

Units 4 & 5 Project

Start Assignment

- Due Friday by 11:59pm
- Points 50
- Submitting a text entry box or a file upload

In this project, we'll use our unique IAT random samples to demonstrate what we learned in Unit 4 (Module 11).

WARNING: Since this project is equivalent to an exam, I will not be able to help you. However, you can still rely on your classmates for help, and I can answer clarification questions.

Progress Check

Use this activity to assess whether you can:

- Analyze the relationship between two categorical variables using a two-way table.
 - Analyze and compare risks using conditional probabilities.
 - Interpret probability distributions for a categorical variable.
 - Distinguish between discrete quantitative variables and continuous quantitative variables.
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Directions

WARNING: The directions for Unit Projects differ from the directions for homework and lab assignments.

Use the drop-down menu to learn about the **four steps** needed to complete this assignment.

- ▶ Four **steps** to complete the assignment
-

Data

From this point forward, all links in this assignment open in a new tab.

- Login and open StatCrunch ([directions](https://gcccd.instructure.com/courses/58436/pages/directions-open-statcrunch) (<https://gcccd.instructure.com/courses/58436/pages/directions-open-statcrunch>)).
- Open your IAT sample data set in StatCrunch ([directions](https://gcccd.instructure.com/courses/58436/pages/directions-open-your-unique-iat-sample-in-) (<https://gcccd.instructure.com/courses/58436/pages/directions-open-your-unique-iat-sample-in->

[statcrunch](#)).

Prompt

Each IAT data set has a different prompt for this project. Select the appropriate drop-down triangle below to see the prompt for your data set.

Gender-Career IAT Questions & Variables

- ▶ Open for the **Gender-Career** prompt

Gender-Science IAT Questions & Variables

- ▶ Open for the **Gender-Science** prompt

Race IAT Questions & Variables

- ▶ Open for the **Race** prompt

Sexuality IAT Questions & Variables

- ▶ Open for the **Sexuality** prompt

Weapons IAT Questions & Variables

- ▶ Open for the **Weapons** prompt

Weight IAT Questions & Variables

- ▼ Open for the **Weight** prompt

1. Use StatCrunch to produce a two-way contingency table as we did in Unit 4 (Module 11).

Use *Birth-Gender* for the **row variable** and *Prefers* for the **column variable**.


- Copy the table in your StatCrunch output window and paste it into the textbox with your response.
- After you paste the content of your StatCrunch output window into the textbox, keep the table titled **< Contingency table results,<** and delete the **Chi-Square results** table.
- **VERY IMPORTANT:** Perform each of the following to make your table more meaningful to the reader (and me, the grader). If your table is not meaningful, I cannot check (and therefore grade) your work.
 - Above your contingency table, provide a meaningful title that includes the name of your IAT Data set.
 - The row and column labels in the contingency table are numbers. This makes the two-way table hard to read. Use the variable descriptions for your IAT data set to relabel the column and rows with meaningful words. (The variable description link for your IAT data set is provided above in the *Variables* section.) Not sure how to relabel the

columns in rows in your two-way table? Here is an [example](https://gcccd.instructure.com/courses/58436/pages/units-4-and-5-project-relabel-contingency-table-example) (<https://gcccd.instructure.com/courses/58436/pages/units-4-and-5-project-relabel-contingency-table-example>).

- Below the table, include the name of your row variable and the name of your column variable.
2. For each of the following percentage questions, **copy the question for your IAT data set and paste it into the textbox**. Then find the indicated percentage. Write each percent as a ratio (e.g. 25 out of 40) and as a percentage (e.g. $25/40 = 62.5\%$). Then interpret the percentage in a sentence.
 - a. Find the percentage of Weight IAT participants who were born female.
 - b. Find the percentage of Weight IAT participants who indicated that they moderately or strongly prefer thin people.
 - c. Find the percentage of Weight IAT participants who were born males who moderately or strongly prefer thin people.
 - d. Find the percentage of Weight IAT participants who moderately prefer fat people who were born female?
 3. **Copy the question below for your IAT data set and paste it into the textbox**. Then answer this question.

Weight IAT: Are born-male participants more likely to indicate that they strongly prefer thin people?
 4. Use the Weight IAT [variable descriptions](https://gcccd.instructure.com/courses/58436/pages/project-implicit-weight-iat-variables) (<https://gcccd.instructure.com/courses/58436/pages/project-implicit-weight-iat-variables>) (opens in a new tab link to peruse the variables in your chosen IAT data set. Does your unique data set contain any *continuous random variables*? If so, give an example and explain why the variable is a *continuous random variable*. If not, explain why not?)
 5. Use the Weight IAT [variable descriptions](https://gcccd.instructure.com/courses/58436/pages/project-implicit-weight-iat-variables) (<https://gcccd.instructure.com/courses/58436/pages/project-implicit-weight-iat-variables>) (opens in a new tab) link to peruse the variables in your chosen IAT data set. Does your unique data set contain any *discrete random variables*? If so, give an example and explain why the variable is a *discrete random variable*. If not, explain why not?

StatCrunch Directions

Here is a PDF document with all [StatCrunch directions](https://www.cuyamaca.edu/academics/departments/math/math-160-canvas-pics/lmc/statcrunch/statcrunch-directions.pdf) 

(<https://www.cuyamaca.edu/academics/departments/math/math-160-canvas-pics/lmc/statcrunch/statcrunch-directions.pdf>).

Units 4 & 5 Project Discussion Board

Use the *Units 4 & 5 Project* [discussion board](#)

(https://gcccd.instructure.com/courses/58436/discussion_topics/1050067).(opens in a new tab) to ask questions or provide feedback about this project.

Review Feedback

- Instructor feedback is only available after an assignment is graded.
- Use these [directions](https://gcccd.instructure.com/courses/58436/pages/directions-how-to-view-feedback) (<https://gcccd.instructure.com/courses/58436/pages/directions-how-to-view-feedback>).(opens in a new tab) to learn how to review feedback.

Submit this assignment, then click the "Next" or > button to continue

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Units 4/5 Project

| Criteria | Ratings | | Pts | |
|--|---|--|---|--------------|
| <p>Question 1</p> <p>StatCrunch two-way table is provided with the correct variables for your IAT.</p> | <p>5 pts Complete</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> | |
| <p>Question 1</p> <p>Chi-Square results in the table have been deleted.</p> | <p>1 pts Complete</p> | <p>0 pts Incomplete</p> | <p>1 pts</p> | |
| <p>Question 1</p> <p>The two-way table has a meaningful title, column and row variables in the table have been relabeled with meaningful words, and below the table is the name of the row and column variable. For an example of this, refer back to the Module 11 Two-Way Tables Homework.</p> | <p>2 pts Complete</p> | <p>0 pts Incomplete</p> | <p>2 pts</p> | |
| <p>Question 2</p> <p>All questions about your IAT data set have been copied and pasted into the textbox.</p> | <p>2 pts Complete</p> | <p>0 pts Incomplete</p> | <p>2 pts</p> | |
| <p>Question 2a</p> <p>Each percent is represented as a ratio (e.g. 25 out of 40) and as a percentage (e.g. $25/40 = 62.5\%$) and then interpreted in a sentence. The calculations are incorrect.</p> | <p>5 pts Complete</p> | <p>3 pts Partial Credit</p> <p>Either you are missing a piece of your answer or your calculation is incorrect.</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> |
| <p>Question 2b</p> <p>Each percent is represented as a ratio (e.g. 25 out of 40) and as a percentage (e.g. $25/40 = 62.5\%$) and then interpreted in a sentence. The calculations are incorrect.</p> | <p>5 pts Complete</p> | <p>3 pts Partial Credit</p> <p>Either you are missing a piece of your answer or your calculation is incorrect.</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> |

| Criteria | Ratings | | | Pts |
|---|---|---|---|--------------|
| <p>Question 2c</p> <p>Each percent is represented as a ratio (e.g. 25 out of 40) and as a percentage (e.g. $25/40 = 62.5\%$) and then interpreted in a sentence. The calculations are incorrect.</p> | <p>5 pts Complete</p> | <p>3 pts Partial Credit</p> <p>Either you are missing a piece of your answer or your calculation is incorrect.</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> |
| <p>Question 2d</p> <p>Each percent is represented as a ratio (e.g. 25 out of 40) and as a percentage (e.g. $25/40 = 62.5\%$) and then interpreted in a sentence. The calculations are incorrect.</p> | <p>5 pts Complete</p> | <p>3 pts Partial Credit</p> <p>Either you are missing a piece of your answer or your calculation is incorrect.</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> |
| <p>Question 3</p> <p>The question from the prompt is copied and pasted into the textbox.</p> | <p>1 pts Complete</p> | | <p>0 pts Incomplete</p> | <p>1 pts</p> |
| <p>Question 3</p> <p>Percentages were used to answer the question. The percent increase was calculated to find which group is "more likely". The answer to question 3 is correct.</p> | <p>4 pts Complete</p> | <p>2 pts Partial Credit</p> <p>The answer is incorrect OR does not use percentages/percent increase.</p> | <p>0 pts Incomplete</p> | <p>4 pts</p> |
| <p>Question 4</p> <p>You have correctly identified a continuous random variable and your explanation is correct.</p> | <p>5 pts Complete</p> | <p>3 pts Partial Credit</p> <p>Either a continuous random variable was not correctly identified OR the explanation was incorrect.</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> |
| <p>Question 5</p> <p>You have correctly identified a discrete random variable and your explanation is correct.</p> | <p>5 pts Complete</p> | <p>3 pts Partial Credit</p> <p>Either a discrete random variable was not correctly identified OR the explanation was incorrect.</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> |
| <p>Self-Evaluation</p> | <p>5 pts Complete</p> | <p>3 pts Partial Credit</p> | <p>0 pts Incomplete</p> | <p>5 pts</p> |

| Criteria | Ratings | | Pts |
|--|---|---|--------------------------------|
| <p>The final draft begins with a self-evaluation of your first draft. The self-evaluation describes how you demonstrated attainment of the learning objectives in the "Progress Check" section of the assignment, OR what you needed to correct in order to demonstrate attainment of the learning objectives.</p> | <p>The self-evaluation does not describe how you demonstrated attainment of the learning objectives in the "Progress Check" section of the assignment, or what you needed to correct in order to demonstrate attainment of the learning objectives.</p> | <p>No self-evaluation of your first draft is included with your final draft. Or, you did not commit a good-faith effort on your first draft and therefore your self-evaluation is not applicable.</p> | |
| | | | <p>Total Points: 50</p> |