

Students Sense of Community and Social Behavior in University Outdoor Campus Environments

By

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I hope that you find it worthwhile and helpful. Enjoy the read!

Abstract:

Campus environments and open spaces play a particularly important role in developing sense of community. It is important to study the impact of campus landscape on how people use such spaces to see how this may affect students' sense of community. The campus is the total physical environment, including all buildings and outdoor landscape spaces that connect buildings together. This combination of buildings and outdoor landscape spaces between building functions bears a distinctive identity across different campus designs. The user's perception of the physical environment is perhaps the most important factor to make a place outstanding and how this impacts the quality and effectiveness of campuses landscape space in terms of students' behavior.

The thesis is based on the constructs of human-environment interaction theory, which implies that a positive relationship exists between an individual's physical environment and his consequent behavior. Human-environment interaction theory examines how an environment can encourage specific behaviors to occur, and how particular environments can be shaped to achieve desired behaviors. This thesis examines students' environment interaction and the impact of physical characteristics of the environment on the university students.

The purpose of the study is to investigate university campus environment and how it would particularly affect students' sense of community (SSOC) and behavior. This study examines different aspects of students' college life to identify the factors that contribute to students' overall sense of campus community. The case study focuses on two university campuses, the AUC new campus, one of the largest private universities in Egypt, and the Cairo University campus, as it represents one of the largest public universities in Egypt. The study utilized a primary data set from visual-questionnaires distributed over 300 students. The findings indicate that a student's sense of community is closely associated with their feelings of being cared about or being treated in a caring way, feelings of being valued as an individual and being accepted as a part of community. The most negative influence on students' sense of community comes from their feelings of loneliness on campus. The results suggest that physical space matters and that there is a need for investment in campus landscape designs and the programs of the university to positively impact a sense of community on campus.

Key Words: Campus built environment, sense of community, students' behavior, campus landscape

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QUESTIONNAIRE FOR STUDYING AUC NEW CAMPUS BUILT ENVIRONMENT AND DESIGN ELEMENTS

QUESTIONNAIRE FOR STUDYING AUC NEW CAMPUS BUILT ENVIRONMENT AND DESIGN ELEMENTS

CHAPTER ONE
INTRODUCTION

1.1 Introduction:

Colleges and universities are dependent on the community in which they are located (Dober, 1992). Colleges and universities are becoming significant resources, in the same way as health care, science and technology facility for surrounding communities as they influence people's lives by affording several activities such as : social, economic, and cultural. It is important to study the impact of campus landscape on how people use such spaces (Huan Yang, 2009). Most of the designers in our society when designing campuses' open spaces don't take into consideration the importance of how this would serve the society needs , therefore the students may behave in unexpected way contrary o designers' expectations.

In this research the design process of the university main campuses' open spaces will be studied from diverse perspectives and how these would affect students' sense of community and accordingly their behavior. In order to achieve a successful design by creating a comfort environment, the main principles of the design process of the open spaces in the campuses and the role of landscaping process will be studied. Moreover, exploring the importance of themes such as landscape, architecture, place-making and sustainability within university development in order to meet the needs of the students and how this may affect the students' behavior and sense of community (Coulson, J., Roberts, P., & Taylor, I. 2011).

Campus physical development plan is a powerful method to shaping campus life, particularly among students to support a sustainable living community. This chapter provides a review and examination of the major concepts relevant to the study of campuses' environment. Specifically, from the research questions the investigation extends to the analytical models developed and the measurement tools applied to study campuses. The objectives of the study are identified. A brief description of the conceptual model and its methodological aspects is presented.

1.2 Background and Overview:

Universities have been studied as communities (Cruz.F.F1987). For example, as Angell described one of the most essential characteristics of university campuses as the "mental unity" of life on campus. He concluded that each student "lives in a particular social situation which gives rise to common interests and problems" which are "satisfied or worked out by the entire group, not as separate individuals, but as functioning members of the organic whole."

Also as Toma & Kezar (1999) stated "It is hard to find such a homogeneous campus environment in education institutions, the idea of the college or university as campus – an actual place where academic life and community life assume something approaching equal importance – retains a favored status" (Toma & Kezar, 1999). Meikle john (1969) called a university campus "a place, a group, a comradeship of those who follow learning as their guide and who welcome others in the same pursuit." The students go to the university looking for more than academic

education. “They yearn for a sense of belonging, and the lack of it may prompt some to abandon either their institutions – or worse – their education” (Brazzell, 2001).

In 1986 a significant step was taken by David McMillan and David Chavis with the release of their theory of Sense of Community and Sense of Community Index. Among published studies of sense of community of university students, the community studied has always been the institution as a whole (McMillan, D.W., & Chavis, D.M. 1986). McMillan and Chavis used “the university” to symbolize how definitional the elements of sense of community can apply to an actual community. A variety of positive outcomes have been found for those who feel a sense of community in relation to the environment (Royal, M.A. & Rossi, R.J. 1996). An important research question is why and how campus environment affect students’ sense of community and the way they behave. According to this issue it was one of the major reasons for undertaking this study.

In order to understand why students act with certain behavior in relation to campus environment within the university, campus built environment and open spaces design should be studied. In this manner, it is important to mention that as Martin Pearce (2001, p:32) suggests that, "education is an invisible substance; architecture allows it to become material", thereby affirming the role of architecture in education. The “Educational Campus” is a concept that was born in 2005, with the design of the new Campus of the University of Salamanca, in Spain, and published in the Review “ Programme on Educational Building” (Campos, P. 2005). A first approach to the concept University Architecture has the main aim of affecting human behavior, encouraging visual comfort and psychological wellbeing. As suggested by the German professor Rudolph Arnheim : “The Sensualist philosophers have reminded us forcefully that nothing is in the intellect which was not previously in the senses” (Arnheim, R. 1962). “Educational Campus” involves four spatial scales (Campos, P. 2005):

- The first scale frames the relation between University and City.
- The second scale focuses on the campus environment made up of built volumes and open spaces. Campus expresses metaphorically the unexpected character of modern Education (Turner, Paul Venable 1984).
- The third scale applies to the building, as an independent piece of architecture.
- The fourth and final scale is the classroom. In an effort to study students’ behavior and sense of community we are going to focus on the second scale which is, as described above, a study of campus built environment and open spaces.

Using McMillan and Chavis theory (1986), the research will compare two campus environments in terms of open spaces and campus built environment and how this will affect sense of community. First, Cairo university which is considered a large, prestigious public university was founded on December 21, 1908, as the result of an effort to establish a national center for educational thought. Cairo University was founded as an European inspired civil university, in contradiction to the religious university of al-Azhar, and became the central model for other state universities¹. Number of national leaders and pioneers describe the establishment of the Egyptian University as a “lighthouse” of liberal thoughts and as a basis for academic revival in order to deal with the international scientific advancement.

Second, The American University in Cairo (AUC) which is considered an independent, liberal arts university located in Cairo, Egypt. The University provides American liberal arts education to Egyptian students and students from other countries. The university provides American style learning programs at the undergraduate, graduate and professional levels, also with an extensive continuing education program. The university supports professional education, and learning².

Choosing the case studies was based on the following criteria:

- 1- The Universities are located in Greater Cairo, where few studies were conducted via this issue in Egypt.
- 2- In the heart of Giza, Cairo University is located, as European-inspired civil university, which is considered a large, prestigious public university in Egypt. And the AUC new Campus, as one of the largest private universities in Egypt, is located in 5th settlement, which is considered a new developed district, where the principles of sustainability are needed to be applied.
- 3- The research is concerned with educational buildings, where students and staff stay for about half of their time and need better environment to improve their productivity, social life and sense of community.

1.3 Environmental Psychology within University Campus:

The field of environmental psychology is a branch of psychology that is defined as “the study of the interface between human behavior and the sociophysical environment” Stokols, D. (1978). It is clearly that environmental psychologist’s intent to identify how the environment affects people, and vice versa especially with the increasing interest of environmental sustainability and how humans affect, and are affected by, natural environments. This is reflected in environmental

¹ http://en.wikipedia.org/wiki/Cairo_University

² http://en.wikipedia.org/wiki/American_University_in_Cairo

work that has been concerned with both built and natural environments (Stokols, 1995; Sundstrom, Bell, Busby, & Aasmus, 1996).

In order to understand the place, its meaning, and how its environment affects our behavior, it is important to examine how we relate to our environments through our behaviors and attitudes and to examine the role they play in our lives. Our surroundings shape how we live and how we feel (Lew, E. 2006). The environment provides many services for human beings as ecologists mentioned, (Daily, 1997).

We might not find the reason why we chose certain place than another, why by just being there, we feel good and being relaxed, why this place, whether it is place of natural beauty or not, all these questions motivate us to consider how much our surroundings affect us. Each place that comes to mind represents a mix of impressions founded in both objective and subjective qualities. And just as places can make us feel good, they can also have the opposite effect. This makes us wonder about our feelings and how they are or can be attached to the physical form of a place, (Erika Lew, 2006).

The environment of the campus and the link between the environment and human behavior has long been of interest to the field of environment and behavior studies. The works in this field whether theoretical or practical is aimed to improve the quality of life of the community. The concepts, theories, and methods about the links between the built environment and personal health in campus planning are used by urban planners as a foundation for a research about the relationship between the built environment and students' sense of community (SSOC).

The environment within which students in university campuses interact is essential to their quality of life and health. We don't have any doubt about the importance of the campus landscape to students, faculty, and staff on campus. However, in the past, they don't pay any attention to the design of campus landscape spaces, even though campus landscape spaces are more than the "faces" of colleges, (Huan Yang, 2009). As more universities start in the process of expanding and redesigning their landscape spaces, the design of campus landscape space has gained more recognition in the recent twenty years. One of the significant changes in the campus landscape design process is taking into account the users' needs, (Huan Yang, 2009).

1.4 Aim of Research:

The aim of the research is to outline the potential contributions from the field of environment behavior studies (EBS) towards the exploration of relationship between the built environment and physical activity via studying various design elements and landscape spaces in university campuses and how this will affect students' sense of community and behavior. The thesis begins with a background section that defines key terms and describes how the interest in this topic has

evolved within the field of campus planning and its traditional focus on student behavior. The next section discusses the challenges associated with measuring characteristics of the built environment and student behavior. The research then turns back to the theories utilized to assess the link between the built environment and student behavior, and conclude with a discussion on the issues that must be addressed in exploring the relationship between the built environment and SSOC.

1.5 Research Questions and Objectives:

Some campuses appear to be more successful than others in increasing the interaction of students with surrounding environment thus affecting their attitude. The identification and analysis of design elements and environment of campuses are main steps in evaluating their effect on students' attitude and behavior. Because of the early campus planners who focused their planning on the design of buildings, with limited attention to the importance of surrounding open space, there were inappropriate connection between students and surrounding environment. Coulson, J., Roberts, P., & Taylor, I. (2011).

This study investigates the relationships between the campuses' design elements and students' interaction within campus environment, and how this may affect their behavior.

In particular, the questions this research seeks to answer are:

1. How are the open space design elements perceived on campus affecting students' behavior?
2. Is there a relationship between the campus outdoor environment and students' attitude and sense of community?
3. How is the outdoor campus design of both universities different in their effect on students' sense of community?

This research intends to study the design elements of campuses and analyze the effect of these elements on students' attitudes .In such regard the research objectives are as follows:

1. To study the effect of campuses' design elements and surrounding environment on students' behavior.
2. To study the factors of sense of community and compare how these factors affect students behavior within both universities.
3. To study campus's design elements and outdoor environment and compare their influence on students' behavior and sense of community between AUC and Cairo University.