



How Students Study in Wireless Coffee Shops: Personal Learning Environments

Nathan Moore & Dr. Newton D'Souza, Department of Architectural Studies, University of Missouri-Columbia

Introduction

What are Personal Learning Environments?

Personal Learning Environments, or PLE, are internet or software tools used by learners to take control of and manage their own learning, such as wiki, blogs, or even social networking sites such as Facebook. Our study was aimed at identifying environmental behavior attributes that facilitate PLE.

Objectives

- 1) Identify the intensity and sequence of student learning activities, such as using Facebook or Email before starting their studies.
- 2) Identify the important physical and behavior attributes.
- 3) Time spent on student learning activities.
- 4) Understanding the PLE process.

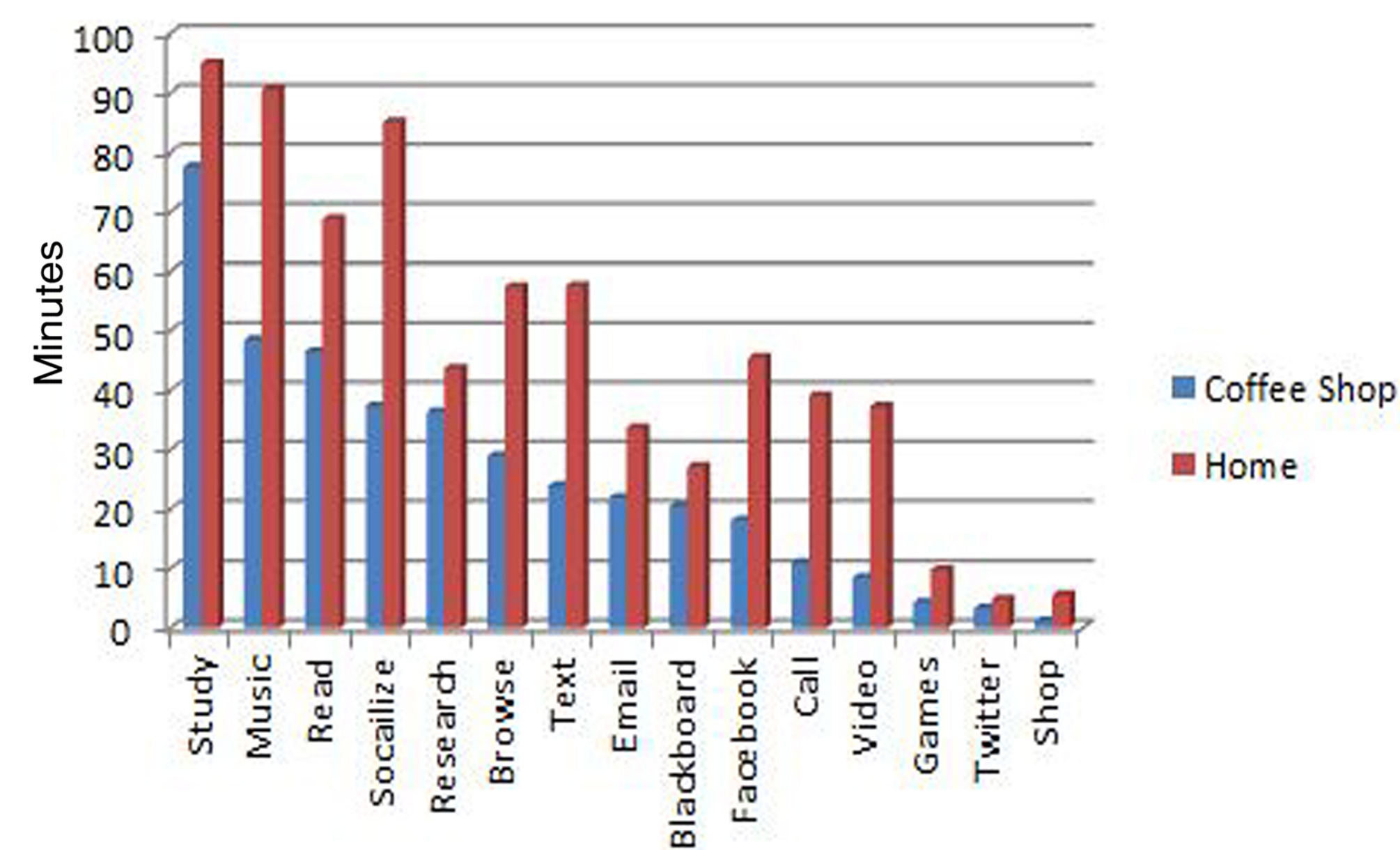
Method

The Study took place in four local coffee shops near to the University of Missouri-Columbia campus.

- 1) Surveys were collected to understand the intensity and sequence of student learning activities.
- 2) Interviews (n=51) were conducted to understand physical and behavior attributes of PLE.
- 3) Surveys (n=98) were collected to measure time spent per day of similar PLE at coffee shops compared to time spend at home.
- 4) Students used cognitive maps to display individual student learning environments.

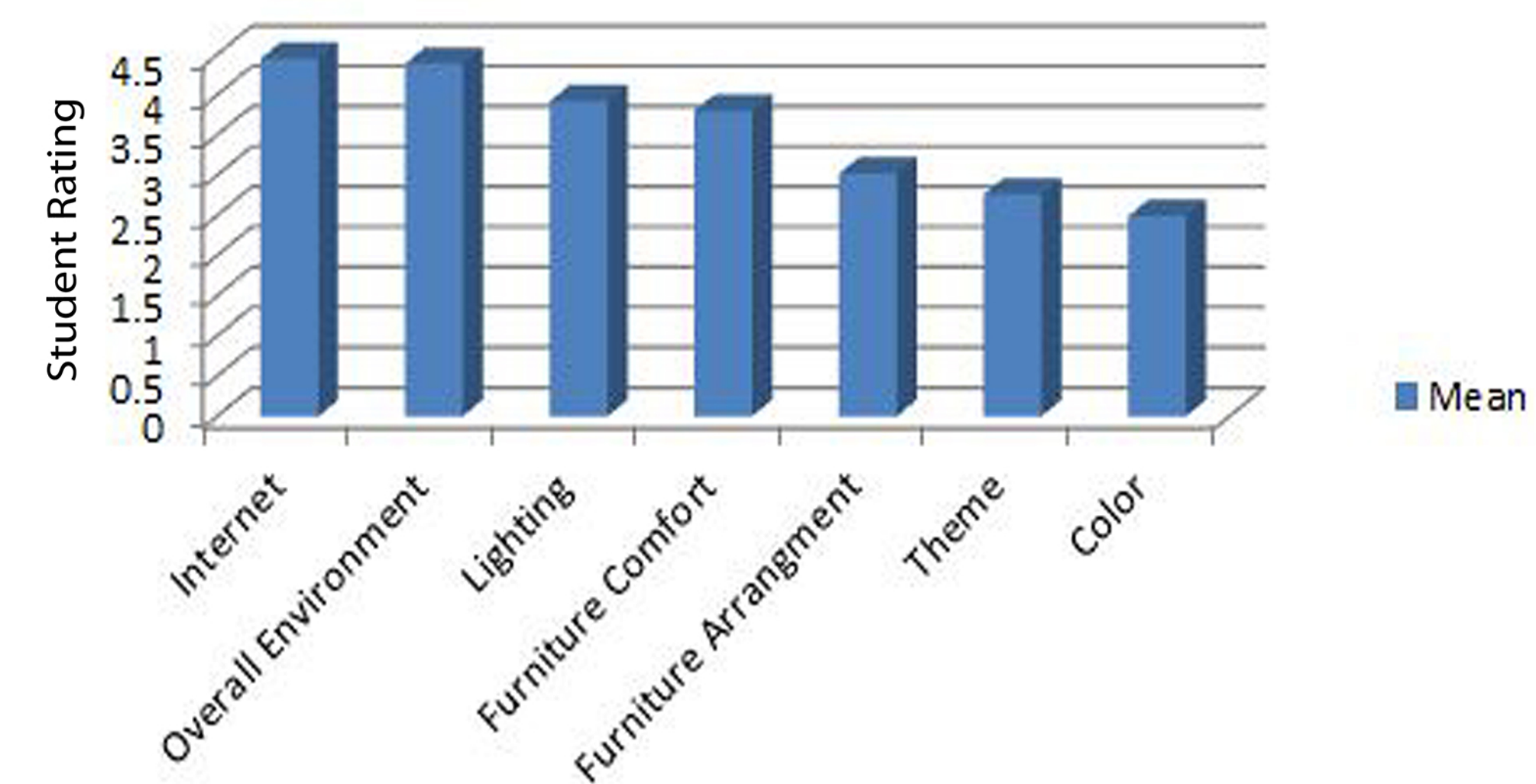
How Students Spend Their Time

Coffee Shop vs Home

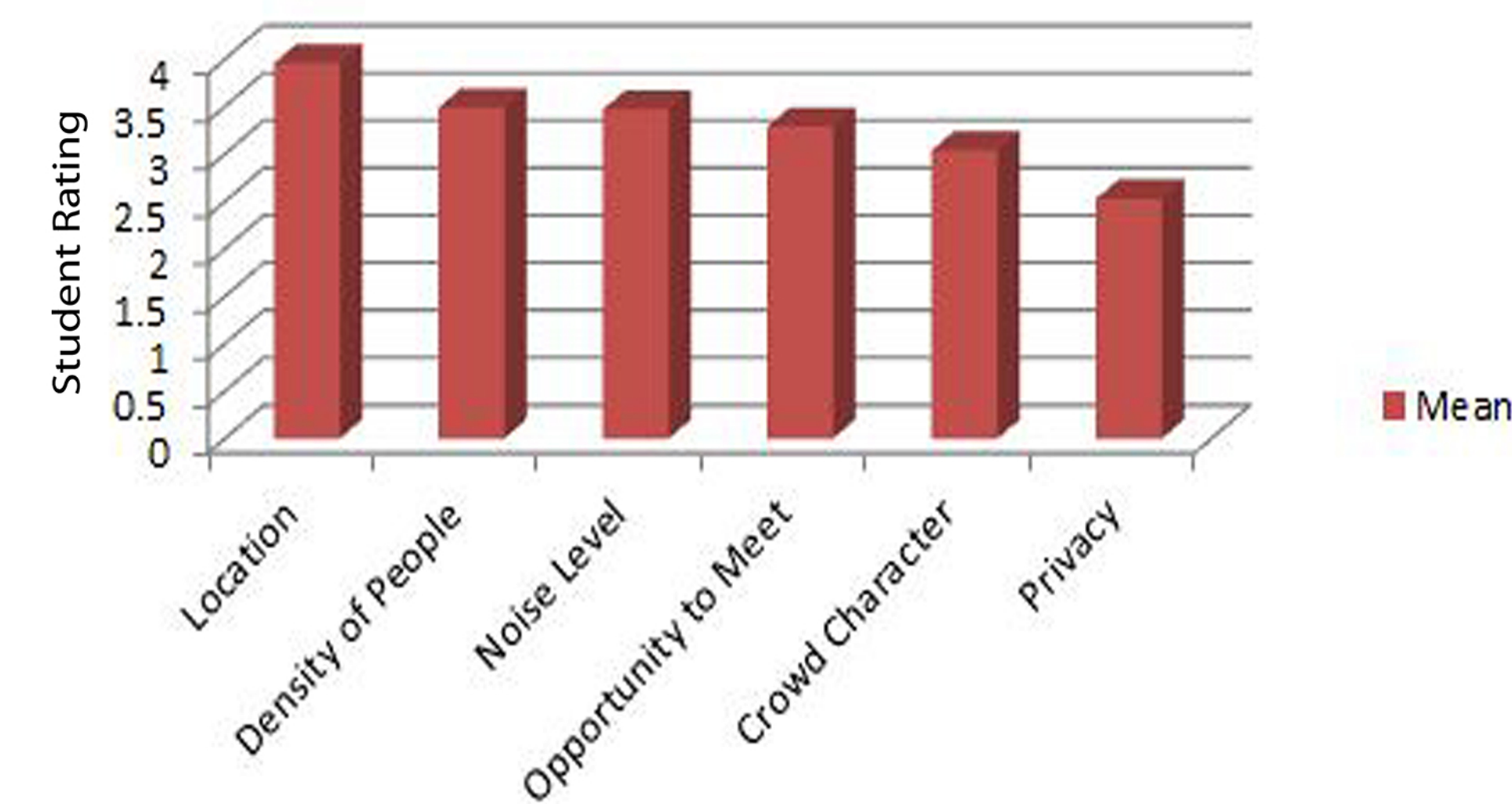


What is Most Important to Students Environment

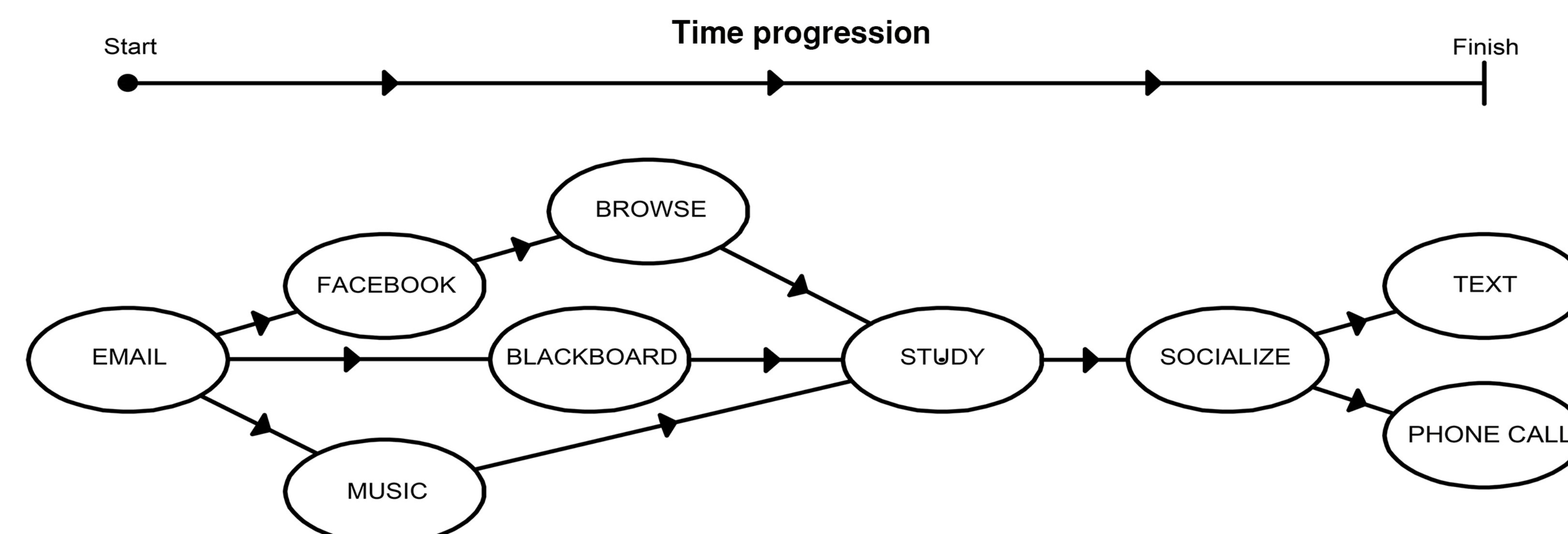
Physical Environment



Behavior Environment



Typical Cognitive Map



Findings

1) Intensity and Sequence of Student Learning Activities

- 43% of students check their e-mail before doing anything else.
- 15% of students listen to music the entire time they are at the coffee shops.
- 10% of students are constantly in contact with another person through technology.

2) Identify the Important Physical and Behavior Attributes

- Location and internet accessibility are the most important aspects when students are choosing a coffee shop.
- Students tend to disregard color and theme of their physical PLE, such as decor.
- Students prefer firm chairs with a table over lounge furniture to prevent getting too relaxed for the purpose of learning.

3) Time Spent on Student Learning Activities

- Students tend to study significantly more if they are at coffee shops than if they stay home.
- Whether students are at a coffee shop or at home they tend to spend more time studying and listening to music than any other activity.

4) Understanding the PLE Process

- Other than music, activities that occur before studying tend to take less than 20 minutes, such as Facebook or Browsing.
- When studying in coffee shops students tend to end their visit with a form of socializing, both virtually and physically.
- 100% of students that study in coffee shops adjust their physical surroundings to meet personal needs. (chair, table, lighting, books, laptop, etc.)

Acknowledgements:
The study was funded through The Program for Undergraduate Research Experiences (PURE) through the College of Human Environmental Sciences, at the University of Missouri-Columbia.