Secondary school students’ perspectives and use of three school grounds of varying size, content and design

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A R T I C L E   I N F O

Keywords:
Adolescents
Children's perspectives
Green space
Landscape architecture
Schoolyard
Teenagers

A B S T R A C T

School grounds can have multiple values, and especially sufficient size, green elements, variation, integrated design and participatory development have been described as positive qualities. However, many studies have focused on pre-school and primary school grounds, while less is known about school grounds for adolescents. This study explored how secondary school students experience and use school grounds of varying size, content and design. The study included one class in year 8 (aged 14–15) at each of three schools in southern Sweden. A questionnaire with mainly open questions was distributed, followed by both individual interviews and walking interviews with four students from each class. The results show that school grounds were appreciated, but also that many chose to stay indoors. Large surface area and varied content, with ball courts, greenery, seating and multifunctional equipment, were valued, but a school ground design with integrated and pleasant settings, allowing socialising and activities, particularly support use by secondary school students.

1. Introduction

School grounds are places for everyday play that can provide multiple benefits for children, supporting their physical and mental health, learning and development (O’Brien and Murray, 2007; Ridgers et al., 2007; Dyment and Bell, 2008; Chawla et al., 2014). Their design and properties vary much but have impact on children’s activities (Samborski, 2010) and signal social norms and views (Dyment and Bell, 2007). One aspect which has not been sufficiently considered is how the landscape architecture of school grounds can be adapted to children’s own perspectives (Jansson et al., 2014).

Studies of school ground qualities and functions for children at preschools and primary schools (e.g. Boldemann et al., 2006; Dyment and Bell, 2007; Paechter and Clark, 2007; Samborski, 2010; Märtensson et al., 2014; Jansson et al., 2014; Pagels et al., 2014) have identified school ground size, varied and green content, designs of combined settings and inclusive participatory development as valuable qualities for play, physical activity and health. Much of these qualities, found in a number of research studies of school outdoor areas, have been theorised into OPEC (Outdoor Play Environment Categories) by Märtensson (2013). OPEC points at three dimensions: size (“total size of the outdoor area”), content (“proportion of surfaces with trees, shrubby or hilly terrain”) and design (form) (“integration between vegetation, open areas and play areas”) (Märtensson, 2013).

Play in areas with a natural character has been found to be more imaginative, varied, gender-mixed and creative than in other settings (O’Brien and Murray, 2007; Lucas and Dyment, 2010; Samborski, 2010; Jansson et al., 2014; Märtensson et al., 2014). Green school grounds are also liked by children (Dyment and Bell, 2007; Lucas and Dyment, 2010) and support them in finding peace from stress, in building social relationships (Chawla et al., 2014) and in physical activity (Ridgers et al., 2007; Märtensson et al., 2014). However, the activity level diminishes with age and is also lower among girls than boys (Pagels et al., 2014) who may both be affected by cultural views of suitable activities for them and by the fact that facilities like sport courts, attracting mainly boys, often dominate school grounds (Paechter and Clark, 2007; Pawlowski et al., 2015). According to children in grade 4 (aged 10–11), lack of space and equipment, weather conditions, conflicts and use of electronic devices limit school ground use, with girls in particular requesting more secluded places to ‘hang out’ (Pawlowski et al., 2014).

There is little legislation that guarantees access to high quality school grounds. The Swedish Planning and Building Act gives poor direction, stating only that schools should have “sufficiently large open surfaces for play and being out of doors in or close to the building” (SFS, 2010:900). A connected general recommendation from 2015 (BFS, 2015:1 FRI 1) specifies that school grounds should be large enough to offer varied terrain and vegetation without risking too much wear and placed so that children up to grade 6 (aged 12–13) can access them directly from the school building, while for grades 7–9 they should be close and easily accessible. The Swedish Board of Housing, Building and

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https://doi.org/10.1016/j.ufug.2018.01.015
Received 30 March 2017; Received in revised form 12 January 2018; Accepted 15 January 2018
Available online 31 January 2018
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Planning recommends a school ground allocation of 30 m$^2$ per student (40 m$^2$ at pre-schools) and a minimum total area of 3000 m$^2$ (Boverket, 2015). To counteract a negative trend for vague municipal responsibilities and shrinking, low-quality or even non-existent school grounds, it is important to increase knowledge of their qualities.

Compared with school grounds for younger children, less is known about qualities that suit secondary school students (Rickinson and Sanders, 2005; Ridgers et al., 2012). The landscape architecture of secondary school grounds therefore risks being neglected or based on assumptions on what adolescents need or prefer. The reported high importance of environments that facilitate socialising and a decrease in students’ rating of both indoor and outdoor school areas from 12 to 16 years (Edgerton et al., 2011) indicate that current school environments are less fit for older students.

1.1. School grounds for adolescents

Children’s uses and preferences for outdoor areas change with age, but this has not been much concerned in the landscape architecture of school grounds. From early adolescence, social activities become increasingly in focus in school grounds (Coplan et al., 2014), with more games and socialising, while younger children are more engaged in pretend play, locomotor play and exploring their surroundings (Baines and Blatchford, 2011). Before the age of 11, most children appear to