

Point-of-Decision Design (PODD) to Support Healthy Behaviors in the College Campuses

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Abstract : Behavior choices during college years can establish the pattern of lifelong healthy living. Nearly 1/3rd of American college students are either overweight ($25 < \text{BMI} < 30$) or obese ($\text{BMI} > 30$). In addition, overweight/obesity contributes to depression, which is a rising epidemic among college students, affecting academic performance and college drop-out rates. Overweight and obesity result in an imbalance of energy consumption (diet) and energy expenditure (physical activity). Overweight/obesity is a significant contributor to heart disease, diabetes, stroke, physical disabilities and some cancers, which are the leading causes of death and disease in the US. There has been a significant increase in obesity and obesity-related disorders such as type 2 diabetes, hypertension, and dyslipidemia among people in their teens and 20s. Historically, the evidence-based interventions for obesity prevention focused on changing the health behavior at the individual level and aimed at increasing awareness and educating people about nutrition and physical activity. However, it became evident that the environmental context of where people live, work and learn was interdependent to healthy behavior change. As a result, a comprehensive approach was required to include altering the social and built environment to support healthy living. College campus provides opportunities to support lifestyle behavior and form a health-promoting culture based on some key point of decisions such as stairs/ elevator, walk/ bike/ car, high-caloric and fast foods/balanced and nutrient-rich foods etc. At each point of decision, design, can help/hinder the healthier choice. For example, stair well design and motivational signage support physical activity; grocery store/market proximity influence healthy eating etc. There is a need to collate the vast information that is in planning and public health domains on a range of successful point of decision prompts, and translate it into architectural guidelines that help define the edge condition for critical point of decision prompts. This research study aims to address healthy behaviors through the built environment with the questions, how can we make the healthy choice an easy choice through the design of critical point of decision prompts? Our hypothesis is that well-designed point of decision prompts in the built environment of college campuses can promote healthier choices by students, which can directly impact mental and physical health related to obesity. This presentation will introduce a combined health and architectural framework aimed to influence healthy behaviors through design applied for college campuses. The premise behind developing our concept, point-of-decision design (PODD), is healthy decision-making can be built into, or afforded by our physical environments. Using effective design intervention strategies at these 'points-of-decision' on college campuses to make the healthy decision the default decision can be instrumental in positively impacting health at the population level. With our model, we aim to advance health research by utilizing point-of-decision design to impact student health via core sectors of influences within college settings, such as campus facilities and transportation. We will demonstrate how these domains influence patterns/trends in healthy eating and active living behaviors among students. how these domains influence patterns/trends in healthy eating and active living behaviors among students.

Keywords : architecture and health promotion, college campus, design strategies, health in built environment

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