Where Do Students Rest in MacEwan University?

By Terence Kamau
SCIE 201 AS41, 2018, MacEwan University
Introduction

University and college students make common practice of napping.

The Circadian Rhythm affects your sleep/wake cycle

Sleep Restriction, Sleep Deprivation and Sleep Debt

- affects cognitive functions such as slower response times, bad impulse control, and impaired judgement.

Where do students rest?
**Literature Review**

- Sleep debt up to 19 hours is equivalent to being drunk with a BAC level of 0.05 (two wine glasses).
- **Morningness (early bird)-Eveningness (night owl) Questionnaire (MEQ)**
- Napping restores metabolism, lowers blood pressure.
- **MetroNap Energy Pods, PodTime Nap Stations, Nap Nooks**
- Significance of Study- None have done a purely observational study on student populations and where they prefer to rest.

![Figure 1. BAC of 0.05 equivalent](image1)

![Figure 2. Eveningness (Night Owl)](image2)

![Figure 3. MetroNap Energy Pod](image3)

![Figure 4. PodTime Nap Stations](image4)
Objective of Study

- To determine the association between the POST & POP’n and the factors of Time, Noise Level (Average), Location and Day

- **Hypothesis**
  - At least 1 predictor for both POST and POP’N is significant

- **Variables**

- **Response:**
  - Prop. of Seats Taken (POST), Prop. of People Napping (POP’n)

- **Predictor:**
  - Time, Noise Level (Average), Location, Day
Methods Part 1

- Went to locations 1, 2, 3, 4 and 5 in that order
  -1. The second-floor bridge (pedway) linking building 7 and 8
  -2. Paul Byrne Hall
  -3. The first-floor of building 7 entrance
  -4. The second-floor bridge (pedway) linking building 6 and 5
  -5. The first-floor of building 5

T & TH: 8:00 hours and 11:00 hours
M, W, & F: 14:00 hours and 16:00 hours
Methods Part 2

- Travel to 5 locations, 1 hour interval twice a day (except Monday)
- Record sound level for 1 min each location (stayed stationary at Pedways)
- Noted people napping and sitting in each area.
- Counted number of total seats in each area
- **Data Analysis:**
  - SSPS Logistic Regression and Minitab Box-Plot & Interval Graph
  - 5% significance level ($\alpha=0.05$)
Result

n=59

Nappers (POP’n)= 26

Total (POST)= 1058

Non-nappers=1032

Logistic regression with SSPS

Omnibus Test showed predictor for POST and POP’n significant.

POST was significant with predictors location and time

POP’n was significant with predictors location and maybe average (p=0.0668)
Results

Figure 2 - POP'n Boxplot vs time/location

Figure 3 - POST Boxplot vs time/location
Discussion

For POST, location and time were significant factors.

For POP’N, location and maybe noise level ($P=0.066$) were significant.

Hypothesis proven - Omnibus Test.

First Floor Building 7 has most nappers.

First Floor Building 5 has most POST.

Most seats occupied for POST and POP’n at 11:00 hours.
Conclusion

Predictors of time and location significant for POST

Predictors of location and possibly noise level (average) significant for POP’n

Hope this helps in understanding students needs in resting area’s

**Recommendations**

Future studies should find a way to analyze light in an observational study

Better sound equipment could be used

More areas can be added as potential resting area’s

Mapping out locations can be very effective in presenting data
Acknowledgements

Dr. Karen Buro

Tara Steigliz

Dr. Katie Bittner

My SCIE 201 Classmates!

My brothers Nicholas and Frederrick!
References


Questions?