Developing Conducive Sustainable Outdoor Learning (CSOL): The Impact Of Natural Environment On Student's Ability

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Abstract:- Natural environments have a potential for encouraging students' physical health and psychological well being in schools. The green area are recognize to promote physical activity, which include a better designing the feature of landscaping for positive youth development. This paper explores how outdoor learning access to nature has two aims to sustainable this programs school gardens which improves the factors of psychological health and effective functioning between positive and negative behaviors and also to provide natural environment to enhance physical health, reduce health inequalities by supporting physical activities, directly advantage to growing body and also opportunities to encourage better nutrition for students.

Key-Words:- natural environment, physical health, psychological health, physical activity, students.

1 Introduction

Grounds of school is an umbrella condition used to related to a sort of changes happening that containing garden activities, naturalization, environment restoration, planting of tree and other corporative efforts to take back with nature to the school ground. School grounds, including their design and physical features, the rules that govern them, their role in school and community life, and the types of play and social interaction that they invite and support, become a site of purposeful intervention for promoting health. (Bell and Dyment 2008) Recently, In the US the increasingly sedentary lifestyles has contributed constant asthma, obesity, attention deficit/ hyperactivity disorder (ADHD), and lack of vitamin D, which have enhanced in commonness over the past few decades. Viewing television is one of the factors for obesity, deficient oral hygiene which connected to reduce physical activity. (McCurdy et al 2010) This paper in the table1 posits students need to access to nature in schools due to develop psychological and physical health. This proposed that decreased exposure to nature is likely to be disadvantages to health and wellbeing. (Maller et .al.2002, White 2004 cited in Johnson 2007) Natural environments may have the potential to improve capacity for attention, mental health, physical well-being and positive effect on mood reduce stress and restore. (McCurdy et al 2010)

Table1: The impact of natural environment on student's ability

<table>
<thead>
<tr>
<th>Benefit of nature</th>
<th>Physical health</th>
<th>Psychological health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance of positive behaviors</td>
<td>Reduce of abnormal behaviors</td>
<td>Enhance of health</td>
</tr>
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</table>

Greater feel of well being due to the physical environment encourage experience and emotion. [8] Psychological health and physical well being are improved in outdoor activities in green schools (5). National Longitudinal Study of Adolescent Health show that adolescent who feeling of report more linked to school indicate minor emotional distress levels, threat behavior and aggression. (Resnick et al., 1997 cited in Arbogat et al 2009) In addition, other organized health subjects on natural environments encouragement of physical activity. (Belland Dyment2006; Boldemann et al.2006) and to promote of food gardens to increase knowledge of health food choices and production of food. (Canaris 1995; Dillon et al.2003;Graham and Zidenberg-Cherr2005;Morris,Briggs and Zidenberg-Cherr2002 cited in Bell and Dyment 2008)green school stimulate using knowledge of growing crops to educate about present universal issues focusing
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2 Nature And Mental Health

Natural environments in schools are a significant role in developing psychological health. Green school ground promote more regular access to nature world, they position to create a significant of contribution to wellbeing in children and adults.(Dyment and Bell 2008) therefore, Landscape of Campus and building designer and aid school managers in way that may enhance satisfaction with the environment of school and student behavior and also reduce mental fatigue and stress levels.(Matsuoka 2010) Rohde and Kendle( 1994) indicated that viewing nature reduces anger, anxiety and interest and enhances sustain concentration and feeling of pleasure.(Leger 2003) Exposure to natural settings encourage feeling of pleasure and psychological excitement, and decrease negative effect. So, natural elements in environment most able of increasing psychological health should be free of stressors and include an aesthetically enjoyable. Referring to Ulrich et al. (1991) state that developments to psychological health and well being are as a result of decreasing stress.(Duvall 2011) Nature reduce stress and improve concentration and observation of spontaneous, therefore, association with the physical environment become more healthier, calmer and alert and less control to conflict. (Szczepanski 2009) The amount of nature in environment have strongest connection to reduce anxiety and depression in people's, particularly in children. (McCurdy et al 2010) Referring to Kellert (2002) suggested that promoted cognitive development, another researches recognized that psychological and well being are supported and motivated by direct and ongoing nature experience. (Johnson 2007) In additional, Nature experience is definitely essential to positive improvement, contributes wellbeing of the mind and can be used as an efficient psychotherapy for some abnormal behaviors, and contributes for young people.(Wolf 2003) and also, Natural environment has a positive effect in violence and levels of crime in United States.25,26)- (11) Moreover, Dyment (2004) indicated that naturalizing ground of school supplied safe area for students and had the influence of enhancing cooperation while decreasing vandalism and violence.(Johnson 2007) Greening in school ground can increase the safety by calming, softening surface of place, by supportive behavior and encouraging civil. (6)- (11) The potential of contact with nature is to restore a directed attention individual skills and have a stress- reducing by sustaining nontaxing attention, positive emotions, and restricting negative attitude.

Neurophysiological stimulation is restored to more levels of moderate, encouragement an overall well-being sense. (Haritig et al., 1991; Ulrich et al., 1991 cited in Matsuoka 2010) Table 2 indicates that the effect of natural environment on psychological health.

Table 2: The impact of natural environment on student's mental health.

<table>
<thead>
<tr>
<th>The element of student's mental health</th>
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</thead>
<tbody>
<tr>
<td>psychological health</td>
</tr>
<tr>
<td>feeling of pleasure</td>
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<tr>
<td>Organism's psychological characteristics</td>
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<tr>
<td>mental health</td>
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<td>wilderness therapy</td>
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<td>Psychological well being</td>
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<tr>
<td>Mood</td>
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<tr>
<td>sustains attention</td>
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<td>Restoring attention</td>
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<tr>
<td>cognitive functioning</td>
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<td>Behavioral interest</td>
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<tr>
<td>Privacy</td>
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<td>Creates harmony</td>
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<tr>
<td>Satisfaction</td>
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<tr>
<td>Calmer</td>
</tr>
<tr>
<td>Security</td>
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<tr>
<td>concentration</td>
</tr>
</tbody>
</table>

Enhanced

Reduced

Stressed

mental fatigue

depression

Anger

Anxiety

Irritability

anti- social

impulsive

distractible

violence

bullying,

vandalism

accident prone

crime

abnormal behavior

control to conflict

negative opinion

aesthetically enjoyable

Table 3: The impact of natural environment on student's health.

<table>
<thead>
<tr>
<th>The element of student's health</th>
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<tbody>
<tr>
<td>Enhanced</td>
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<tr>
<td>Physical health</td>
</tr>
<tr>
<td>Health fresh food</td>
</tr>
<tr>
<td>Opportunity for fresh air</td>
</tr>
<tr>
<td>Growth body</td>
</tr>
<tr>
<td>Healthy bones and muscles</td>
</tr>
<tr>
<td>Vitamin D</td>
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</tbody>
</table>

Reduced

Obesity

Diabetes

Type of cancer

Hypertension

Heart disease

Osteoporosis

Depression

Attention Deficit Hyperactivity Disorder (ADHD)

Blood pressure

Sickness

Asthma

Myopia

Pain issues

Health inequalities

Ultraviolet radiation

When enhancing shade in schools, student's exposures are reduced by harmful chemical and ultraviolet radiation. John (1998) states that preparing shade is a more efficient health than teenagers wear hats in. (Bell and Dyment 2008) furthermore, green environment have an opportunity for fresh air and physical activity(Szczepanski 2009). Connect with nature may decrease inequalities of health by stimulating physical activity and proposing protection from natural influence of poverty linked stress. (McCurdy et al
and also natural environments have always featured as key elements in health encouragement models and ideas. Therefore, new field of survey are emerging which take idea for benefit of nature to increase or restore health.(Leger 2003) consequently, access to nature may directly to advantage of health.(Cleland et al 2008 & Potwarka et al 2008 cited in McCurdy et al 2010) design of school ground is opinion that lawn and asphalt area provide model of surface for engaging in team sports and burning off excess energy, and are therefore greatest suited to encouraging physical activity. (Bell and Dymet 2008) Plants take part in organize of pediatric asthma remains indefinite. (Lovasi et al 2008 cited in McCurdy et al 2010).

Moreover, there is significant evidence when viewing nature such as flora and fauna enhanced psychological health, and the other factors such as safe walking area and well- lit, have built an significant role to decreasing injury and promoting physical activity. (Leger 2003) level of moderate physical activity, such as those obtained through walking and cycling be able to decrease the risk of overweight. (Frank & Niece 2005 cited in Dyment and Bell 2008) furthermore, animals have influenced to health for thousands of years, and also providing source of food, and they have been indicated to give to reducing blood pressure, stress and negligible health promotion.(Maller et al., 2002cited in Leger 2003) Anderson et al., 1992 demonstrated that the owner of PET had considerably decrease levels of blood pressure, cholesterol and triglyceride than non- owners. (Leger 2003) natural environments promote physical activity and amount the time spend in outdoor and also has the influence to reduce the risk of obesity and stress in students. (McCurdy et al 2010). Sedentary life style has enhanced to contribute childhood chronic condition as an example asthma, childhood obesity, attention deficit hyperactivity disorder (ADHD), lack of vitamin in the US over the past few decades. (McCurdy et al 2010) The connect of enhances physical activity with nature and development health, as well as the prevention of diabetes, cardiovascular infection, a variety of cancer type, hypertension, osteoporosis and obesity has been well recognized. (Warburton, Nicol, &Bredin, 2006 cited in Duvall 2011) Guide line of the US Department of Health and Human Services (DHHS) explain that regular outdoor activity helps make sustain healthy bones and muscles, decrease the risk of overweight and chronic diseases such as diabetes and cardiovascular disease, and sense of depression. (McCurdy et al 2010 & Szczepanski 2009& ). Outdoor activity is recognized to decrease the risk of untimely mortality, coronary heart disease, hypertension, colon cancer, depression and anxiety. (Pate et al cited in McCurdy et al 2010) Physical activity in nature may be connected with levels of vitamin D. The factors of Lifestyle integrated nutrient intake, physical activity, and duration of access to sunlight. In addition, outdoor activity in nature may also improving chronic pain issues, myopia asthma, type 2 diabetes and development of childhood decrease susceptibility to other disease. (McCurdy et al 2010) and to decrease systolic and diastolic blood. (Hansen et al 1991 cited in McCurdy et al 2010). Moreover, Cohert (2009) researched among 1249 teenager students in Singapore who spend more times in natural environment has a significantly less myopia.(McCurdy et al 2010) the other benefit of physical health by natural environment is the opportunity to encourage better nutrition through student involvement in activity of food gardening. (Bell and Dymet 2008) and the other factors is contact to healthy fresh food. (McCurdy et al 2010).

3 Challenges And Conclusion
This study adds to exploring the impact of natural environment on student's psychological and physical health where student able to experience nature. In addition, designing of landscape can influence the amount of opportunities to encourage students for outdoor activities, consequently; Landscape architects can also be evaluated to decide their thoughts on how school ground landscapes are designed. Features of landscaping have the potential to develop physical and mental health. Grounds of green school can play an important role in encouraging physical activities. Physical activities indicated to improve student's health suggests that contact with nature can reduce obesity, depression, diabetes, sickness, asthma and myopia, and also growing body of facts and enhance physical health and well being. In addition, access to natural elements encouraged student's emotional and cognitive well being as well as decreased abnormal behavior and anxiety, violence, anger, mental fatigue. In summary natural environments are a potential to development physical and psychological health.

References:


