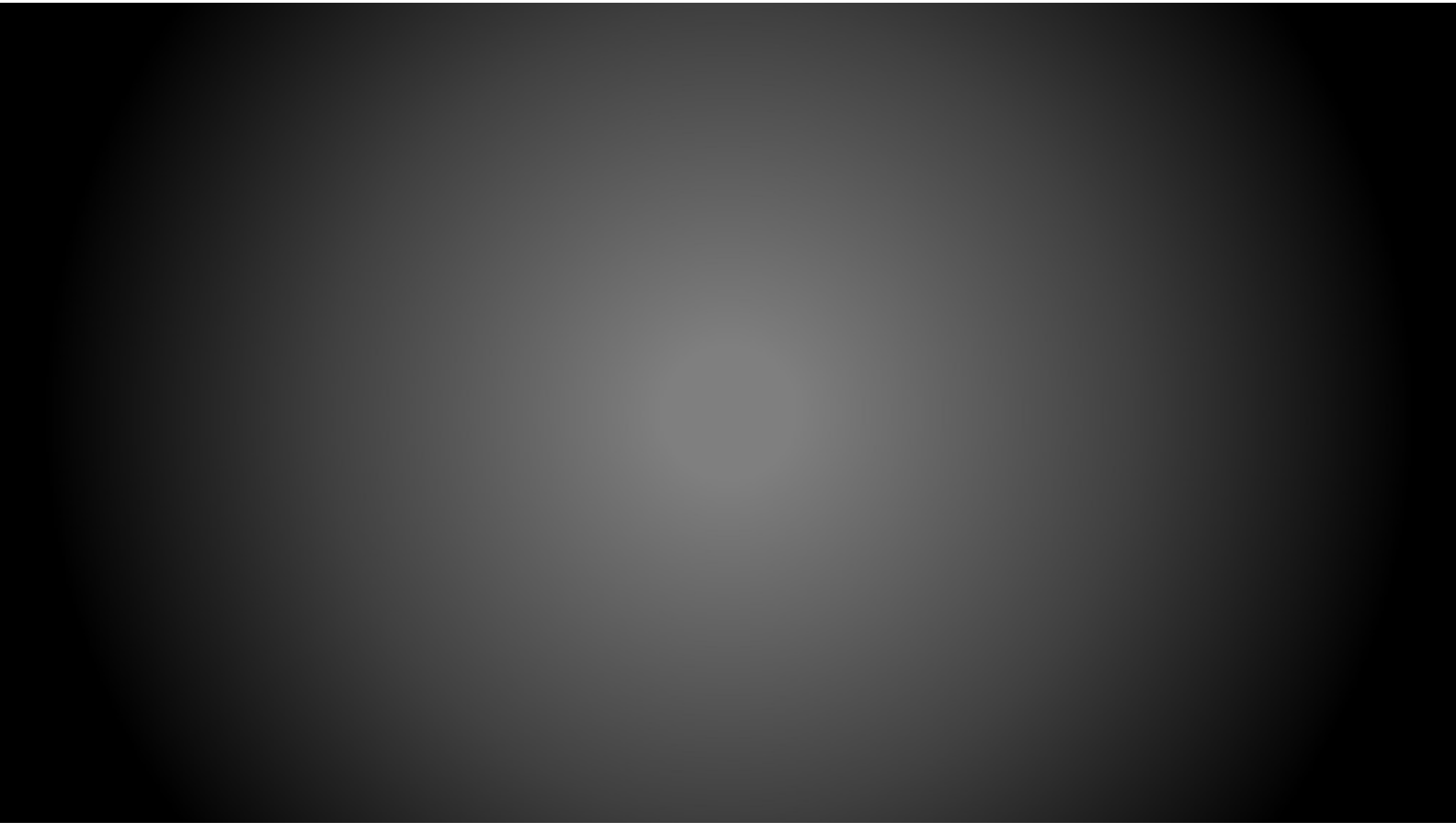
Gaze Aversion: Door Placement's Effect on Classroom Attendance

Hayden Hobbick
Faculty Advisor: Dr. David Zuckerman
Central Washington University Economics




stablediffusionweb.com

Research Question:

- Does the classroom door placement affect student attendance patterns at Central Washington University?

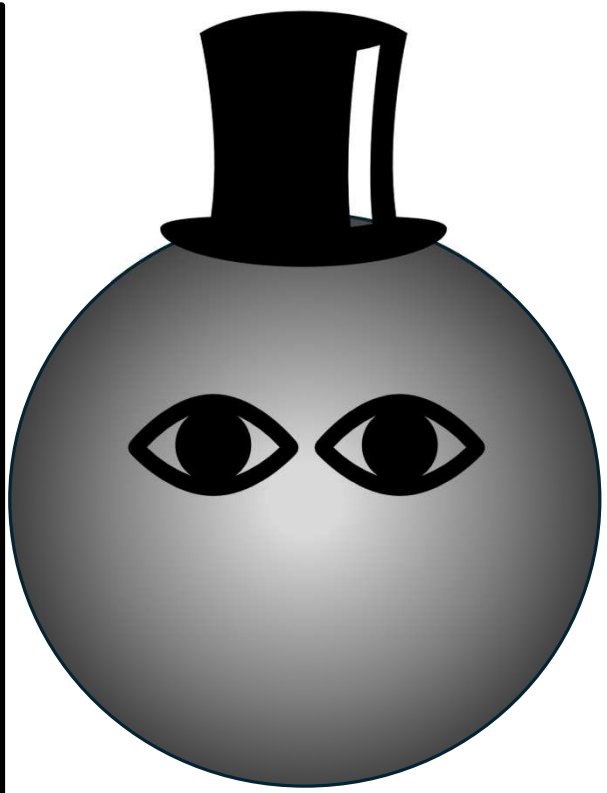
Motivation:

- Investigate human decision-making and an overlooked input to academic success.
- Behavior under both reputational concerns and direct observation.
- Inform community space design.

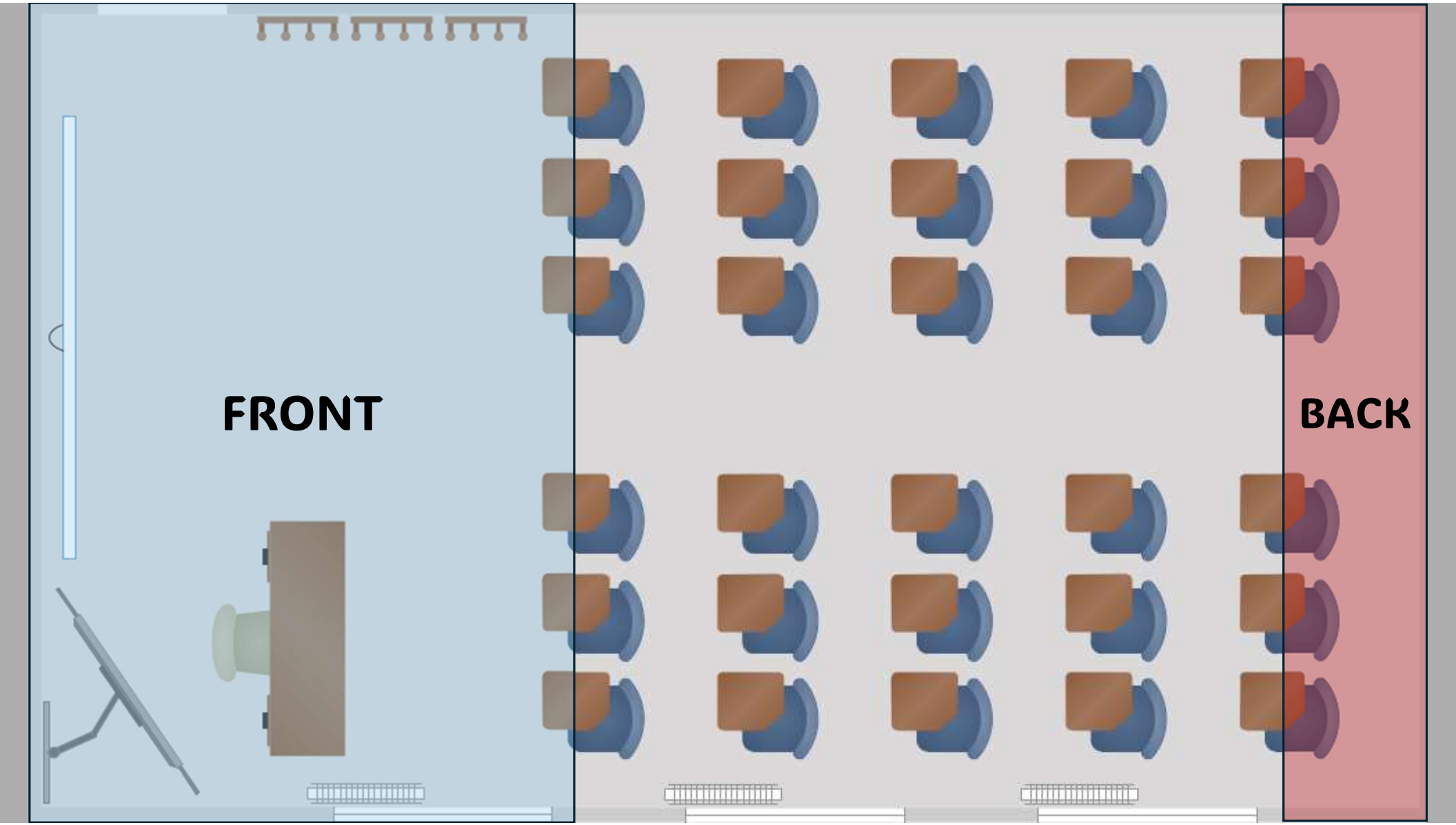
- Hypothesis: Classes with the door in the front are more likely to have a greater rate of absences than classes with the door in the back.

- Students prefer to avoid walking into the classroom late and being subjected to the judgmental eyes of their peers

- **Gaze Aversion**: *When agents are under reputational concerns, they are willing to incur a cost to avoid direct observation.*



Quarter	*Building*
Week	*Max Capacity*
Day	*Door placement*
Time	*Subjective Importance of Attendance*
Course Subject	*Attendance Mandatory*
Course #	*%Absent*
Total Students	*%Late*
	%Excused Absent


FRONT
BACK

Course 1

Course Prefix and Number: e.g., UNIV 101

Classroom: e.g., Samuelson 115

Total # of Students in Class Roster: e.g., 30

Attendance Data - Day 1

Which day are you reporting attendance for?

Select a day

Was attendance mandatory on this day? (Answer "Yes" if attendance on this day was counted toward a student's overall grade, or if there was an in-class exercise (e.g., a test) that counted toward a student's grade.)

Select an answer

Total # of Students Absent: e.g., 2

# of Excused Absences:[1, 2]

# of Students Late:[2]

1. Excused absences include students who have contacted you ahead of time with a legitimate reason for their absence. These students should also be included in the total number of student absences.

2. If you do not record excused absences and/or the number of late students, please leave the corresponding text box blank. If you **do** record these, and there were zero excused absences and/or late students, please enter "0".

Sample	Total Data	Subset w/ Late and Unexcused Data
# Observations	1695	567
# Unique Courses	77	44
# Front Door Obs.	974	295
# Back Door Obs.	721	272
% Mandatory Attendance	0.54	0.65
Avg. Class Size	22.44	13.88
Mean % Absent	0.23	0.14
Mean % Unexcused	NA	0.12
Mean % Late	NA	0.04

Variable	Back Door	Front Door
Mean start time	11.14	11.37
Mean credit amount	4.28	4.63
% Upper-level course	55%	26%
Mean class size	22.34	22.52
% Mandatory attendance	63%	47%
Mean subjective importance	5.99	5.37

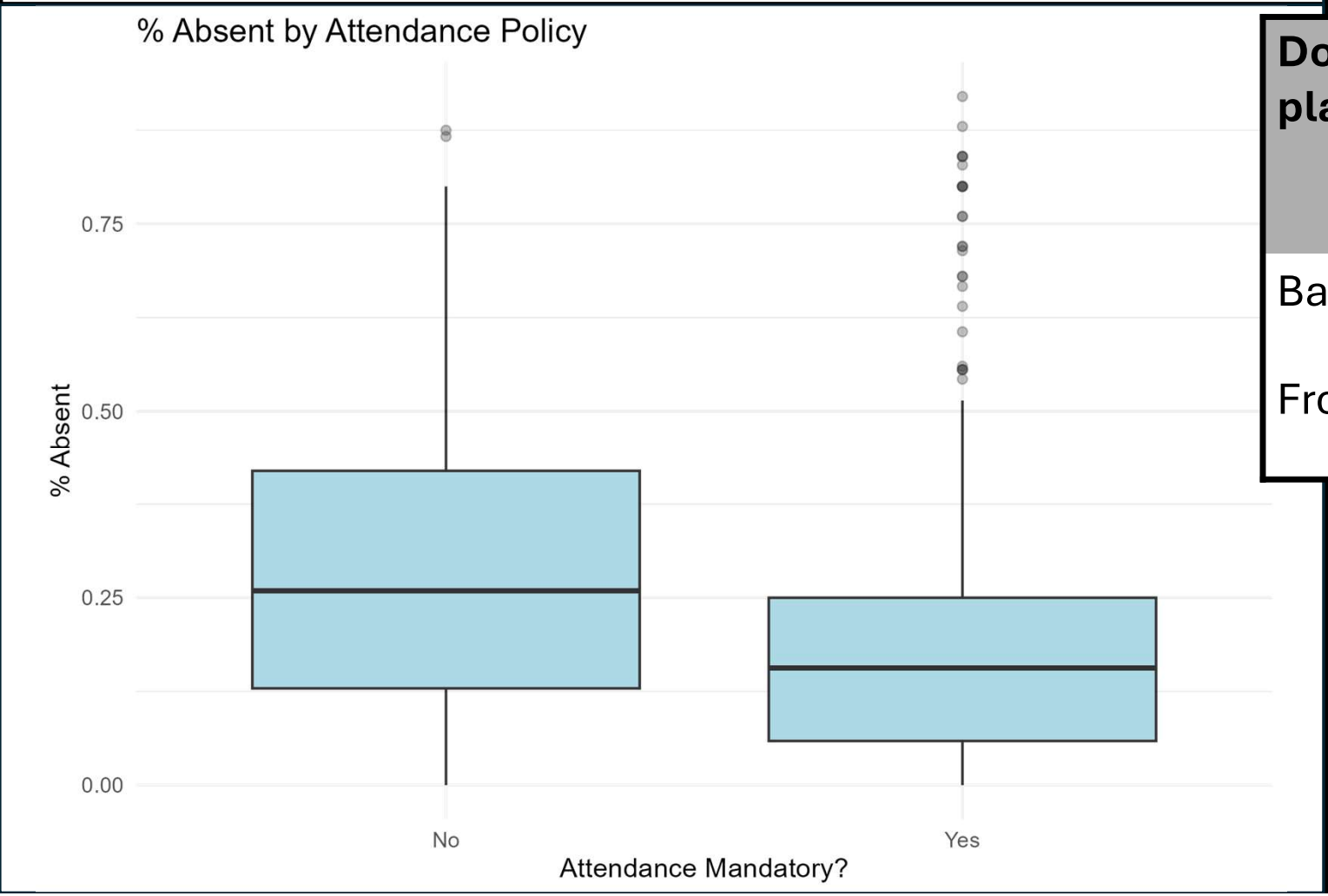
Balance Check

Compares the distribution of control variables across our two different door conditions

Back Door

Earlier start time
Higher course level
Smaller class size
Higher importance of attendance

% Absent by Attendance Mandatory



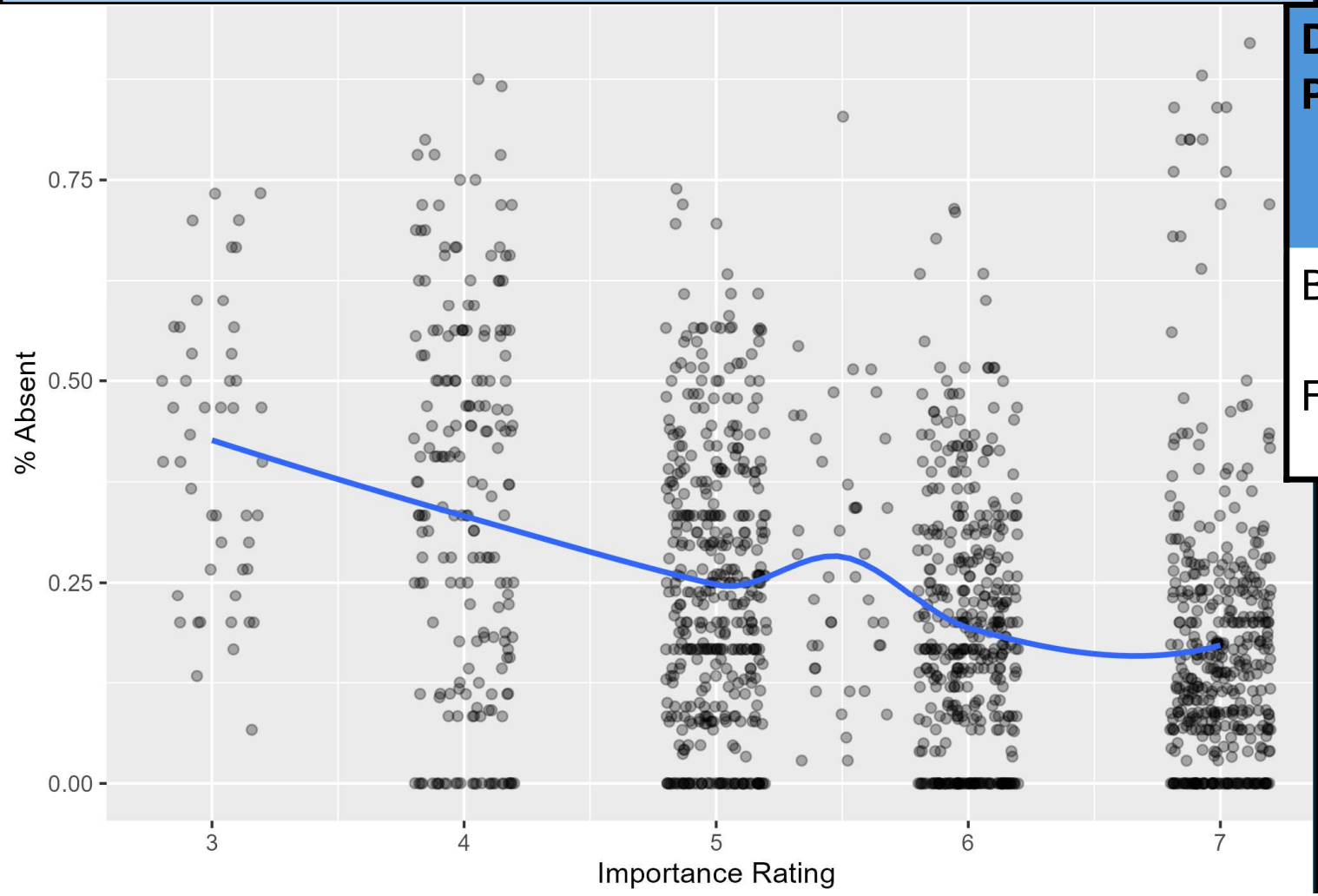
Door placement	*% Mandatory attendance*
Back Door	63%
Front Door	47% HH1

Slide 11

HH1 Larger difference than last year, maybe worth talking about

Hayden Hobbick, 2026-05-16T07:24:52.448

% Absent by Subjective Importance



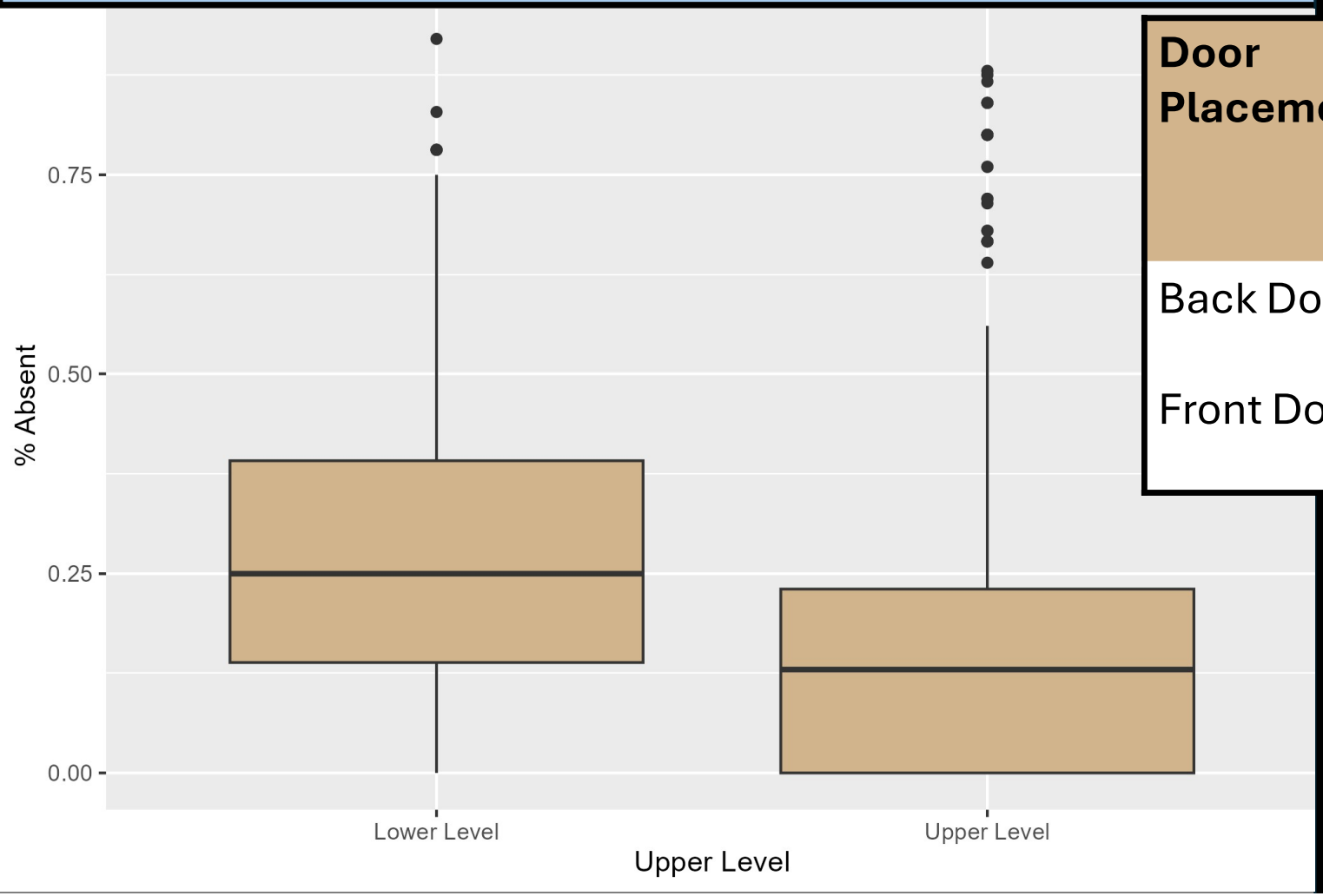
Door Placement	Mean Subjective Importance
Back Door	5.99
Front Door	5.37

Slide 12

HH1 Smaller distribution than last year

Hayden Hobbick, 2026-05-16T08:09:16.698

% Absent by Class Level



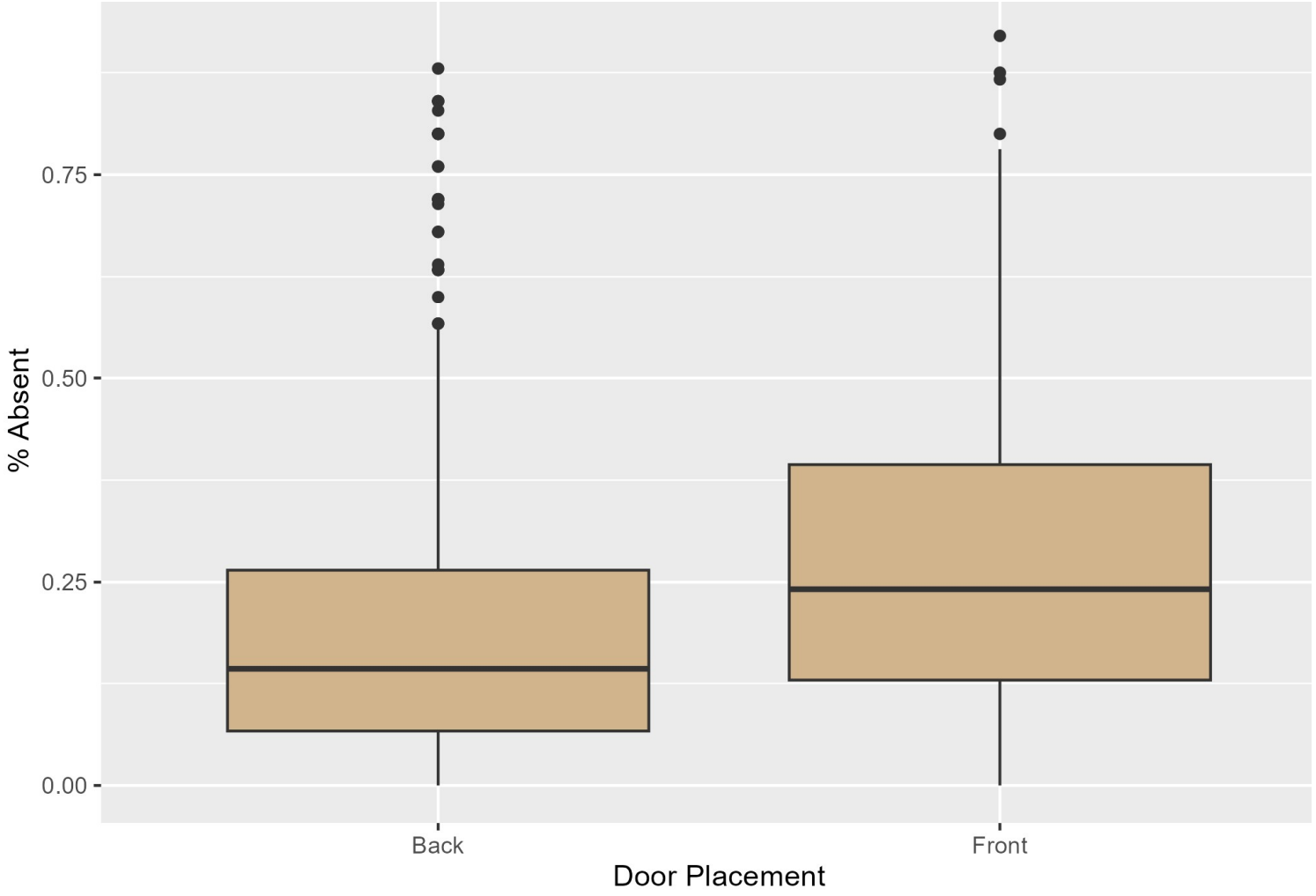
Door Placement	% Upper-Level Course
Back Door	55%
Front Door	26%

Door placement	*% Mandatory attendance*
Back Door	63%
Front Door	47%

Door placement	Mean Subjective Importance
Back Door	5.99
Front Door	5.37

Door Placement	% Upper-Level Course
Back Door	55%
Front Door	26%

%Absent By Door Placement



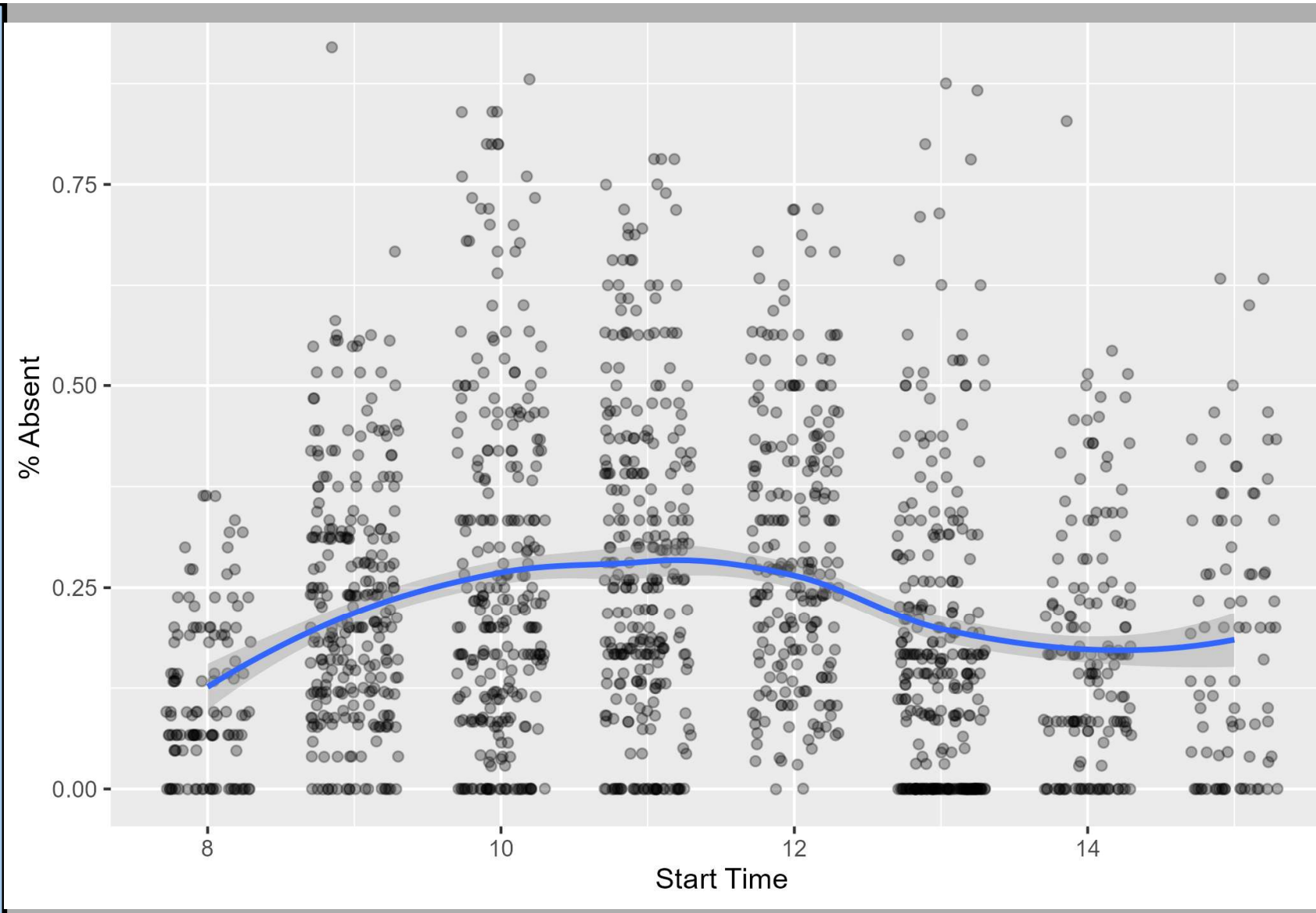
Term	No Control or Interaction	Mandatory Attendance	With Interaction
Back Door (vs. Front)	-0.055**	-0.046*	-0.091**
Mandatory Attendance	NA	-0.025	-0.070
Back Door x Mandatory Attendance	NA	NA	0.086
Total Students	0.009***	.009***	0.008***
Upper-Level Course	-0.020	0.034	0.030
Subjective Importance	-0.046**	-0.043**	-0.038**
Day, Week, Time, & Class Size Controls	Yes	Yes	Yes
Observations	1679	1484	1484
Number of Clusters	77	72	72
R-squared	0.425	0.446	0.451

Slide 15

HH1 No % Filled Data available
Hayden Hobbick, 2026-05-16T09:19:44.089

HH2 I’d like to remove this row
Hayden Hobbick, 2026-05-16T09:20:01.600

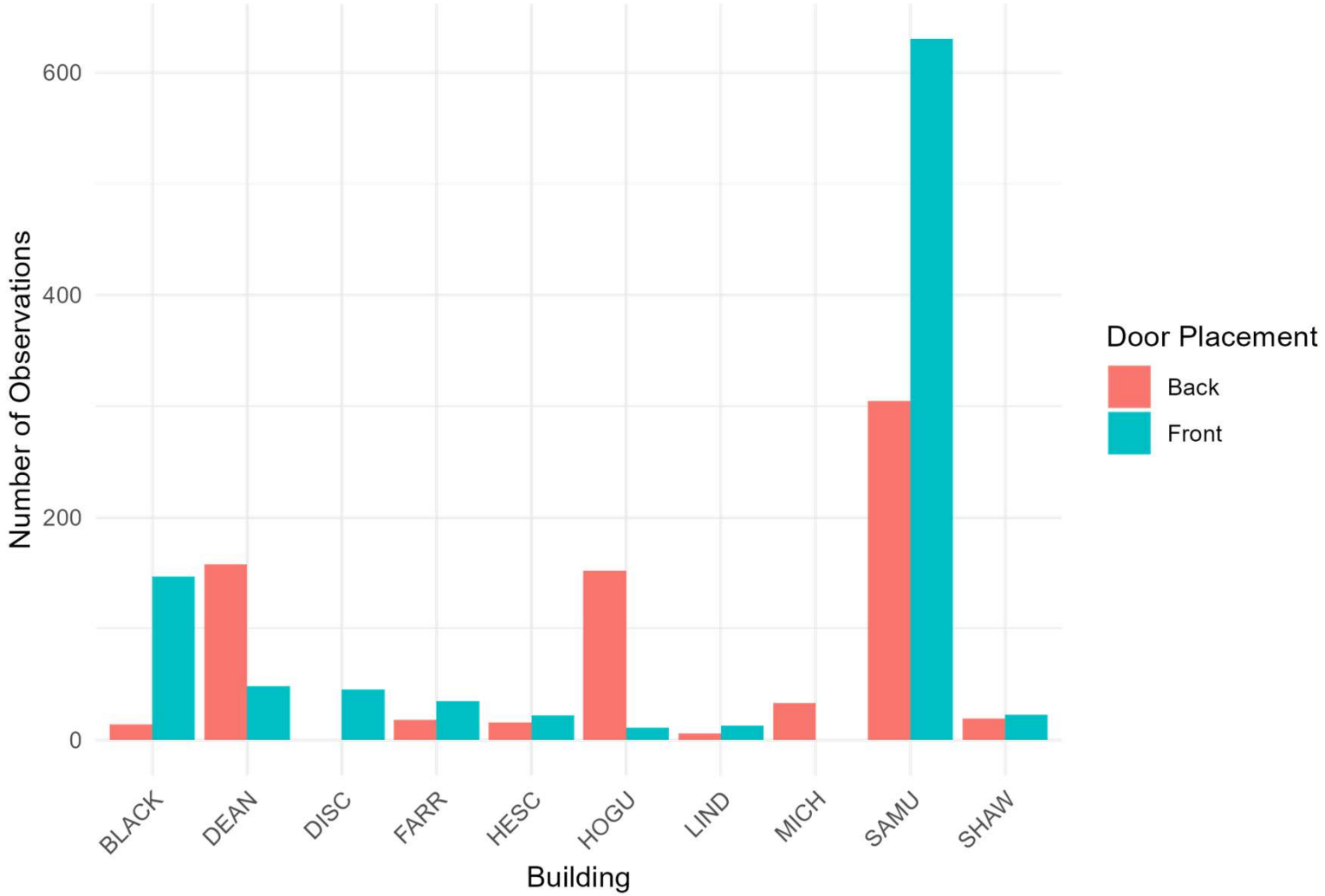
% Absent by the Time-of-Day



Limitations

- Representativeness
- Limited scope
- Omitted Variable Bias
- Biased measurement error
- Experimenter Demand Effect
- Missing variables → Mean Imputation

Number of Observations by Building and Door Placement



1) Continue collecting data throughout Spring Quarter

2) Publish conclusive results

3) Suggest improvements to community space design

Gaze Aversion: Door Placement's Effect on Classroom Attendance

Hayden Hobbick: *HobbickH@gmail.com*
Faculty Advisor: Dr. David Zuckerman
Central Washington University Economics

Thank you