Assignment 1 has three parts. Students are instructed to submit all parts of this assignment together as one file at the end of Unit 1.

Part A: Comparing Theoretical Perspectives (*9 marks total*)

Introduction

In Part A of Assignment 1, you will get a chance to apply different perspectives of psychology in order to explain a person's career choice.

Theoretical Perspectives

Imagine that you're walking down a beautiful wooded country road. It's a lovely sunny day, there's no one around, and you're really enjoying the sounds of the birds and the feel of the sunlight on your face. You look around. Suddenly, behind you and getting closer is what looks like an enormously large cat. As it gets closer, you see that it's a cougar. Your heart begins to pound. Your breathing begins to speed up. There's a hot feeling of dread in the pit of your stomach, and you freeze. Your mind goes a mile a minute, frantically trying to think of what to do to escape the cougar. Your total focus is on that cougar's face and its large, snarling teeth. It looks at you. You look at it. It's not leaving. What are you going to do?

Fortunately, it's very unlikely that you're going to encounter a cougar while out walking on a country road. Cougar attacks on people are very rare. However, this example is very useful in illustrating how psychologists look at human experiences. Psychologists from different areas would analyze this experience differently.

For example, a biological psychologist would be very interested in the physiological experience that you're having while you contemplate being attacked and eaten by a cougar. The fight-or-flight response will kick in without any conscious processing. One thing you might do is try and run away. Another thing you might do is try and fight off the cougar. Something else that sometimes happens is completely freezing, being unable to move at all. The fight-or-flight response is an adaptation that evolved by natural selection, and it is shared by many other species. It is our reflexive response to threats.

Biological psychologists are interested in the biological reactions at play. When the fight-or-flight response is activated, a number of physiological changes take place to provide your body with the resources it needs to flee or attack: your pupils dilate; digestion slows down as resources are diverted to your arms and legs; your focus sharpens; your heart rate and blood pressure are raised; and adrenal and cortisol are released into the bloodstream.

A cognitive psychologist, on the other hand, is going to analyze your experience with the cougar by looking at the thinking that's taking place. They may be less interested in the physiological state of fight or flight, and instead more interested in the cognitions that you're having during this experience. For example, what is running through your head as you're thinking about this experience? In other words, what is your appraisal of the situation? For most of us, we're going to be thinking, "I'm in grave danger, and I need to get out of here!" However, it's possible that someone who is experienced with being in the back country, or someone who is familiar with being in emergency situations, might have a different type of appraisal. They might think, "I know what to do, I know how to get out of here, and I'm going to be fine."

Cognitive psychologists are interested in the processing of information, both conscious and unconscious. For example, they're interested in how we reason about problems, how we think about things, our beliefs, and our attitudes—in all of the ways in which we process information.

The above examples from biological and cognitive psychology show you that psychologists can approach human experiences from different perspectives. You wouldn't be wrong to think that *both* of these perspectives are needed to understand people's responses to threats.

For this assignment, you will choose ***one*** of the following case studies. Your task is to think like psychologists from five different perspectives: psychodynamic, behavioural, cognitive, humanist, and social-cultural.

NOTE: This is not about a psychologist doing therapy - this is not asking you how these psychologists would help the person, just theoretically how each perspective would explain their career interests.

Case Study 1

Arjun is a 30-year old man who is unhappy in his present job. He is a family lawyer, and spends most of his time negotiating separation and divorce agreements, and custody arrangements for children. While he likes being able to help people, he feels stifled by the need to work long hours in an office, and he craves more personal freedom. He enjoys travelling, cooking, and reading.

Your task for this case study is to examine how Arjun should choose a new career, using reasoning from the above five perspectives. What questions would each of these five different psychologists ask Arjun? How would each of them approach finding a new career? Note that we're not asking what career Arjun should choose, but what kind of thinking and reasoning each perspective would come from in analyzing the problem. Write a brief paragraph for each perspective, and ensure that each is precise and specific.

Case Study 2

Patrice is a 20-year old woman who was adopted as a baby. She has met her birth mother, and a birth sister, who live together nearby. Over the past two years, she has come to know them well, and both her adoptive and birth families are on good terms with the other. Patrice is fascinated by archaeology, and intends to study it at university.

Your task for this case study is to examine why Patrice is interested in archaeology, using reasoning from the above five perspectives. What questions would each of these five different psychologists ask Patrice? How would each of them explain Patrice's interest? Write a brief paragraph for each perceptive, and ensure that each is precise and specific.

Grading Rubric

Below is a set of guidelines to help you set goals in this assignment and interpret the grades you receive.

	Exceeds Expectations (3 marks)	**Meets Expectations (2 marks)**	**Does Not Meet Expectations (1 mark)**
Comprehensiveness	Provides several complete and detailed reasons for each perspective	Provides one reason for each perspective and/or reasons without a lot of detail	Does not provide reasons for all perspectives and/or reasons severely lacking in detail
Understanding	Reflects complete and detailed understanding of perspectives	Reflects adequate understanding of perspectives with a few missing details	Reflects incomplete understanding of perspectives and/or with many missing details
Clarity	No spelling or grammatical errors	Minor or few spelling and/or grammatical errors	Several spelling and grammatical errors

TOTAL /9

Part B: Conduct an Experiment or a Correlational Study (*12 marks total*)

Introduction

For Part B of Assignment 1, you are going to create and conduct your own experiment ***or*** correlational study. After your experiment or correlational study, provide the requested details.

Experiment

You will need some common household items, but you are free to modify your research question to suit the items that are available to you. Choose any ***one*** of the following research questions, or contact your Open Learning Faculty Member if you do not have access to these materials:

- Does the amount of baking powder matter to the final product in a muffin recipe? Alternatively, you could use a recipe for a cake, biscuit, cookie, or a different ingredient to manipulate.
- Does listening to music while reading affect your memory for the reading material?

Your task is to turn your question into a testable prediction and then test the prediction using an experiment. The prediction should be stated as your best guess about the outcome (e.g., bubble gum will produce larger bubbles than breath-freshening gum).

Note that you can conduct the experiment on baking powder on your own, you do not need a participant.

For the music experiment, you need a participant because you cannot be the experimenter *and* the participant. In this case, recruit a friend or family member. Make sure that the friend or family member is 18 years of age or older and that you obtain their consent to participate. Please ensure that their participation is voluntary, and that they are aware that they may withdraw at any time. Explain to your participant how you will collect, store, and destroy experiment-related data. Ask your participant if they would prefer their identity to remain anonymous. Be sure to debrief with your participant after you finish the music experiment. Debriefing involves describing the rationale for the study, the hypothesis, and the results.

Be sure to state your hypothesis (i.e., describe your prediction), independent variable (i.e., give an operational definition), control and experimental conditions (i.e., describe your experimental materials and procedures), dependent variable (i.e., give an operational definition), and results. Make sure that you choose a dependent variable that is objectively measurable.

Summary

Address the following:

- State your prediction.
- Identify your independent and dependent variables with operational definitions.
- Report your raw data, the average scores, and your results.
- Explain whether or not your prediction was supported by your results, and how you know.
- What are the possible experimenter effects in your experiment and how could you eliminate them?
- Why can’t you generalize from your experimental results to the larger population?
- What are the problems with your research design? What would you change to improve it?

Correlational Study

Data sets for this study have already been collected. The first variable is homicide rate in Canada. Refer to *Number and Rate of Homicide victims, by Census Metropolitan Areas* from Statistics Canada (n.d.). Note that you can choose

to have the data reported as “Number of homicide victims” or as “Homicide rates per 100,000” in the drop-down menu; choose the latter. Note that you will need four scores, one for each year ranging from 2015–2018.

The second variable is percentage of Canadians between 18 and 64 years with low income. Refer to *Low Income Statistics by Age, Sex and Economic Family Type* from Statistics Canada (n.d.). Note that you will have to use the “Reference period” box to get data from 2015–2018, and then click Apply. Look in the “Persons in low income” column to get the numbers for persons between 18 and 64 years.

You should have four scores for each variable. To put it another way, each year (e.g., 2015, 2016, 2017, and 2018) has two scores: one for homicide rate and another for percentage of Canadians with low income. You are going to look for a correlation between the two. In order to help you understand the logic, we have only included four sets of scores. In real-life correlational research, you would need a much larger sample size, but this exercise is about understanding how correlational studies are done, not in using statistics.

First, make a prediction about what you think the relationship will be between these two variables. Next, you can test the prediction by calculating a correlation. Because you only have a sample of 4, you can calculate this by hand - use the resource found here.

(Note that with typical sample sizes, the correlation would be calculated by computer. If you want to play with correlations there is a calculator at Pearson Correlation Coefficient Calculator from Social Science Statistics (n.d.).)

Report your raw data for both variables. Construct and submit a scatterplot that shows the relationship. Watch *Constructing a Scatter Plot* by Khan Academy (2015) for details. You may hand draw the scatterplot. Remember to label your axes.

Khan Academy. (2018, May 4). *Constructing a scatter plot* [Video]. Khan Academy. https://www.khanacademy.org/math/ap-statistics/bivariate-data-ap/scatterplots-correlation/v/constructing-scatter-plot

Summary

Address the following:

- State your prediction.
- Report your raw data and the average score for each variable.
- Provide a scatterplot of your two variables.
- What is the value of the correlation coefficient that you obtained and describe in words what it means.

- What is the problem with only having data for a 4-year period?
- Why, theoretically, might there be a correlation between these two variables? Explain the three potential avenues of cause and effect that are discussed in Unit 1, using your obtained correlation coefficient as your best estimate of the relationship between the two variables.
- Could you examine this relationship in an experimental study? Why or why not?

Grading Rubric

Below is a set of guidelines to help you set goals for this assignment and interpret the grades you receive.

	Exceeds Expectations (3 marks)	**Meets Expectations (2 marks)**	**Does Not Meet Expectations (1 mark)**
Comprehensiveness	Provides accurate and detailed responses to all questions posed	Provides responses to all questions posed but without a lot of detail	Does not provide responses to all questions posed and/or responses severely lacking in detail
Accuracy	Precise raw data and results	Mostly precise raw data and results with one or two errors	Imprecise raw data and results with several errors
Understanding	Reflects complete and detailed understanding of limitations	Reflects adequate understanding of limitations with a few missing details	Reflects incomplete understanding of limitations and/or with many missing details
Clarity	No spelling or grammatical errors	Minor or few spelling and/or grammatical errors	Several spelling and grammatical errors

TOTAL /12

Part C: Fun With Statistics (*12 marks total*)

Introduction

For Part C of Assignment 1, you are going to get a chance to collect some data and then describe and summarize it using descriptive statistics. You may ask a friend of family member to contribute some data for this, or you may use only your own data.

Data Collection

Please choose ***one*** of the following:

- Track the number of hours you sleep for one week.
- Track the number of times per day you access social media for 3 days.

- Track the hours per day spent watching streaming video (e.g., Netflix, YouTube, Amazon Prime, etc.) or TV for 3 days.

If you would like to collect more data over a longer period of time for yourself, or by asking a friend or family member to participate, that is fine. You are not allowed to offer any rewards or incentives for participating, and if someone declines to participate, you may not ask them again. You should not ask anyone under the age of 18 to participate. If you would like to ask a friend or family member, then you are required by TRU's Research Ethics Board to provide your participant with the following information:

- My name is _____, and I am a Psychology student at TRU. I am doing a course assignment that requires me to track behavioural data and then summarize and describe it using descriptive statistics.

  If you agree to participate, it would involve reporting on (students choose one of the following: track the number of hours you sleep for one week; track the number of times per day you access social media for 3 days; track the hours per day spent watching streaming video [e.g., Netflix, YouTube, Amazon Prime, etc.] or TV for 3 days).

  There are no risks associated with this activity. You are under no requirement to participate in this activity and should feel free to decline. Even if you decide to participate, you may withdraw at any time. You will not be penalized for not participating or for withdrawing. No information that identifies you personally will be disclosed in my assignment. Your participation will be anonymous and all information will be kept confidential. The data will be destroyed by me at the end of the course to ensure the confidentiality of your responses. If you have any questions or concerns about the study, please contact the course instructor (provide the name and email address of your Open Learning Faculty Member).

With regard to consent, students should read the following section aloud to participants, who may agree or decline verbally:

- "I agree to take part in this study, which has been explained to me. I have been given an opportunity to ask questions about the activity. I understand that any questions I answer will be anonymous and that my identity will not be disclosed in the student's assignment. I also understand that my participation is completely voluntary, and I may withdraw from the study at any time. I am 18 years old or over, and am legally able to provide consent."

After you have completed collecting the data, you must provide the following debriefing:

- Thank you for participating in my assignment. The focus of this study was on (student should describe what was being completed).

Summary

Once you have collected your data, address the following:

- Construct a frequency distribution of your data.
- Construct a histogram of your data.
- Report the mean, median, and mode.
- Report the range and standard deviation.
- Explain what you have learned about your variable (e.g., sleep, social media time, streaming video time) after completing the above.
- Why do the results not generalize to the population at large?
- How well do your data apply to people in other cultures? Explain your answer and give an example.

- Based on what you found, formulate a falsifiable, testable prediction that another researcher could test.

Grading Rubric

Below is a set of guidelines to help you set goals for this assignment and interpret the grades you receive.

	Exceeds Expectations (3 marks)	Meets Expectations (2 marks)	Does Not Meet Expectations (1 mark)
Comprehensiveness	Provides accurate and detailed responses to all questions posed	Provides responses to all questions posed but without a lot of detail	Does not provide responses to all questions posed and/or responses severely lacking in detail
Accuracy	Precise raw data and results	Mostly precise raw data and results with one or two errors	Imprecise raw data and results with several errors
Understanding	Reflects complete and detailed understanding of statistical data gathered	Reflects adequate understanding of statistical data gathered with a few missing details	Reflects incomplete understanding of statistical data gathered and/or with many missing details
Clarity	No spelling or grammatical errors	Minor or few spelling and/or grammatical errors	Several spelling and grammatical errors

TOTAL /12

Add submission

Submission status

Attempt number	This is attempt 1.
Submission status	No submissions have been made yet
Grading status	Not graded
Last modified	-
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