roll. These opportunities are important for the grooming of children as they provide fun opportunities needed by the children for developing strength, coordination, balance, and self-confidence. Moreover, children need physically challenging engagements from the outdoor playground for literally reaching new heights and play wild. They need the stimuli evoked by risks and choices in running, climbing, jumping, swinging and other related activities so that the extent of the excitement of these challenges can be traced by them.

Recent Studies of Preschool Children Using Props Outdoor

The early childhood development sociologists, pediatric health specialists, and behavioral researchers have conducted intense and deep analytical investigations on the effects of outdoor playing on children’s health and development. However, little research has been conducted on addressing this subject in context with the design fields and environments (McCulloch, 2013). The modern technology and educational patterns have completely resulted in the revision of outdoor playing mechanisms. Here the current literature available on the subject addressed will be reviewed so that the past and present trends related to the subject matter can be discovered, analyzed and explored.

Outdoor Play and Physical Development of Children

Forte studied the learning related to outdoor play for children in a special context to the physical development and activity levels and learned that the modern technology has a significant and negative impact on the physical development and level of activity for young children due to gadgets such as television, video games, and computing devices. Forte had predicted this trend in
his findings where he presented the view of the rise in preference by the education system as well as parents for increasing the levels of outdoor activities for their preschool children (Gillard, 2016).

**Development of Motor Skills among Preschoolers**

Fojorto conducted a study on 75 children between the ages of 5 and 7 years who happened to be present at a kindergarten. The control group comprised of 29 children coming from two neighboring kindergartens. The mean age of the children group was 6.1 years without any notable difference between the groups (Suggate, 2017). The experimental group comprised largely of boys while that of the control group was comprised principally of girls. Children in the former group took part in the free play and other physical activities in a shrubby area next to their school for 2 hours regularly for the whole year with 36 occasional visits to the natural environments. The study also contained pre-test and post-test where motor skills and genes were administered following the period of treatment. The control group performed better than the experimental group at the pre-test for fortitude and motor skills. The treatment period witnessed the experimental group caught up with the control group in which the former showed enhanced improvements for balance and coordination tests. Development of different motor skills with specific ages are summarized in the table no 1.

**Outcomes of No Outdoor Engagements/Activities**

According to Roach (2018), Japanese sociologists and integrationists conducted a study on three-year-olds in which they deduced that limited outdoor activities were one of the six chief factors which directly contributed to obesity in children.

| Table No 1: Development of different motor skills with specific ages |
|-----------------|-----------------|-----------------|
| **Age Groups**  | **Motor Skills** |                  |
| 1-2 years       | • Sitting and walking. |                  |
|                 | • Bounce and twirl in reaction to music. |                  |
|                 | • Can feed self using spoon or cup. |                  |
| 2-3 years       | • Push self with feet while adjusting postures. |                  |
|                 | • Build different shapes from building material like toys. |                  |
|                 | • Mold clay into shapes. |                  |
| 3-4 years       | • Prefer using larger writing tools and toys. |                  |
|                 | • Balance on one foot for a few seconds. |                  |
| 4-5 years       | • Throws a ball overhand. |                  |
|                 | • Draw stick figures by utilizing different body parts. |                  |
|                 | • Ride a tricycle or even bicycle having supporting/training wheels. |                  |
The sociologists stressed the need for enhanced physical activities among children at an early age to reduce the chances and occurrences of obesity. According to them, outdoor playing condensed the use of technological gadgets like video games and computers, thereby escalating the physical engagements and movements of children (Roach, 2018).

It is also essential for the environment to be designed to aid the children in interaction with adults and other natural entities in order to learn and develop social skills. The sociologists who conducted the studies of children and their behavior proposed that opportunities for developing children’s social learning could be accomplished by putting children in pairs or small group to play and interact together either with the help of organized physical activities or simple interactions involving conversations (Roach, 2018).

**Different Outdoor Settings and Their Impacts on Child Learning**

Play equipment such as swings, slides, and picnic spots or cozy nooks can be utilized together to help children develop social skills and build large motors (muscles). Interaction between adults and children can also contribute to the development of social behaviors and learning in the outdoors (Lupu, 2013). The sizes of groups and adult to child ratio are deciding elements and are interdependent in the studies of outdoors where the teachers’ planning is also essential to facilitate the opportunities for manipulation of outdoor behavioral studies. It is the role of the teachers to establish and promote such environments that foster development, stimulate creative skills and encourage positive social behavior among the children (Lupu, 2013).

**Bullying Issues in the Outdoors**

Romberg discovered that preschool children’s outdoor play includes more interaction and fewer interruptions by the changing activities when compared to indoor playing which involves toys with general nature and appearance that require lesser or no interactions (Repo, 2014). He also had a concern for the problems associated with outdoor playing environments and one major problem which he addressed was bullying (Repo, 2014). Collins, McLeay and Adamson are professional sociologists who conducted research on bullying in 120 different schools with the help of questionnaires in which they targeted 1080 early age children and 1350 post early age children. The results showed that forty and thirty percent of the early age and post-early age children were being bullied in school respectively. Similarly, twenty-five and twenty-eight percent of the early age and post-early age children were shown to be having bullied respectively. The occurrences of bullying percentages with respect to grades are depicted in the following chart no1.
The results in the chart are consistent with the earlier studies that indicated a decrease in the levels of bullying as the children got older. The most commonly used bullying method was name-calling and a large number of children’s friends proposed that they were less likely to be bullied (Raptou, 2017). The researcher also found gender-related behaviors and preferences among children, for example, they tended to bully the children of the same gender. Boys were most probably bullied by someone older with lesser chances of reporting the act of bullying whereas girls tended to be bullied from the same gender with greater chances of exposing the incident. This study proposes that the engagement of adults in the outdoor activities and their proper guidance to children for fostering smooth group interactions and development of friendships can reduce the occurrences of bullying incidents.

**Relation of Outdoor Play Time Duration to Preschoolers’ Learning**

The increased pressure of academic work demands an increase in the duration of recess time as children cannot perform and deliver efficiently in the short time periods allocated for recesses (Rengel, 2014). This is becoming a progressive movement in many public pre-primary schools which centers around the idea of placing indoor activity times at odds with the outdoor activity times which can cast negative impacts on the physical activity performance levels of the children. The major idea behind this movement is that outdoor activities take away academic learning which has been completely discarded by modern researchers who show that the opposite is true. They also propose that outdoor play times have a positive correlation with the focus on
academic learning as children become more attentive after being involved in outdoor play activities as compared to when they have meager or no outdoor play activities (Rengel, 2014). The No Child Left Behind Act links the success of state standardized testing with the federal resource investment. It is evident that children can effectively refocus and become more attentive after outdoor play time. Controversy surrounds the issue as some skeptics propose that outdoor play time leads to interferences in the children’s ability to acquire an academic education (Hayes, 2015). Contrastingly, the supporters and proponents of outdoor play time claim that the development and learning are both maximized to greater levels by allocating time for outdoor play activities. Supporters are also of the view that young children need longer outdoor play breaks than older children or adults. Such conflicting views create an absurd environment which the sociologists and researchers are looking forward to exploring (Hayes, 2015).

Holmes et al. devised the notion of Development Appropriate Practice (Towns, 2013) which proposed that preschool children needed a balance between the child-initiated activities and the instructor-initiated activities in their daily educational routines. Holmes also noted the effects of outdoor activity durations on pre-school children’s level of attention and suggested that such durations of being either too short or too long, have negative impacts in both ways. His further studies showed that male children reach their peak levels of focus after 20 minutes of outdoor activity whereas the female children reach their peak levels after 10 minutes of outdoor play. According to the study (Towns, 2013) boys needed more time as they are generally less attentive than girls.

**Importance and Benefits of Greenery in the Outdoors**

Environmental sociologists and behaviorists explored a connection between the amount of greenery in the outdoor activity areas and the attention level development of young children (Zamani, 2016). Dyment and Bell discovered that cognitive development and learning is aided by the greening of play grounds as green environments are generally considered promoters of attentive functioning and increased concentration (Zamani, 2016). The finding supports the activities performed by preschoolers in playing fields as these fields are generally rich in grass and other plants depending upon the geographic and environmental conditions. The playing facilities lacking in green elements should be redesigned so that they can accumulate this beneficial factor for the development of learning skills among children.

Many research findings generalize the concept that preschoolers benefit from spending time outdoors which results in maximum benefits and appear to optimize children’s behavioral learning (Norling, 2015). Contemporary research on the positive impacts of preschoolers’ outdoor play is promising and an extended in-depth analysis is required on the perks of outdoor activities which alleviate many difficulties faced by children in their nourishment and physical development (Norling, 2015).
Physical Engagements versus Healthy Lifestyles

Angela T et al., conducted a study on the relationship between the physical engagements and a healthy lifestyle in which she discovered that increased energy expenditure results in the more efficient body working with improved physical, mental and social lifestyle (Olesen, et al., 2013). As she projected, the preschoolers’ outdoor play activities encompassed bright opportunities for social and mental learning experiences for the children. Angela also suggested that children socialize more when they become physically engaged with their peers and develop collaborative skills, physical skills, behavioral attitudes and traditional values. The most important and frequently observed constructive play behaviors of children are shown in the following histogram chart no 2.

Chart No 2: Constructive play behaviors of children

The Conventional Outdoor Play Areas

Traditional outdoor play areas are characterized by equipment generally made up of metal and wood. The equipment typically includes plays cape with slides, age-appropriate rock climbers, and swings, climbing ropes and walking paths. The philosophical base and design of such traditional playing areas are much limited when compared with the requirements of a widespread modern outdoors learning environment that takes physical as well as mental development of the children into consideration (Nah, 2016). The concept of contemporary playgrounds emerged in the quarter of the last century which was refined later by renaming it as the Designer playgrounds. The major objectives of these playgrounds were physical exercise and gross motor development of children.

Role of Adult Facilitation in Outdoor Learning

The concept of learning in outdoor environments with adult facilitated activities evolved after inspiration from urban children playing in the areas known as Adventure playgrounds. The
major feature of these outdoors was that they provided children with the opportunities to act freely in them without any restrictions and perform the activities which they might not be able to perform in other play facilities due to restrictions of resources or space. These adventure grounds possessed a structure where children could play in all types of weather as materials from several developmental areas were available. The play facilitators observed the children and their activities under intense supervision for supporting the playing without any interference in the ongoing children’s activities.

**Role of Surroundings on Children’s Development and Learning**

An approach on childhood development and playing was developed by Rudolph Steiner named as Waldorf Approach which considers young children as entities that consummate different things present in their surroundings and actively attempt to develop on their own (Shaari, 2016). The development of preschool children occurs primarily through practice and imitation within the surrounding environments where they are physically active. The theories of Behavior and Arousal both observe the reactions of children in response to the stimuli in their surroundings. Supporters of Behavior theory suggest that playing occurs in learned behavior whereas those of Arousal theory suggest that playing involves certain levels of interest and behavioral adjustments for maintaining arousal (Shaari, 2016).

**Theories Related to Children’s Outdoor Play**

The Expression Theory of Play and the Competence-Motivation Theory observe outdoor playing as a means for children to meet their emotional needs and express their physical abilities. The Expression Theory of Play proposes that kids are interested in outdoor activities in order to express themselves and gain confidence in their capabilities (De Grove, 2014). Outdoor play activities serve to facilitate the children gaining poise through creative interactions and achievements. The Competence-Motivation Theory is of the view that children perform outdoor activities to display their abilities of mastery and grip over environmental settings. These activities also aid the children in achieving competence and self-sufficiency in their playing behaviors and activity patterns. The positive motivation by teachers and parents to participate in outdoor activities can also play a critical role in helping children to develop self-expression and mastery which is an essential aspect of interacting in the social settings.

Preschool children outdoor play activities are effective sources of cognitive and motor development. Many sociological theorists consider playing as the efficient source of fostering general well-being and social understanding among children. These sociologists also contend that playing is as much important for children’s education as is the breathing for life. The researchers have established a relation between children’s learning behaviors and the perceptions of leisure based on genders which are summarized in the table no 2.
Table 2: relation between children’s learning behaviors and the perceptions of leisure based on genders

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Feminine</th>
<th>Masculine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom</td>
<td>Freedom is not linked with the perception of leisure</td>
<td>Freedom is closely linked with the perception of leisure</td>
</tr>
<tr>
<td>Social Evaluation</td>
<td>Social Evaluation is closely linked with the perception of leisure</td>
<td></td>
</tr>
<tr>
<td>Self Expression</td>
<td>Self-expression is closely linked with the perception of leisure</td>
<td>Self-expression is not closely linked with the perception of leisure</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>Enjoyment is closely linked with the perception of leisure</td>
<td></td>
</tr>
</tbody>
</table>

**Indoor Versus Outdoor**

Some behaviorists and sociological researchers believe that the relation between the indoor and outdoor space available to preschoolers is critical in determining their effects. For example, the increased amount of natural sunlight in the indoor environments can make the children feel a part of their natural environment, and the large windows can provide them with the opportunity to observe the outside greenery and other natural objects which helps to develop and maintain well-being (Kos, 2013). The different activities assigned specifically for indoors and outdoors can be deployed interchangeably, for example, the activities reserved for indoor learning environments may support behaviors and interactions in the outdoors too. Analytical research supports the idea of positive and constructive effects of the views of natural surroundings on the health of children (Kos, 2013).

**Impact of Natural Outdoor Environment on the Cognitive Behaviors of Children**

Wells conducted an analysis of natural environments in which he performed studies on a group of 17 children. He first examined the cognitive behaviors of those children by keeping them in settings having fewer natural elements after which he made them live in settings having more green space and natural objects (Jing, 2013). The purpose of the experimentation was to observe the impact of the natural sights on the children’s cognitive functioning. The results showed that children who experienced a greater amount of natural elements experienced significant positive
changes in their cognitive abilities and attention which supports the link between natural outdoors and the proper learning and development of preschoolers (Jing, 2013).

Also, Kaplan conducted an explorative study in which he surveyed several residential apartments regarding the natural views from the windows of those apartments. The views were rated by the respondents according to certain dominant features highlighted by Kaplan and by the comparisons with few photographs provided to them by him. The results of the survey showed that views of the natural surroundings had constructive and restorative effects on the satisfaction of residential respondents. The results also depicted the value and importance of connection to the natural environment even if is only by means of a window. Same is the case with preschoolers where the connection between indoors and outdoors is also chief supporter and promoter of ameliorated satisfaction levels among them.

**Interchangeability of Outdoors and Indoors**

The connection between indoors and outdoors is facilitated by bringing of natural elements like window gardens, pictorial representations of natural objects and dramatic playing equipment into the view of the preschoolers. It aids in developing the connection between the outdoor environments and indoor learning settings where children become amused and engaged with the feeling of outdoors while gaining learning experiences indoors. Another similar approach is the Reggio Emilia Approach that too advocates for the involvement of outdoor views or characteristics in the indoor educational settings.

Nabors et al observed that bringing toys and related items that are generally reserved for indoor classroom learning into outdoor environments can aid the children with development of varying creative abilities and can facilitate the responses of children which they generate while interacting with their surroundings. This also provides the instructors with an opportunity to assist the special needs of children and bestowing them with such playing facilities with which they are familiar and willing to join.

**General Assessment of Outdoors**

The quality of outdoor play areas for preschool children can be assessed using several measures which are specifically designed for this purpose and can also provide assistance in development and maintenance of safe outdoor learning environments. These measures also can highlight the areas which need revision in their designs for the purpose of preventing injury and reducing liability (Scrutton, 2014). The instruments related to safety measures address multiple issues related to the design and organization of outdoor play areas such as fall and playing zones, drainage systems, boundary fencing and ground surfacing. There are many qualitative tools which provide data for analyzing the quality of outdoors with resulting opportunities for positive change and adaption to the natural settings. Some tools which are effective for this scenario can be children journals, instructor reflective journals, and videotaping. The qualitative data gathered with the help of these tools can provide deep analysis of interactions and curricular
issues faced by children in the outdoors, in addition to addressing the concerns with the outdoor physical surroundings.

Role of the Quality of Outdoor Environment in Children’s Learning

There have been multiple comprehensive quality assessments conducted for determining the quality of outdoors for preschool children (Oqvist, 2018). A multidisciplinary team comprising of designers, children health experts and environmental safety experts collaborate to produce an all-inclusive assessment report that addresses all the major areas of any particular assessment scenario (Öqvist, 2018). The assessments show that majority of the injuries suffered by preschoolers in their educational settings occur in the outdoor play areas. There are standards for safety provided by safety assurance tools which result in minimizing the liability and chances of potential injury for the children as well as other actors in the outdoors.

Organizations for Guiding the Outdoor Engagements of Children

There are certain organizations working in different parts of the globe providing basic guidance along with health standards related to the behavioral styles of children in the outdoors for reducing the chances of physical injuries while playing (McEntire, 2013). The American Society for Testing and Materials commonly known as ASTM and the Consumer Product Safety Commission (CPSC) are two such organizations whose working and publications address multiple issues related to design, durability and installation of play equipment. They also deal with the provision of maintenance course of action for the equipment as well as the play surfaces. The publications are necessary components of the comprehensive assessment of the outdoor play environment and their effects on preschool children health and learning.

Risk Reduction for the Outdoor Play Environment

The measures focusing on the reduction of risk and promotion of developmental opportunities require a delicate balance so that the innovative learning of the children is not affected by precautionary measures (Little, 2013). Children learn from opportunities that help to build their creative skills as well as expand and boost their confidence levels. However, the risk reduction mechanisms should not be designed in such a way which can induce fear or apprehensions among children and can hinder their proper development and learning (Little, 2013). Children should be encouraged to participate in outdoor activities without any fear of falling or getting injured which can, as a result, promote courage and bravery among them.

Guidance and Training of Teachers and Caretakers

The teachers’ training is also of due importance but is usually ignored in the contemporary educational environments. Unluckily, little or no training sessions are available to many teachers for the purpose of effective exploitation of outdoor areas and the associated benefits on children’s health (Cure, 2018). The teachers and caretakers should support and encourage the
preschool children during their outdoor activities in the same fashion as they support the indoor activities. Many traditional teachers still observe the outdoors as merely a break time for providing the preschoolers with relaxation periods. They ignore the need of interaction between the children and only supervise them in behaving properly without giving them instructions for effective outdoor playing activities. Though the role of adults, as discussed earlier, is critical in policing the outdoor environments it is not the only role expected of them (Cure, 2018). The chart no3 shows the frequency of use by activity for preschool children.

*Chart 3: The frequency of use by activity for preschool children*

Play tutoring and play leadership are essential requirements which are expected from the teachers supervising the preschoolers. Teachers are familiarized with the requirements through proper training sessions and knowledge sharing interactions. There are still many needs related to effective teacher training which have gone unmet (Haywood-Bird, 2016). These needs chiefly include training for effective facilitation of verbal skills outdoors, developing interaction opportunities for smaller groups, scaffolding efficiently and lack of infringement from adults when the children are in conversations.

**Play Tutoring and Its Impacts**

The concept of Play Tutoring proposed by Dempsey and Frost is an important aspect related to the children’s interactions while they are in outdoor learning environments. This concept suggests that the outdoor interactions of children can be encouraged using indirect means such as providing them with more time and materials or using direct means such as respect and support for children’s initiatives and timely lessons from the adults (Tudorică, & Țîmpău, 2015). The play tutoring has been found to augment the quality and preference of the type of playing activity targeted by the children in the outdoor playing facilities. There is a vast literature available on the subject matter of play tutoring based in the home or educational settings.
An effective planning and the proper utilization of outdoors in the preschoolers’ learning environments are necessary to help them develop and nourish well in all fields along with attaining a sense of responsibility and well-being (E-Book Features Unrelated to Narrative May Hinder Preschooler Learning, 2017). The children also develop a sense of respect and care for their natural surroundings as they interact with them in a properly supervised manner. Some of the information gathered from research in this specific field of interest is well supported empirically while some are not as most of the studies have not been carried out in early care and educational environments with a special focus on preschool age group. These studies have also ignored the gender issues as they impact greatly on the behaviors and interactions of children while they are outdoors.

**Advantages of Planned Outdoor Activities**

The significance of planned outdoor playing activities and environments is supported by the theoretical work conducted in particular to this subject matter. Affordances and aesthetics are accepted to be contrasting when compared on the basis of individual preferences and perspectives (Andkjær, 2015). Movements and other physical actions performed by children in the outdoor environments have been well examined and explored because the impression of outdoors as a place for physical engagement and exertion is well established and generally accepted by all. While interactions of the children in an outdoor environment are examined, there is a need of additional examination and exploration of other interactions such as individual behaviors which they show while not in the outdoors, is also beneficial for developing a proper understanding of and tracing their behaviors.

The inclusion of behavior analysis of children with disabilities or partial impairments can aid in ameliorating the quality of the outdoors which results in improving the outdoor experiences of all children (Hosseinkhanzadeh, 2013). The teachers and caretakers can play their part by modify the interactive environment of children in a manner that helps to reduce negative implications faced by them. The modifications can effectively reduce the occurrences of bullying and also can facilitate inclusions more successfully.

**Conclusion**

In short, the outdoor playing areas of kindergartens have an unending diversity of interacting experiences and a feeling of timelessness which causes the children to get themselves free from many worries and relax their minds as well as bodies. The interaction of pre-school children with outdoor playing facilities is completely different for the interaction of young and teen-aged children; unlike which the pre-school community rates the outdoor settings by the level and quality of their interaction with such settings. They do not consider such settings as a platform or background for events and time-pass; rather they consider them as a stimulator and necessary constituent of their playing activities.
The importance of outdoor education which is commonly known as environmental education cannot be underestimated for the nourishment of pre-school children. This provides them with an opportunity of personal interaction with diverse natural outdoor settings where they can play and develop new skills. This interaction also ameliorates the emotional health of pre-school children as they get a chance to interact with a wide range of nature and human community which provides them with a sense of solitude and wonder.

The theories which are in favor of establishing a connection between indoors and outdoors namely the Montessori and Waldorf approaches are in existence for decades and have a major proposition that experiences of children in the natural environments augment their cognitive abilities and reduce the stress levels by regulating the blood flow. Many research and studies have been done on this topic, among which many are referenced, that supports the healthy and restorative effects of the natural views on children’s health. There is a lot of literature available which supports the therapeutic impacts of interaction with natural environment but unfortunately, none has focused on and completed with particular consideration to preschool age children. Gender issues are only identified but not addressed or explored within the same subject matter.

Longitudinal research has been carried out on children who have fostered in child-care centers as they can possibly better answer the queries related to the development of advantageous attitudes toward citizenship (Ribeiro, 2017). The shortcomings related to the duration of time spent in outdoor activities for preschoolers have not been explored in reference to the remedial effects of outdoor surroundings. Behaviorists support the advantages of both natural and synthesized elements and equipment in the outdoors and the introduction of natural elements in the indoor educational settings. Although the research about social implications of elements present in outdoor environments has been conducted with sufficient information and data available, still a more profound and persistent research about the impacts of these elements on outdoor learning would be valuable.

The critical study of the injuries and meticulousness in the execution of physical harm prevention strategies is beneficial due to the reason that majority of the injuries sustained by children occur in the outdoor play areas. Moreover, balanced research is required which takes both opportunities for learning of children and the safety precautions into the measure. The preschool learning settings can provide useful information and patterns while studying the role of safety measures in the outdoor interactions of children. The implications related to gender issues and socio-economic statuses also need to be examined and explored so that the policymakers and designers of children’s outdoor activity areas take all the precautions into consideration so that the proper outdoor learning and development of children is ensured.

There is a deficiency of proper teacher training about the beneficial role of natural outdoor environments and the value of outdoor activities which are direly required by the children for their social and emotional development along with cognitive capabilities and physical health endurance. The modern educational culture fosters lack of outdoor engagements on the part of instructors which need a revision so that they can facilitate and support inclusion and positive
learning experiences to augment children learning. The teachers, as well as parents, also need to expand their knowledge regarding harms of barriers in the way of outdoor activities of children and become familiarized with the perks of modern strategies which are followed in quality outdoor playing environments.

Qualitative methods that garner feedbacks from the children can also prove effective and beneficial for the studies related to the examination of their behaviors and related learning while in the outdoors. This can be achieved both by using efficient ways of collecting their input and observing them while they interact and play in the outdoor environment.

This research study concludes that there is a need of a more extensive and hands-on approach for conducting research for specific landscapes and their effects in the health of children which can authenticate the sparse research already done. Studies also show that outdoor activities are becoming progressively more imperative for the academic settings in civilizing the children attention levels, escalating physical engagement levels, lessening the chances of childhood obesity and serving as the source-point of social behavior development (Aziz, 2017). The study also reveals that outdoor playing produces positive effects on the skill development of young children as they socialize and interact with natural elements that influence their feelings, emotions, and behaviors. The study compares, explores and summarizes the research findings related to the subject matter. All the findings point to and converge at identical conclusions which support the outdoor playing activities as an essential element in the development and nourishment of children.

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