

THE SOCIAL JUSTICE OF EVERYDAY PRIORITY QUEUES

*Megan Albrechtsen
Faculty Mentor – Michael Dixon
Utah State University - Huntsman School of Business*



Operational Implications of Priority Queuing

- Wait Times for Fast Pass customers are lower
- Reduces arrival variability of customers
- Average wait time increases assuming resources are constrained and dedicated to F.P.
- Customer Satisfaction ?
 - Increases for F.P.
 - Decreases for others



Procedural Justice

Fairness and Transparency of the process by which decisions are made.

What is the Process of Wait Line Management?

What is going on here?

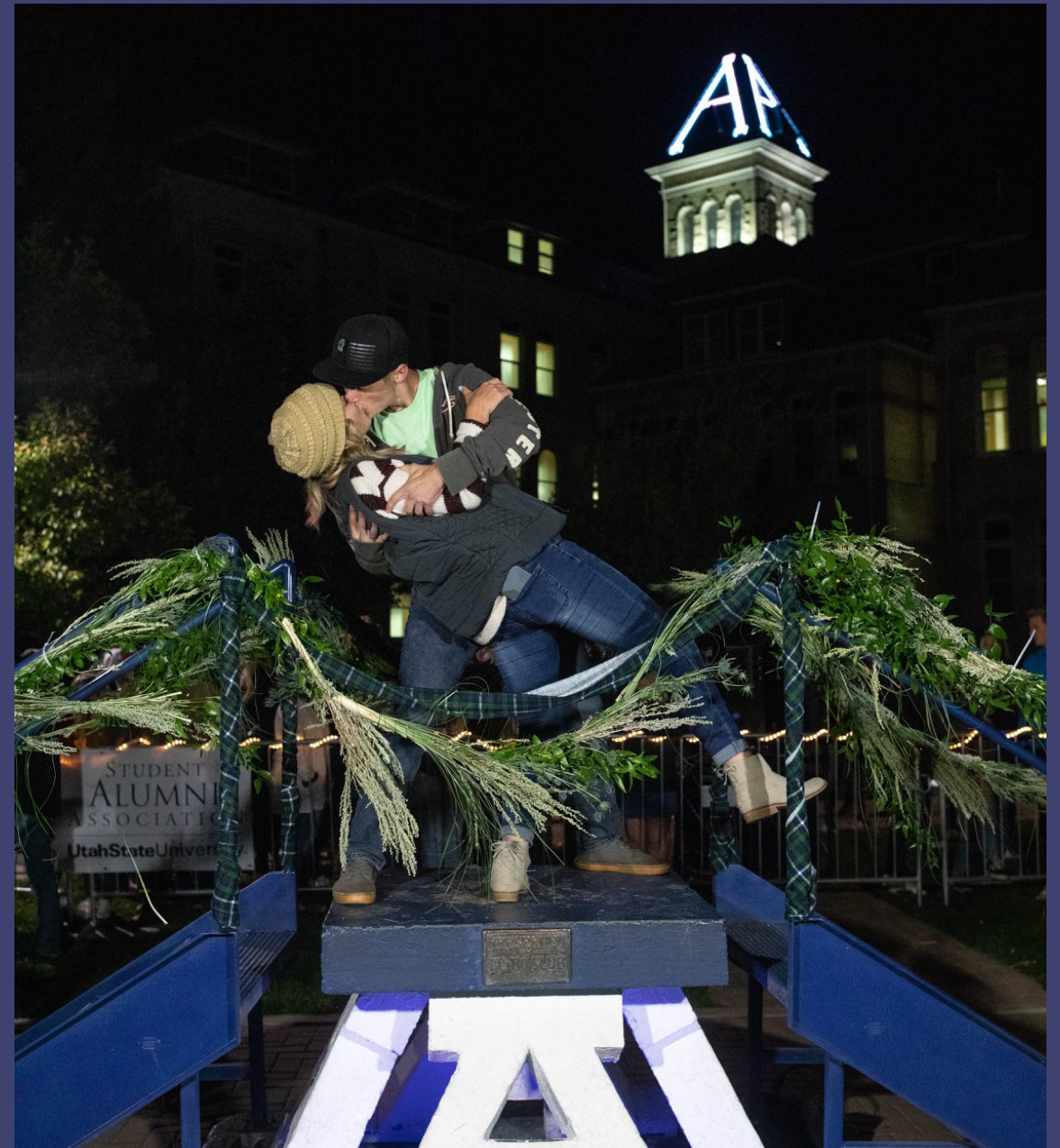
RESERVATION OR LINE SKIPPING

Research Question

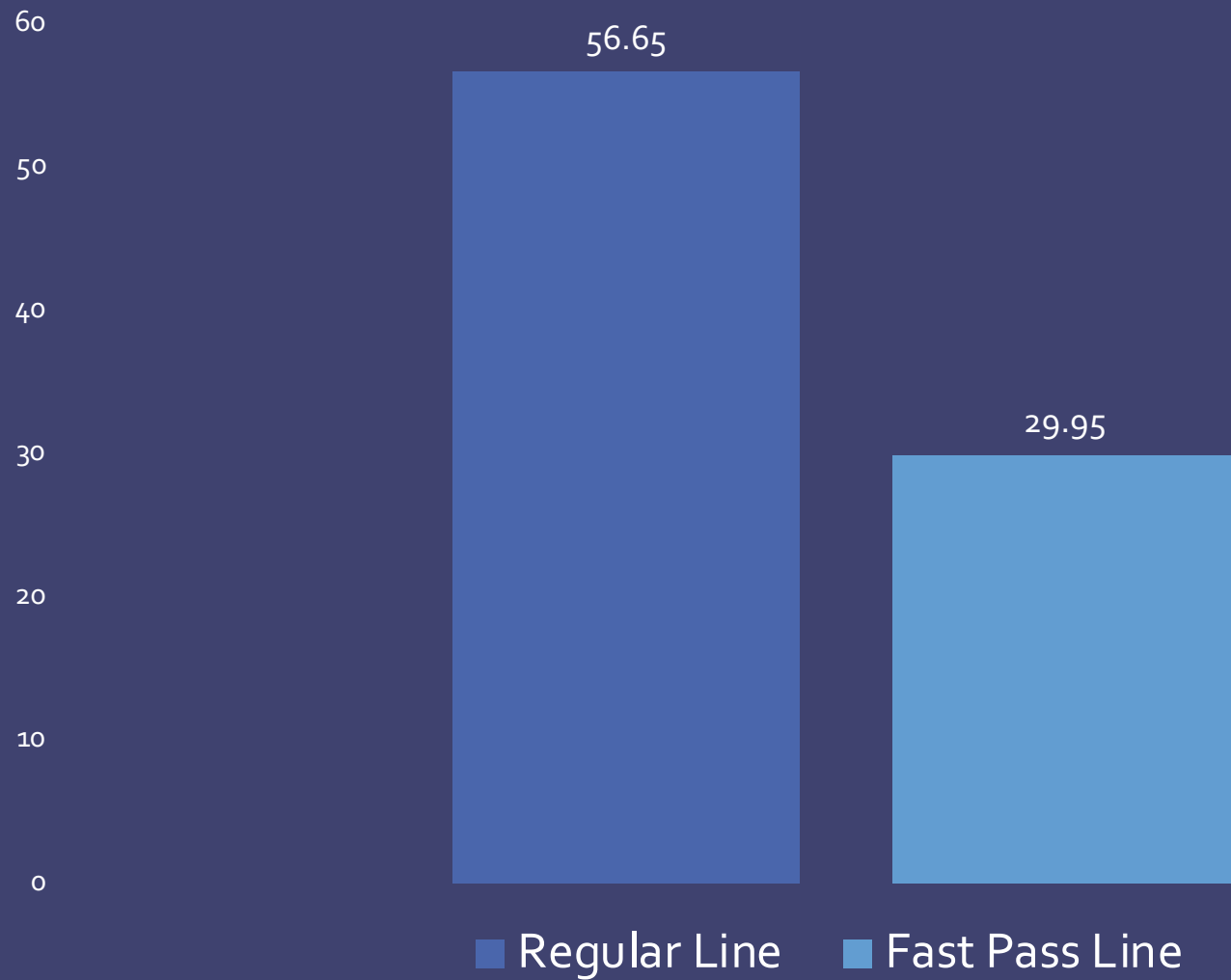
WHAT IS THE PERCEIVED FAIRNESS OF PRIORITY QUEUES?

Two Methods: Field Study and Controlled Experiment

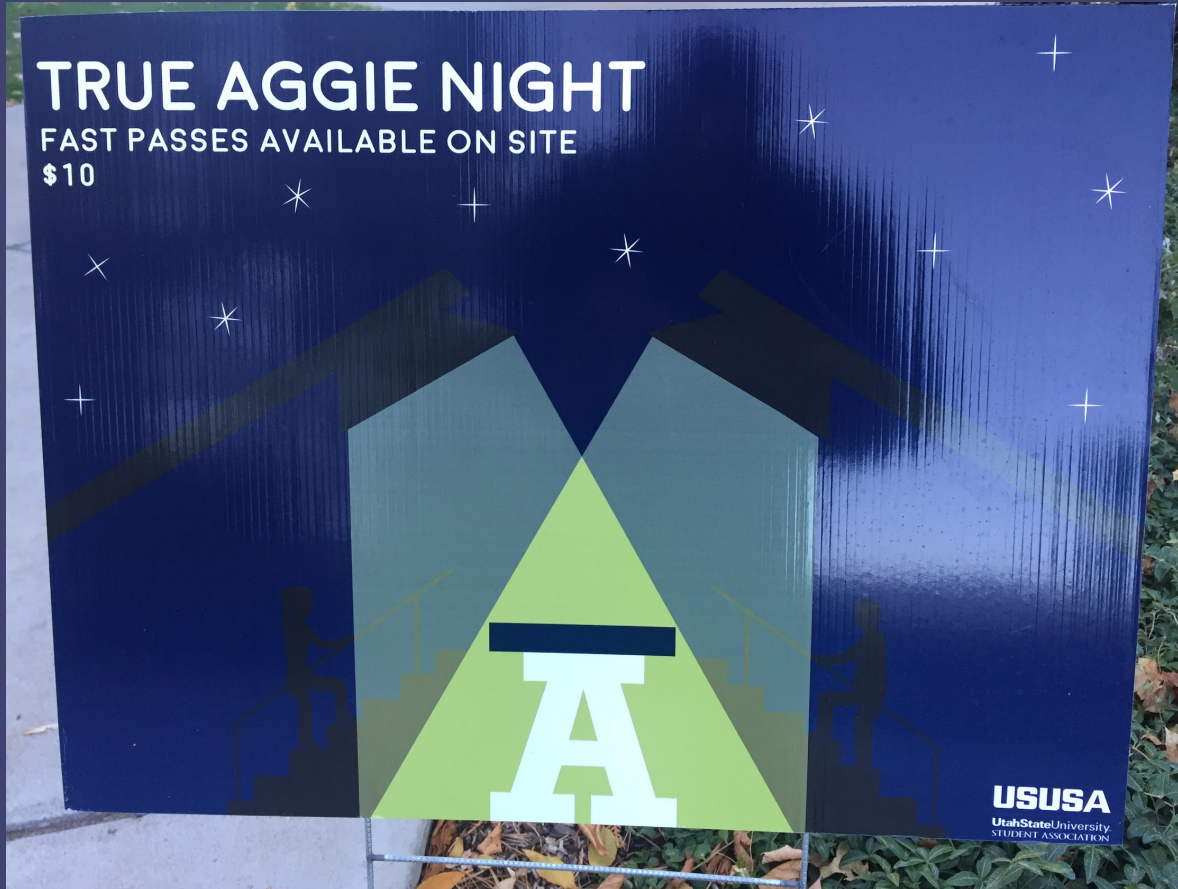
*Study #1:
Field Study
- True Aggie Night*



How many minutes do you think you will wait tonight?







RESEARCH QUESTIONS

- *Do people in different lines perceive fairness differently?*

Survey Results

Demographics:

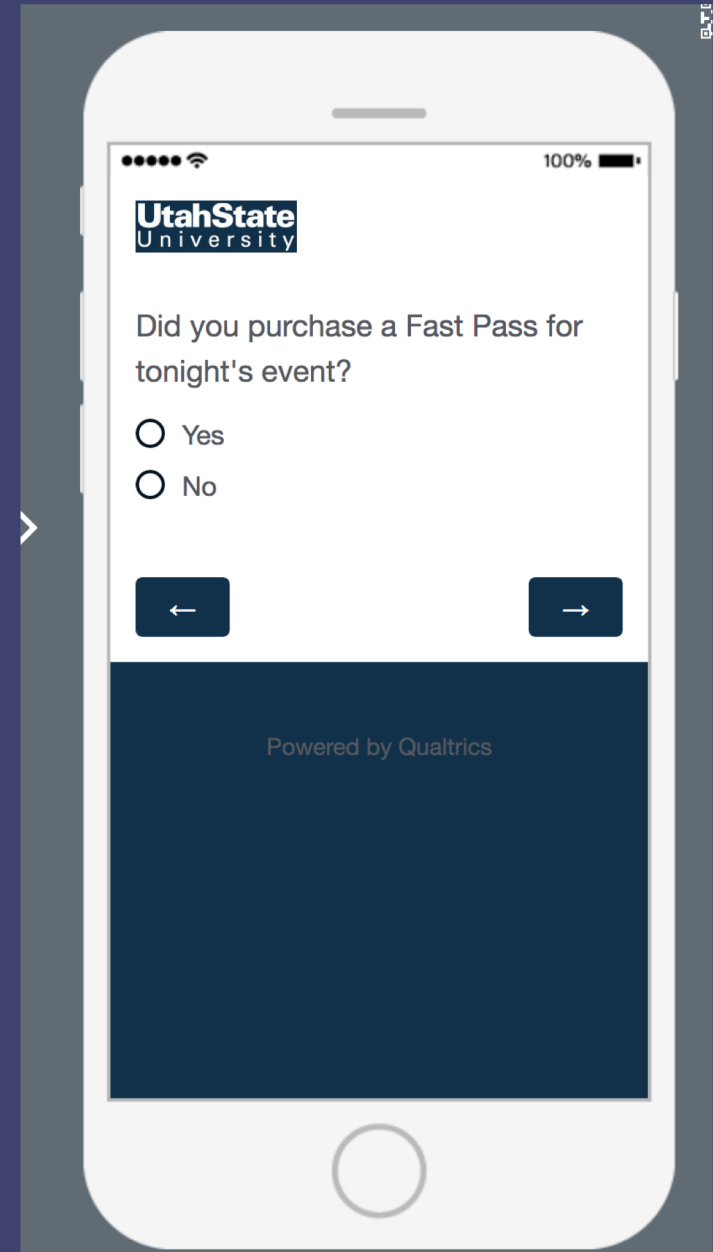
n = 141

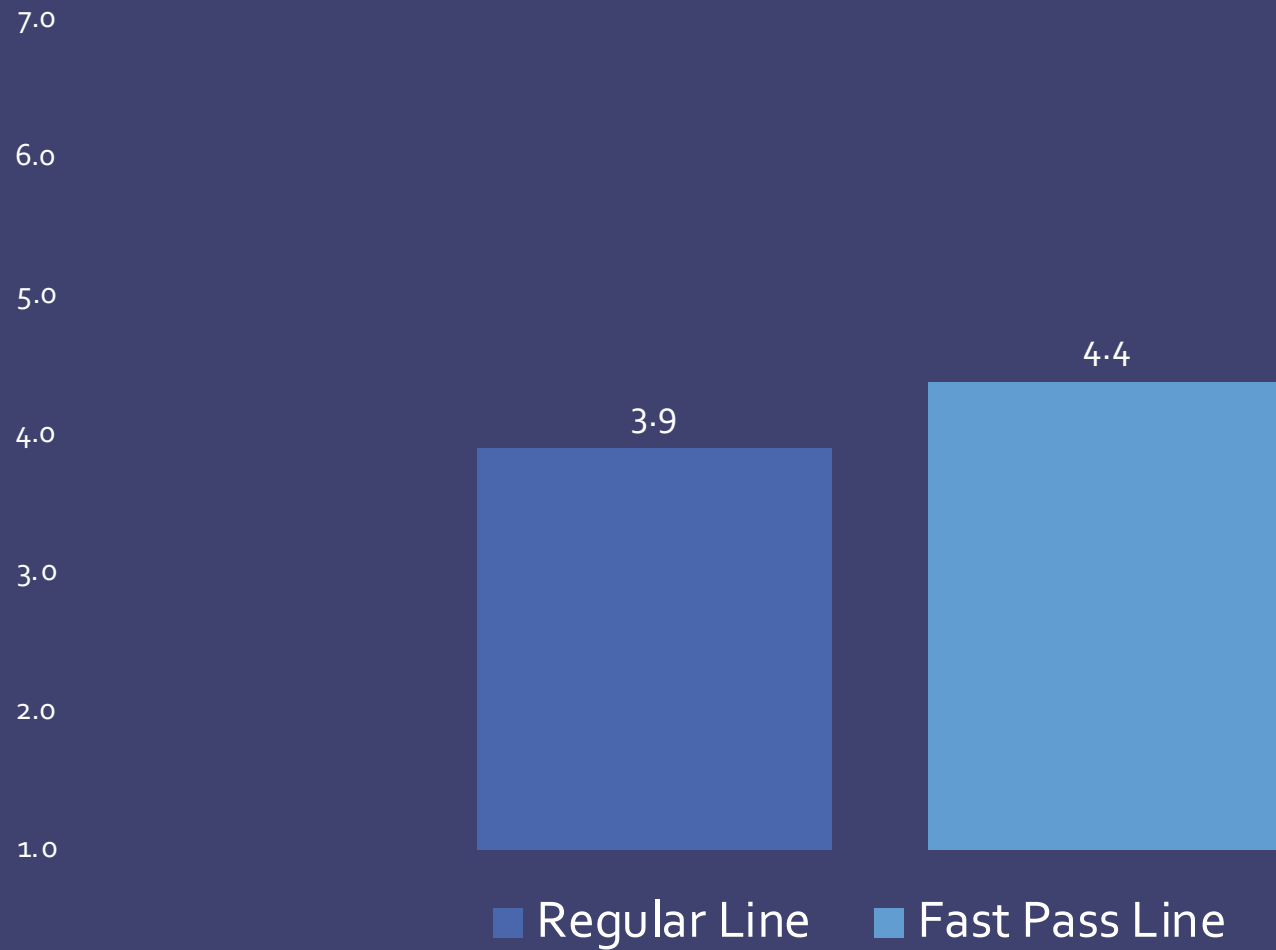
78 Fast Pass, 63 Regular Line

Average Age: 20.6

Gender: 50% Female

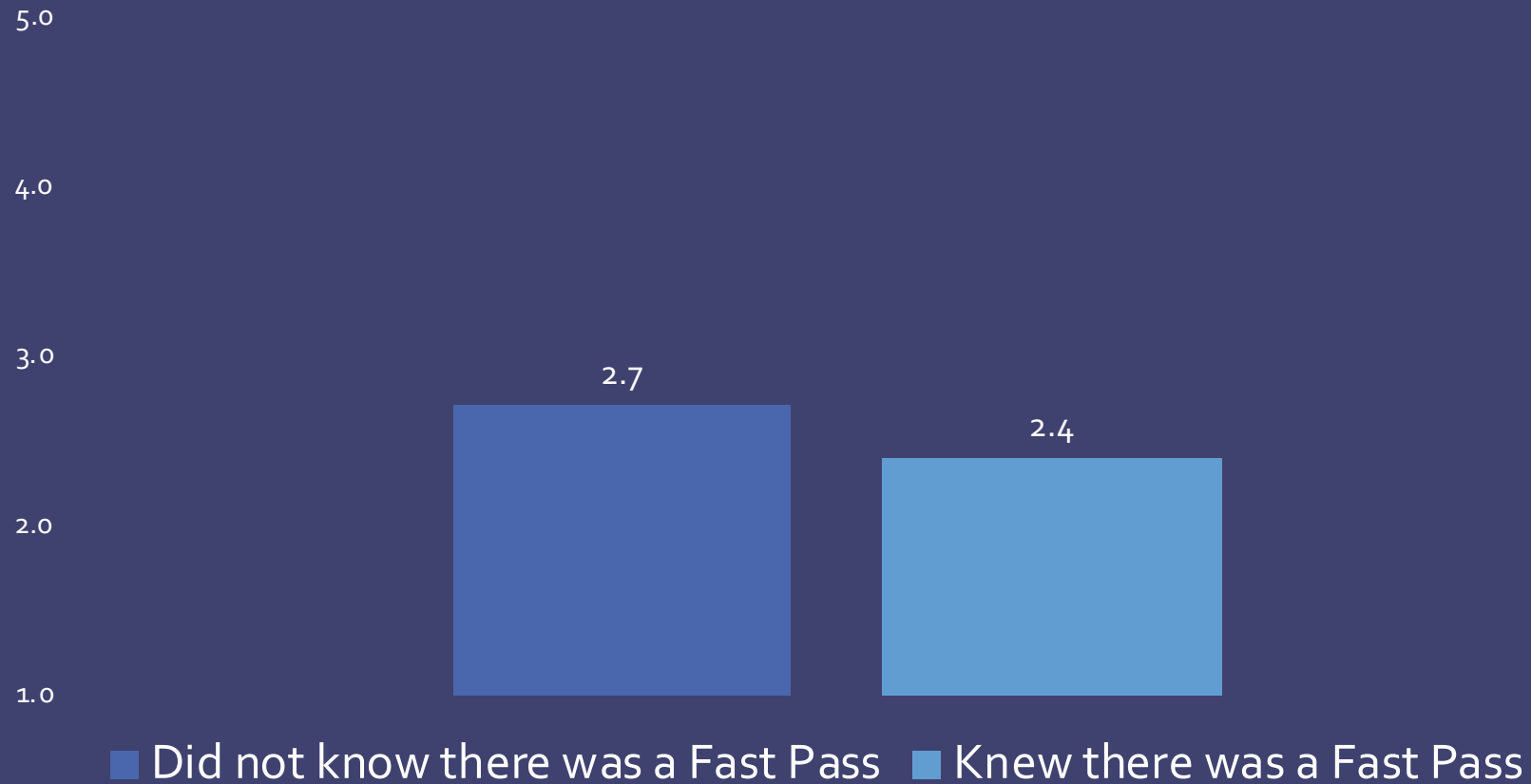
Class: 43% Freshman



[illegible]

How fair do you consider the system of priority lines or Fast Passes in the following contexts?

True Aggie Night – Did not Purchase a Fast Pass



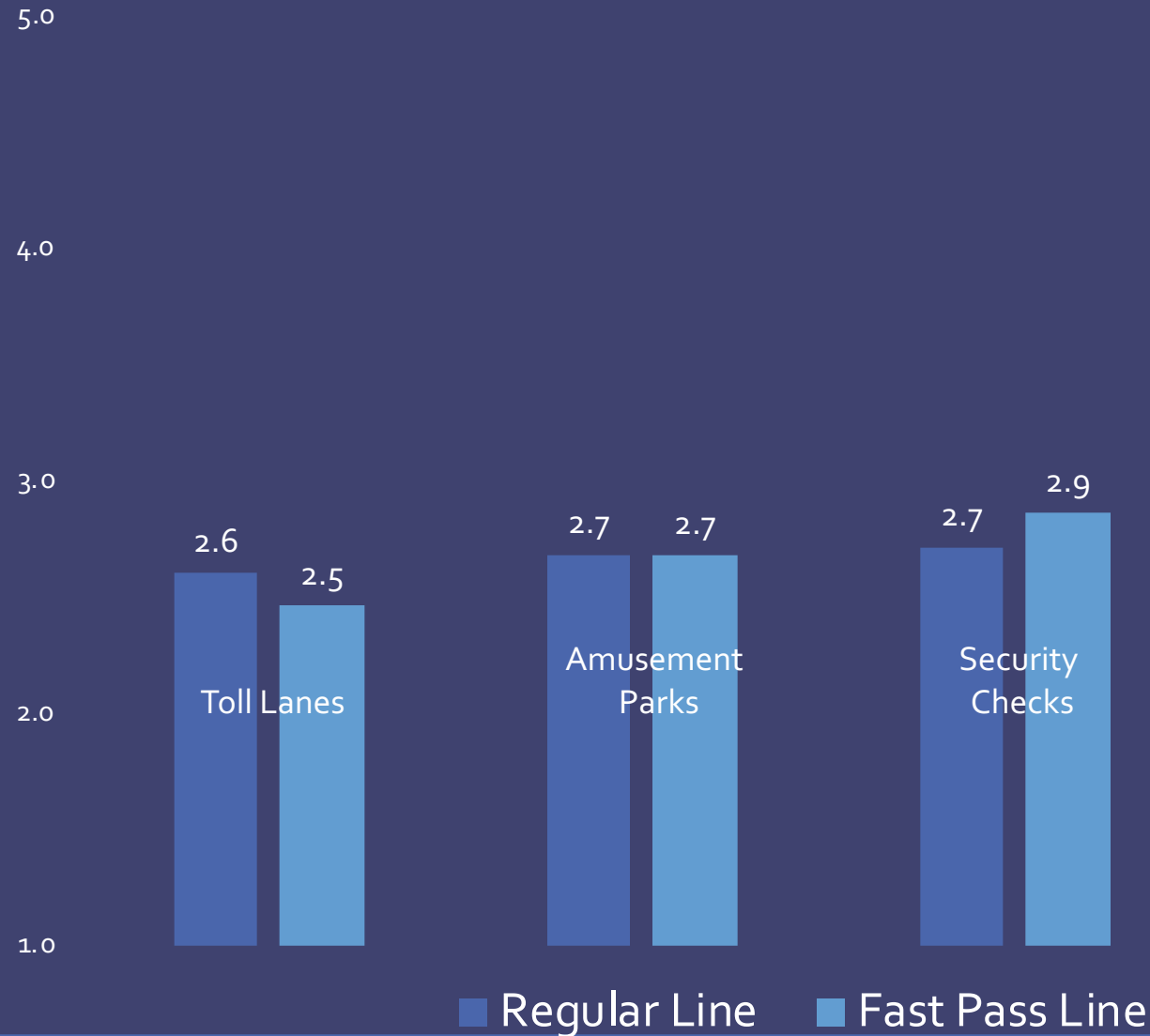
Did not Purchase a Fast Pass

3.7

■ Did not know there was a Fast Pass ■ Knew there was a Fast Pass

[illegible]

How fair do you consider the system of priority lines or Fast Passes in the following contexts?



Observation #1

*PERCEPTION OF
FAIRNESS
CHANGES BASED
ON MEMBERSHIP*

Observation #2

*IGNORANCE IS
BLISS*

Study #2: Controlled Experiment - Queue to take the survey

surveys.charlestoller.com		80%	...	✓
Standard Waiting Line		Fastpass Waiting Line		
Student 17		Student 27		
Student 19				
Student 20				
Student 21				
Student 22				
Student 23				
Student 26				
Student 28				
Student 29				
You				
Student 31				

Thank you for your participation so far. This next study involves taking a survey; however before taking the survey you will be asked to wait in a line.

On the next screen you will see your place in a virtual waiting line.

The waiting line is NOT a simulation, the other people in the virtual line are actually other people in the room waiting to take the survey.

You will be automatically sent to the survey once it is your turn.

Please click the button below to enter the waiting line.

[Click Here to Enter the Waiting Line](#)

RESEARCH QUESTIONS

Does perception of wait differ in the presence of Priority Queues?

Hypothesis:

Priority Queue members under-estimate the wait in regular line

Regular Queue members under-estimate the wait in Priority Queue

Pilot Results

Demographics:

n = 70

27 Fast Pass, 43 Regular Line

Average Age: 20.8

Gender: 67% Male

Undergraduate Students

Study Parameters

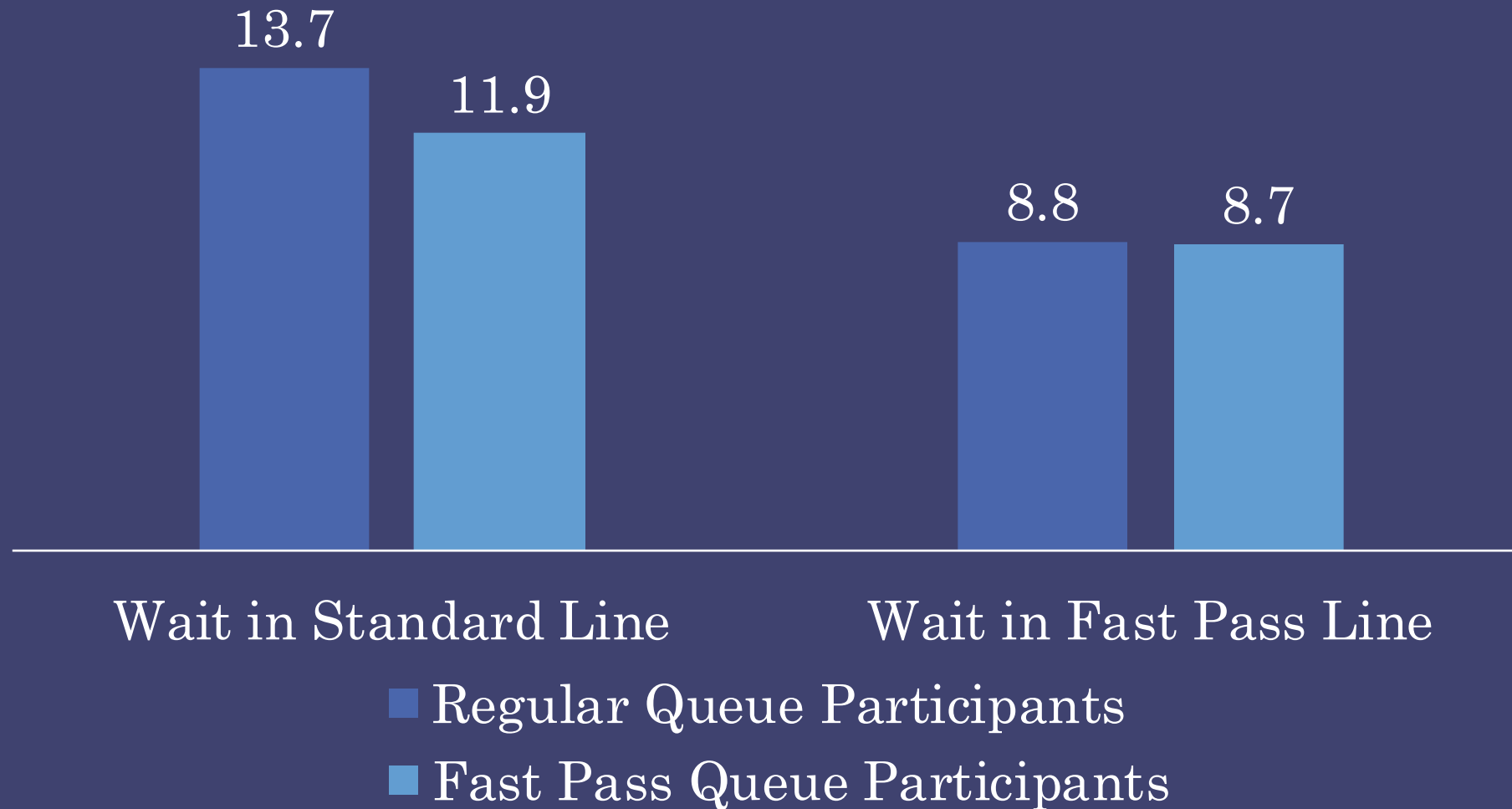
Next into survey priority: alternate between
Regular and Fast Pass

Delay between survey: 120 Seconds

% placed in Fast Pass: 35%

Both Queues Visible to All Participants

How long do you think the wait was for participants in each line?



Observation 3

*PRIORITY QUEUE
MEMBERS
UNDERESTIMATE
WAIT TIME IN
REGULAR QUEUES*

Observation 4

*PRIORITY QUEUE
MEMBERS
OVERESTIMATE
THEIR RELATIVE SIZE*

Observation 5

*PRIORITY QUEUE
SYSTEMS MAY BE
MORE IMPORTANT
THAN ACTUAL WAITS*

WHAT'S NEXT?

Other mechanisms influencing perceived fairness

- Different percentage of Fast Pass members
- Transparency of queues
- Paying for Fast Pass access
- Being paid more to be in regular queues

Thank you

QUESTIONS?
