
Table of Contents

.....	1
How often do you experience a ‘close call’ on campus?	1
Do you feel safe walking around campus?	2
Do you feel safe driving around campus?	3
When walking on campus, do you do any of the following?	4
When driving on campus, do you do any of the following?	5

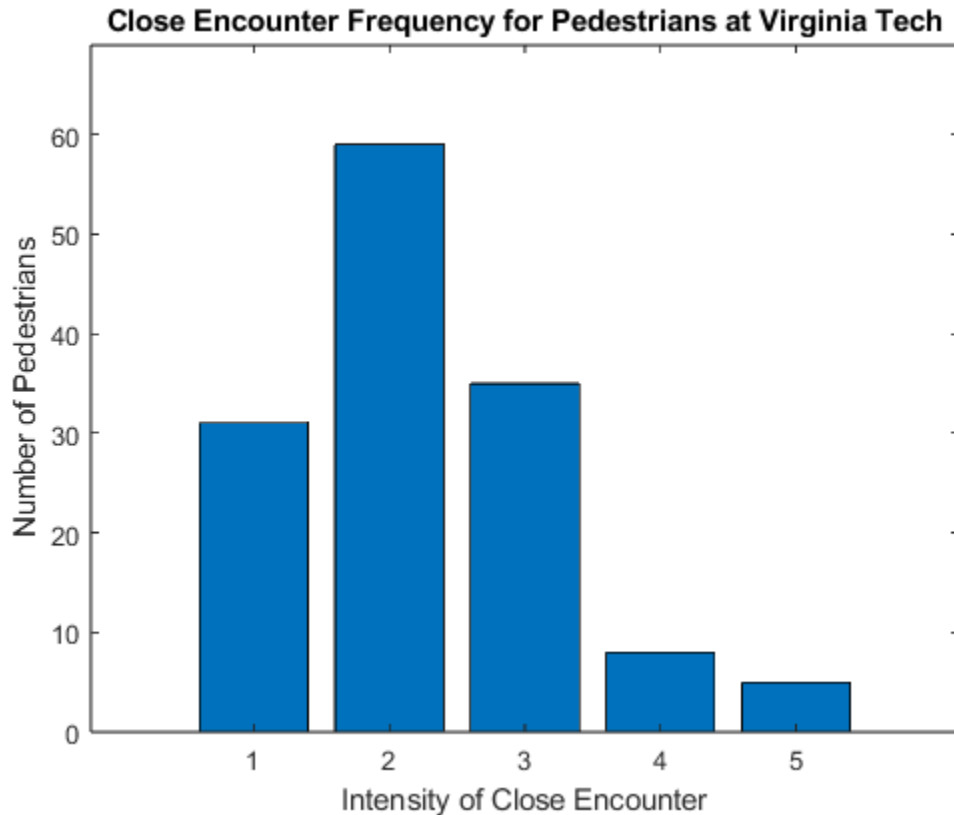
```
% ENGE Fall 2023 - Team 5
% We did not use generative AI to complete this assignment.
% The purpose of this program is to vizualize data collected in the
"Distracted Driving at Virginia Tech" survey.
clear;
clc;
```

How often do you experience a ‘close call’ on campus?

Dataset for number of individuals corresponding to each level of intensity

```
close_calls = [31, 59, 35, 8, 5];

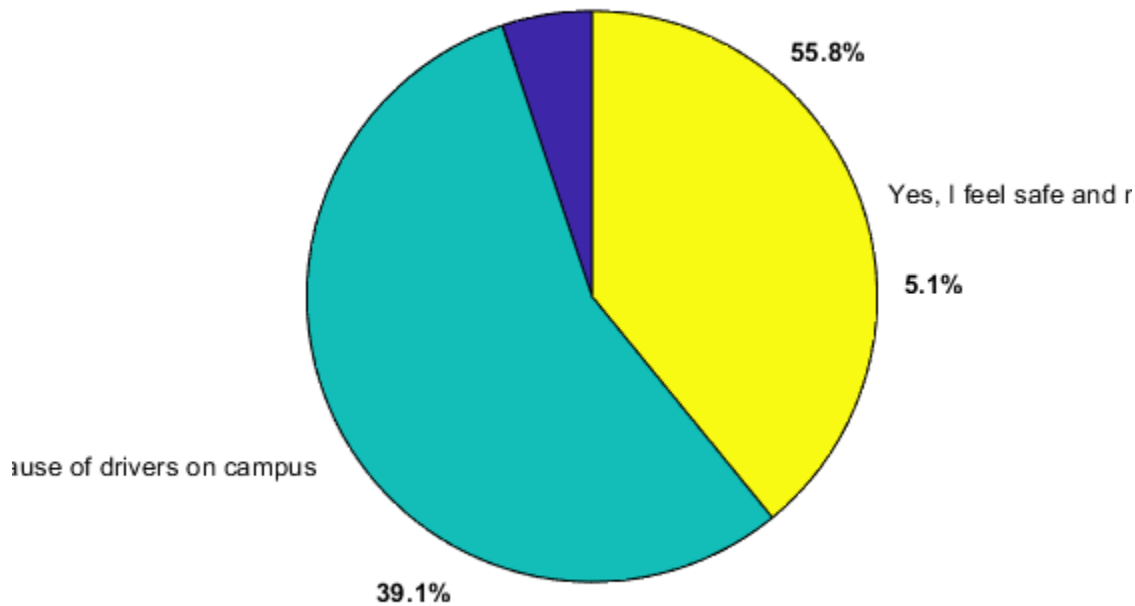
figure;
bar(close_calls);
xlabel('Intensity of Close Encounter');
ylabel ('Number of Pedestrians');
ylim([0, max(close_calls)+ 10]);
title('Close Encounter Frequency for Pedestrians at Virginia Tech');
```



Do you feel safe walking around campus?

```
labels = { 'No, I feel like I am in danger of severe injury because of  
drivers on campus' 'Somewhat, I occasionally feel unsafe because of drivers  
on campus' 'Yes, I feel safe and not in danger of injury while walking on  
campus'};  
values = [5.1, 55.8, 39.1];  
figure;  
h = pie(values, labels);  
title('Do you feel safe walking around campus with the current traffic  
patterns and level of traffic?');  
axis equal;  
text_labels = cellfun(@(x) sprintf('%1.1f%', x), num2cell(values),  
'UniformOutput', false);  
text_angles = cumsum([0, values(1:end-1)/100 * 360]);  
text_radius = 1.2;  
  
for i = 1:numel(labels)  
    text(text_radius * cosd(text_angles(i) + values(i)/2), text_radius *  
sind(text_angles(i) + values(i)/2), text_labels{i}, 'HorizontalAlignment',  
'center', 'FontSize', 10, 'FontWeight', 'bold', 'Color', 'w');  
end
```

ou feel safe walking around campus with the current traffic patterns and level of
 No, I feel like I am in danger of severe injury because of drivers on campus



Do you feel safe driving around campus?

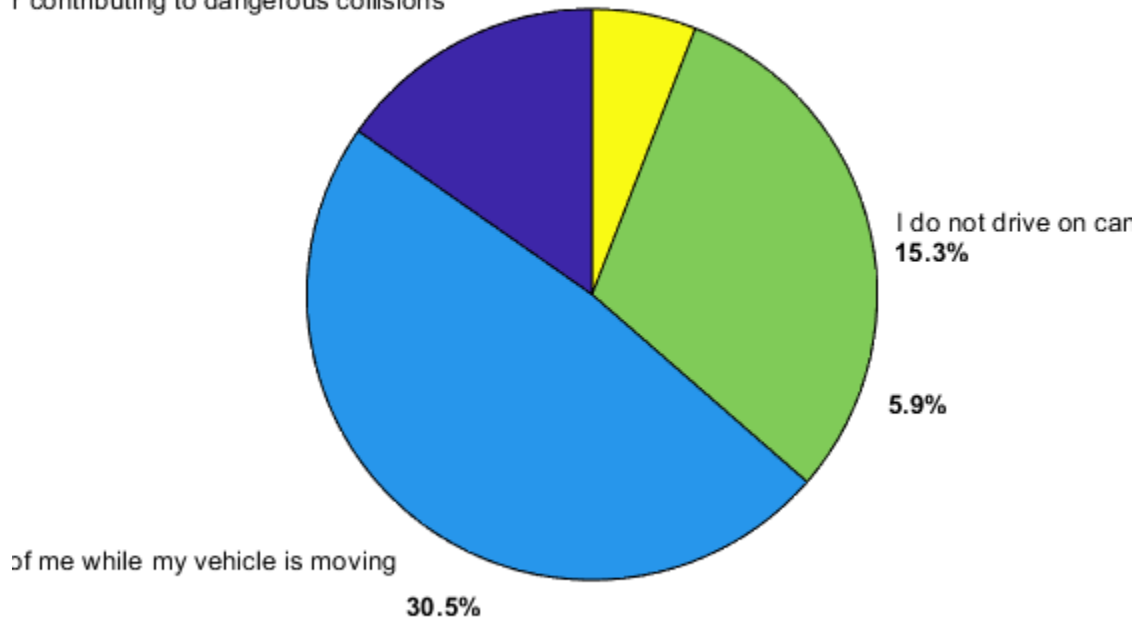
```
labels = {
    'Yes, I am not concerned about pedestrians walking in front of me or
contributing to dangerous collisions'
    'Somewhat, I occasionally worry that pedestrians will walk in front of
me while my vehicle is moving'
    'I do not drive on campus'
    'No, feel unsafe driving and frequently have close encounters with
pedestrians'
};
values = [15.3, 48.3, 30.5, 5.9];
figure;
h = pie(values, labels);
title('Do you feel safe driving around campus with the current behavior and
attitude of pedestrians?');
axis equal;
text_labels = cellfun(@(x) sprintf('%1.1f%%', x), num2cell(values),
'UniformOutput', false);
text_angles = cumsum([0, values(1:end-1)/100 * 360]);
text_radius = 1.2;

for i = 1:numel(labels)
    text(text_radius * cosd(text_angles(i) + values(i)/2), text_radius *
sind(text_angles(i) + values(i)/2), text_labels{i}, 'HorizontalAlignment',
```

```
'center', 'FontSize', 10, 'FontWeight', 'bold', 'Color', 'w');
end
```

u feel safe driving around campus with the current behavior and attitude of pede

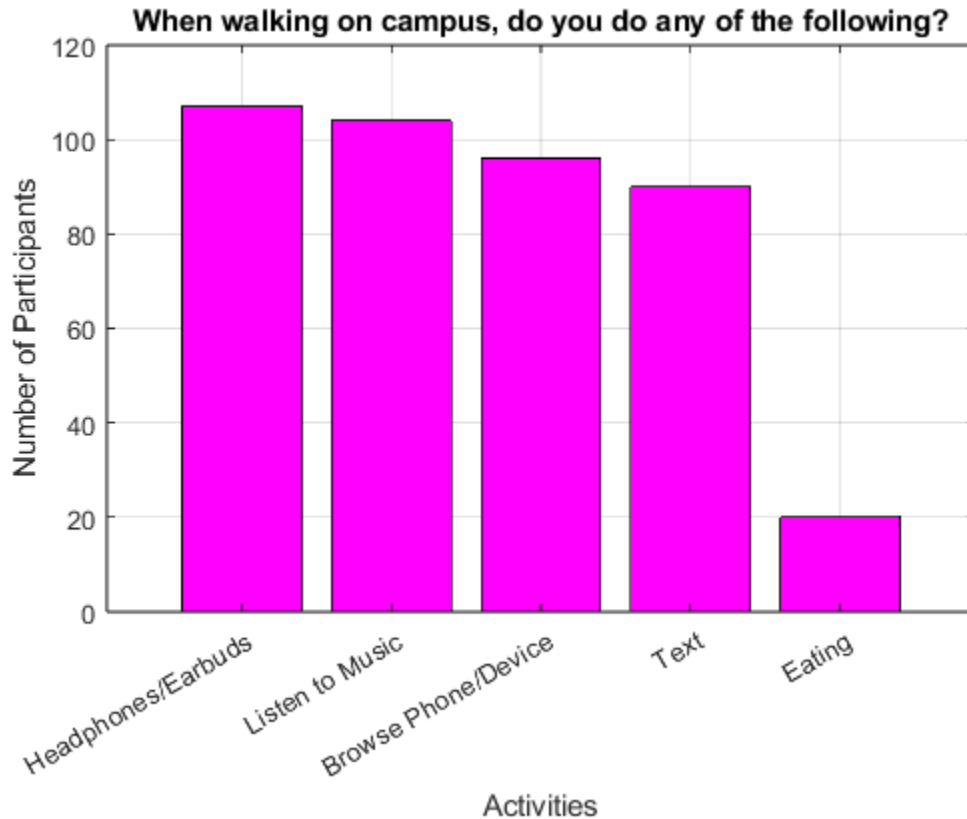
No, feel unsafe driving and frequently have close encounters with pedestrians
r contributing to dangerous collisions



When walking on campus, do you do any of the following?

```
categories_walking = {'Headphones/Earbuds', 'Listen to Music', 'Browse Phone/Device', 'Text', 'Eating'};
responses_walking = [107, 104, 96, 90, 20];
```

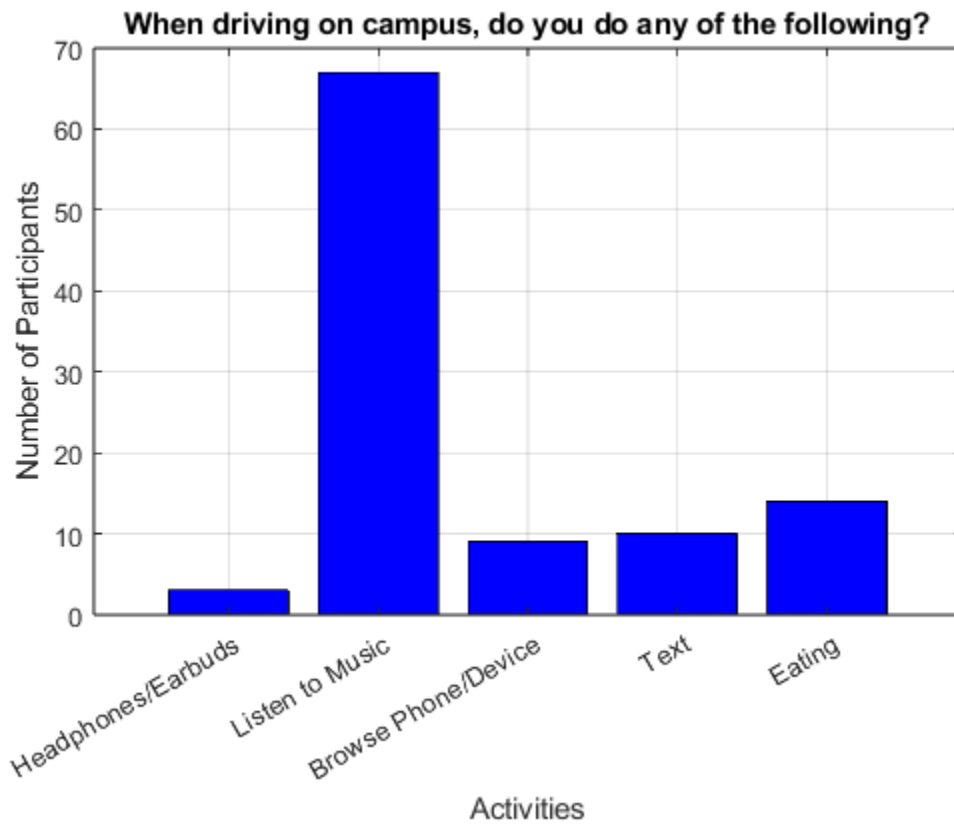
```
figure;
bar(categories_walking, responses_walking, 'magenta');
title('When walking on campus, do you do any of the following?');
xlabel('Activities');
ylabel('Number of Participants');
grid on;
```



When driving on campus, do you do any of the following?

```
categories_driving = {'Headphones/Earbuds', 'Listen to Music', 'Browse Phone/Device', 'Text', 'Eating'};
responses_driving = [3, 67, 9, 10, 14];
```

```
figure;
bar(categories_driving, responses_driving, 'blue');
title('When driving on campus, do you do any of the following?');
xlabel('Activities');
ylabel('Number of Participants');
grid on;
```



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