Introduction

Youth who are born between 1995 to 2003 is known as Gen Z. Gen Z is the first generation of the 21st century and was born from the mid of the 1990s to the late 2000s (McCrindle and Wolfinger, 2008: Grail Research, 2011: Sladek and Grabinger, 2014). In order to support the healthy development of youth, they need to access the outdoor environment. Participation in leisure activities in public spaces is known to be an important determinant of health and well-being. Leisure activities among youth are diverse and play an important role in the forming of self-perceptions, forming an identity, providing interaction with peers, health and problem behaviour.

However, most of them prefer to stay indoor during their leisure time and then afflict themselves to sedentary behaviour (Biddle et al., 2009). This is because the electronic entertainments being part of urban life among Gen Z and most of them prefer to amuse and immerse themselves in electronic devices rather than enjoy outdoor activities. The decline in leisure activities and practicing sedentary behaviour leads them to non-communicable disease (NCD) and also increase the issues of overweight and obesity among youth (Gonçalves et al., 2012; Micali et al., 2014). Regular physical activity, recreational activities and healthy eating are the options for urban residents to prevent the chronic disease.

Leisure is essential to humans to achieve a healthy lifestyle. It is about time spent in voluntary activities which also referred to as ‘free time’. Leisure activities are freely chosen and ‘non-obligatory’ in nature that could be divided into four categories: sport, media-related activities such as watching television, listening to music, play computer games and reading, performance activities like music, dance and drama and also community service activities such as volunteer work (Byrne et al., 2006). In other words, leisure means selected activities freely and voluntarily, carried out comfortably without being tied to any conditions and coercion such as time spent during school sessions, household chores and paid employment.
Provision of the recreational park that follows the contemporary design could promote and attract outdoor leisure activities among Gen Z. However, there are several factors to be considered such as their needs in recreational park in terms of facilities and attractive design. Gen Z needs places that are socially attractive to meet and ‘hang out’ with friends without interference. The places should be physically attractive, clean, comfortable and peaceful (Ward Thompson, 2008). The attributes of parks, including safety, aesthetics, amenities, maintenance and proximity are important and correlates with the park use and physical activity in the urban area (McCormack et al., 2010). In order to produce a good recreational park for Gen Z, the planning and design aspects should be taken into account. Good planning and management of the quality and accessibility in the park positively affect the level of youth’s utilization of the space. Therefore, to ensure satisfaction, design criteria must suit according to their leisure activities, so that, the best recreational park can be planned.

The aim of this study is to review the youth’s pattern of activity and needs of the outdoor leisure time. This paper reviews the parameters based on four fields of study. Most of the current research on Gen Z focuses on the aspect of workspace, business, and personality. Therefore, there is a need to investigate the criteria of outdoor space needs. From this review, their needs in relation to growth, development based on Maslow’s theory can be revealed.

Methods
The reviews have classified four fields of study: (1) Epidemiological studies, (2) Lifestyle pattern, (3) Leisure and recreation, (4) Landscape and environmental planning. The analysis of the papers reviewed was categorized into two types: (1) leisure time behaviour pattern and (2) needs of outdoor space. The leisure time behavior pattern consists of the type of activities (active and passive) and location of activities (indoor and outdoor). The needs of Gen Z were identified based on the places that they prefer for leisure time activity. A wide range of electronic databases was covered in the review, including Science Direct, Proquest, SCOPUS, SpringerLink and Google Scholar portal. The remaining studies were also obtained from proceeding papers, journals, theses, governmental reports, and books.

More than 60 papers about leisure time behaviours and Gen Zs’ lifestyle were identified, however, only 40 papers were accepted into the final stage of the review after considering the years of research. Only papers that covered the period from 2008 to 2016 were accepted because the first generation of Gen Z emerged in 2008 at the age of 15. 40 articles were extracted, summarized and tabulated which containing information such as field, authors and parameters studied.
Findings

Table 1: Summary of studies on leisure time behaviour and needs of Gen Z

<table>
<thead>
<tr>
<th>Field</th>
<th>Authors</th>
<th>Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epidemiologic Study</td>
<td>Micali et al. (2014); Gonçalves et al. (2012); Chorin et al. (2015); Apriana et al. (2016); Wickrama et al. (2016); Zahir Izuan Azhar et al. (2016); Ahmad Ali Zainuddin et al. (2016); Siti Nor Yaacob et al. (2009); Majid Abdul Hazreen al. (2014)</td>
<td>• Physiology - Body mass index (BMI), genetic factors, unhealthy diets, blood pressure, sleep quality, obesity and overweight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Psychology - Level of stress</td>
</tr>
<tr>
<td>Lifestyle Pattern</td>
<td>Qidwai, Ishaque et al. (2010); Thomée et al. (2015); Sedighi et al. (2016); Mohamad Idham et al. (2014); Teo et al. (2014); Md Sham et al. (2015); Töröcsik et al. (2014); Biddle et al. (2009); Wight et al. (2009); Abdullah et al. (2015); Chin and Mohd Nasir (2009)</td>
<td>• Type of activity - Computer gaming addiction, spend time indoor more than outdoor, entertainment effect, sedentary behaviour, widespread use of internet and gadget, eating behaviour and symptom</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Effect towards psychology - Personal values and attitudes</td>
</tr>
<tr>
<td>Leisure and Recreation</td>
<td>Coll et al. (2014); Silva et al. (2016); Mohamed (2015); Zulkia et al. (2014); Drygas et al. (2008); Yan &amp; Voorhees (2014); Rada, C. (2015); Amin et al. (2012); Rocha et al. (2011); Duzenli et al. (2010)</td>
<td>• Indoor space – Addiction of passive activities, influencing factor and effect towards youth health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Outdoor space – Level of physical activity, physiological and mental health level, time trends and time spend, location of activities</td>
</tr>
<tr>
<td>Landscape and Environmental Planning</td>
<td>Ries et al. (2009); Kaczynski et al. (2008); Danis et al. (2014); Larson et al. (2015); Rosilawati Zainol (2011); Abd-latif et al. (2011); Su et al. (2014); Ries, Yan, &amp; Voorhees (2011); Ngesan et al. (2013); Latifiyan &amp; Salavati (2015); Cubukcu et al. (2010)</td>
<td>• Physical environments – Park quality is associated with park use, facilities should be given the priority, aesthetic quality, proximity aspect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Social environments – Safety and security aspects, promotes the social interaction, influencing factor by other park users</td>
</tr>
</tbody>
</table>

40 studies of Gen Z leisure time behaviour of the four fields were summarized in Table 1. Looking at the summary, it seems that the four parameters emerged from the findings in the fields. Firstly, most studies found that the lifestyle pattern affects youth’s health, physiologically and psychologically, such as growth development (Micali et al., 2014), body mass index (Chorin et al., 2015) and stress level (Yaacob et al., 2009). Habits of sedentary activities (Biddle et al., 2009; Drygas et al., 2008), overeating (Micali et al., 2014) and unhealthy diet (Gonçalves et al., 2012) were among the factors of increasing the number of obesity among youth. In terms of activity pattern, a majority of the papers revealed that passive activities such as watching television, use of computer and gadget a listening to music feature predominantly in young people’s leisure activities (Coll et al., 2014; Thomée et al., 2015). Increasing industrial development, mass media, and cultural changes were among the factors
of increasing inactivity among Gen Z (Sedighi et al., 2016). Various studies agreed that physical activity has important health benefits in Gen Z such as reduce the risk of unhealthy weight and chronic disease (Teo et al., 2014; Zulkia et al., 2014). Additionally, studies on youth’s place preferences indicate that city centre, home environment, school environment and City Park were outdoor places they use during leisure time (Duzenli et al., 2010). In the fields of landscape and environmental design, the findings were more focused on park characteristics, as examples, features, safety and accessibility. It was a major factor that influence youth to participate the outdoor recreation (Abd-latif et al., 2011).

This review research posits that the needs of Gen Z should be prioritized to provide an outdoor space that satisfies their desire. The needs of Gen Z can be categorized based on Abraham Maslow’s model of human needs; physiological (food, liquid, sleep, oxygen), safety-security (level of physical comfort), affection belonging (give and receive love), esteem (needs for achievement), self-actualization (desire to become more and more) and cognitive aesthetic (appreciate beauty). This paper found that every generation has the same aspect of needs, but, their desire varies and change according to time and trends. They need places to be alone, give freedom and provide activities, promote social interaction and places that offer safety and accessibility. The need for the passive environment is also important that leads to a sense of relaxation. Besides, open space should be designed based on the needs of the current generation to foster outdoor leisure activities. Features, condition, accessibility, safety and aesthetic were among the characteristics that should be considered while designing the outdoor space for Gen Z in order to match their needs for their satisfaction.

Conclusion
This literature review is not exhaustive. Studies on the leisure time behaviour and needs of youth had started since before the 1960s. Nonetheless, less research has focused on the Gen Z’s needs of outdoor space and more are related to the field of business, education, information and communications technology and others. A number of studies prove that the needs of youth depend on their lifestyle pattern. Gen Z is spending time indoors more than the outdoors as compared to the previous generation. Therefore, it is important to create spaces with appropriate characteristics for Gen Z to utilize and spend their free time. Future studies on the Gen Zs’ should look into aspects space preferences and the current quality of recreational space so, the outcome of the topic discuss may be more precise.
References


