# **Searching for Happiness**

In this activity, students will prepare a newspaper article on happiness, based on correlation data and current research.

**Length** 2-3 hours+ (Long Problem)

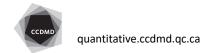
**Prerequisite** Correlation

**Concept** Correlation

Theme Well-being

**Disciplines** Philosophy, Psychology





## Scenario

The deadline for university applications is approaching, which is probably why you and your friends have been talking about your plans for the future more than usual. While having lunch in the cafeteria with your friends Alex and Chris, the conversation picks up again, with Chris declaring that the best way to select a major in university is based on the projected salary after graduation.

Chris: Money does buy happiness, so I want money. That's my top priority.

Alex: I don't believe that. I don't want to choose my path based on money. I want to

focus more on things that make me happy, like where I want to live, and being healthy. You know, like taking good care of myself and having a good state of mind.

I think chasing money is just not the right emphasis. It's the wrong order of

priorities for me.

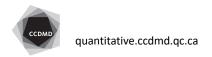
Chris: I get your point. But I think a focus on money allows for all those other things.

I think money is the key to happiness. [Chris turns to you.] And what about you?

You struggle to answer Chris's question as you realize you feel unsure about what leads to greater happiness. You start to wonder if other students in your situation might be similarly confused. You are probably not the only person wondering about how to build a happy life – it seems like an age-old question. This leads you to an idea: you have been looking for inspiration to write a new piece for the school newspaper. What if you researched happiness – what it is, and what really makes people happy – and then wrote about what you found in a news article?

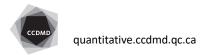
## What you need to produce

- A brief overview of conceptions of happiness (~150 words)
- A brief overview of approaches to measuring happiness (~150 words)
- One computation of correlation
- A brief paragraph explaining correlation procedure and interpreting results (~150 words)
- A set of research notes on happiness among students (~150 words)
- A newspaper article (~250 words)



# **Evaluation grid**

Understanding & Interpretation	
<ul> <li>Overview of happiness is clearly written and demonstrates a strong understanding of relevant concepts (~150 words; 4 points)</li> </ul>	
<ul> <li>Overview of approaches to measuring happiness clearly explains how happiness has been measured (~150 words; 4 points)</li> </ul>	
<ul> <li>Paragraph explaining correlation procedure and interpreting results is logical and clearly explains the results as well as limitations (~150 words; 4 points)</li> </ul>	/21
• Research notes on happiness among students are clearly written and present relevant findings (~150 words; 4 points)	
<ul> <li>Newspaper article responds to the question "what makes people happy?", with an emphasis on students, and it is clearly written and demonstrates a solid understanding of conceptions and measurements of happiness (~250 words; 5 points)</li> </ul>	
Writing & Style	
Writing is formal in tone, and explains key concepts and data points in clear language	/4
Requirements	
<ul> <li>Overview of happiness meets required length, and includes reference to at least one relevant source (~150 words; 1 point)</li> </ul>	
<ul> <li>Overview of approaches to measuring happiness meets required length (~150 words; 1 point)</li> </ul>	
Correlation is accurately computed (4 points)	
<ul> <li>Paragraph explaining correlation procedure and interpreting results meets required length (~150 words; 1 point)</li> </ul>	/10
<ul> <li>Research notes on happiness among students meet required length, and includes reference to at least two relevant sources (~150 words; 1 point)</li> </ul>	
<ul> <li>Newspaper article on the question "what makes people happy?" meets required length (~250 words; 1 point)</li> </ul>	
Total	/35



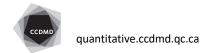
## Breakdown of the problem

## **Guiding question - Part 1**

What is happiness, anyway? (Or, rather, in what ways is it typically defined?

After parting ways with Chris and Alex, you find yourself wondering: what is happiness, anyway? You decide to do some basic searching online to see what common definitions or conceptions of happiness tend to look like. Find at least one reputable source that offers an overview of common definitions or conceptions of happiness, and briefly summarize the key takeaways you notice in the space below (~150 words). Be sure to include a reference of the source you consulted.

Defining happiness
Source



#### **Guiding question - Part 2**

#### How do quantitative researchers study happiness?

Armed with a basic understanding of some of the ways that people have tended to define happiness, you now find yourself all the more curious about how it is that happiness can be measured – or if it even can be measured at all. You wonder:

- Can something that is seemingly so personal, and therefore perhaps hard to pin down, be measured quantitatively? If so, how has it been measured?
- And, if it has been measured, are the results really meaningful?

With these questions in mind, you stumble upon a text that aims to address some of these very questions. Read through the excerpt below from Ortiz-Ospina and Roser (2017), and then draft a response to your questions (above) in the space provided below (~150 words).

## Happiness and Life Satisfaction

By Esteban Ortiz-Ospina and Max Roser (2017)

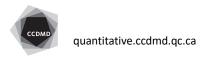
How happy are people today? Were people happier in the past? How satisfied with their lives are people in different societies? And how do our living conditions affect all of this?

These are difficult questions to answer; but they are questions that undoubtedly matter for each of us personally. Indeed, today, life satisfaction and happiness are central research areas in the social sciences, including in 'mainstream' economics.

Social scientists often recommend that measures of subjective well-being should augment the usual measures of economic prosperity, such as GDP per capita. But how can happiness be measured? Are there reliable comparisons of happiness across time and space that can give us clues regarding what makes people declare themselves 'happy'? [...]

#### Happiness around the world, country by country

The World Happiness Report is a well-known source of cross-country data and research on self-reported life satisfaction. [...] The underlying source of the happiness scores in the World Happiness Report is the Gallup World Poll—a set of nationally representative surveys undertaken in more than 160 countries in over 140 languages. The main life evaluation question asked in the poll is: "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?" (Also known as the "Cantril Ladder".) [...]



#### Changes in happiness over time—Findings from the World Value Survey

In addition to the Gallup World Poll (discussed above), the World Value Survey also provides cross-country data on self-reported life satisfaction. These are the longest available time series of cross-country happiness estimates that include non-European nations.

The World Value Survey collects data from a series of representative national surveys covering almost 100 countries, with the earliest estimates dating back to 1981. In these surveys, respondents are asked: "Taking all things together, would you say you are (i) Very happy, (ii) Rather happy, (iii) Not very happy or (iv) Not at all happy". [...]

# Data Quality and Measurement Can 'happiness' really be measured?

The most natural way to attempt to measure subjective well-being is to ask people what they think and feel. Indeed, this is the most common approach.

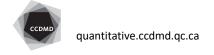
In practice, social scientists tend to rely on questions inquiring directly about happiness, or on questions inquiring about life satisfaction. The former tend to measure the experiential or emotional aspects of well-being (e.g. "I feel very happy"), while the latter tend to measure the evaluative or cognitive aspects of well-being (e.g. "I think I lead a very positive life").

Self-reports about happiness and life satisfaction are known to correlate with things that people typically associate with contentment, such as cheerfulness and smiling. [...]

Experimental psychologists have also shown that self reports of well-being from surveys turn out to correlate with activity in the parts of the brain associated with pleasure and satisfaction. And various surveys have confirmed that people who say they are happy also tend to sleep better and express positive emotions verbally more frequently.

The following table, adapted from Kahneman and Krueger (2006), provides a list of the variables that researchers have found to be related to self-reported happiness and life satisfaction.

The main conclusion from the evidence is that survey-based measures of happiness and life satisfaction do provide a reasonably consistent and reliable picture of subjective well-being.



Correlates of high life satisfaction and happiness
Smiling frequency
Smiling with the eyes ("unfakeable smile")
Ratings of one's happiness made by friends
Frequent verbal expressions of positive emotions
Sociability and extraversion
Sleep quality
Happiness of close relatives
Self-reported health
High income, and high income rank in a reference group
Active involvement in religion
Recent positive changes of circumstances (increased income, marriage)

#### Is 'life satisfaction' the same as 'happiness'?

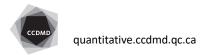
In this entry we discuss data and empirical research on happiness and life satisfaction. However, it is important to bear in mind that "life satisfaction" and "happiness" are not really synonyms. And this is of course reflected in the data, since self-reported measures of these two variables come from asking different kinds of questions.

The World Value Survey asks directly about happiness: "Taking all things together, would you say you are (i) Very happy, (ii) Rather happy, (iii) Not very happy, (iv) Not at all happy, (v) Don't know."

The Gallup World Poll, on the other hand, uses the Cantril Ladder question and asks respondents to evaluate their life: "Please imagine a ladder, with steps numbered from 0 at the bottom to 10 at the top. The top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time?"

[...] these two measures are clearly closely related (countries that score high in one measure also tend to score high in the other), yet they are not identical (there is substantial dispersion, with many countries sharing the same score in one variable but diverging in the other).

The differences in responses to questions inquiring about life satisfaction and happiness are consistent with the idea that subjective well-being has two sides: an experiential or emotional side, and an evaluative or cognitive side. Of course, the limits between emotional and cognitive aspects of well-being are blurred in our minds; so in practice both kinds of questions measure both aspects to some degree. Indeed, social scientists often construct 'subjective well-being indexes' where they simply average out results from various types of questions.



#### Are happiness averages really meaningful?

The most common way to analyze data on happiness consists in taking averages across groups of people. Indeed, cross-country comparisons of self-reported life satisfaction, such as those presented in 'happiness rankings', rely on national averages of reports on a scale from 0 to 10 (the Cantril Ladder).

Is it reasonable to take averages of life satisfaction scores? Or, in more technical terms: are self reports of Cantril scores really a cardinal measure of well-being?

The evidence tells us that survey-based reports on the Cantril Ladder do allow cardinal measurement reasonably well—respondents have been found to translate verbal labels, such as 'very good' and 'very bad', into roughly the same numerical values.

But as with any other aggregate indicator of social progress, averages need to be interpreted carefully, even if they make sense arithmetically. For example, if we look at happiness by age in a given country, we may see that older people do not appear to be happier than younger people. Yet this may be because the average-by-age figure from the snapshot confounds two factors: the age effect (people from the same cohort do get happier as they grow older, across all cohorts) and the cohort effect (across all ages, earlier generations are less happy than more recent generations). If the cohort effect is very strong, the snapshot can even give a picture that suggests people become less happy as they grow older, even though the exact opposite is actually true within all generations.

This example is in fact taken from the real world: using data from the US, Sutin et al. (2013) showed that self-reported feelings of well-being tend to increase with age across generations, but overall levels of well-being depend on when people were born.

https://ourworldindata.org/happiness-and-life-satisfaction#data-quality-and-measurement

Using the space below, respond to your questions about measuring happiness, based on reading the Ortiz-Ospina and Roser text (~150 words).



verview of approaches to measuring happiness	

### **Guiding question - Part 3**

How can you determine whether two variables are in relationship?

After reading Ortiz-Ospina and Roser's text, you decide to search out some of the quantitative measurements of happiness that they mentioned – see the corresponding Excel file for global measurements of happiness, in addition to a few other variables.

As you review the data, you continue to find yourself wondering: which of these other variables might be related to people's levels of happiness? You decide to see if a relationship between happiness and another measurement in the data set exists. Perform a correlation calculation in the space provided below, and then explain your process in selecting and organizing your data for the calculation, and interpret your results, including an indication of limitations you see in this process (~150 words).

orrelation	



Interpretation of results	

## **Guiding question - Part 4**

What fosters happiness among students?

The deadline to submit your writing to the school newspaper is approaching, and although you have more of a sense of what happiness is, some of the ways it has been measured, and what might (or might not) relate to it, you cannot help but feel that you still have not answered your questions about happiness for yourself. As a final step towards preparing your background research for your news article, you therefore decide to do some targeted research on what specifically seems to foster happiness among students — and particularly post-secondary students like you. Using the space below, take research notes on at least two relevant and reputable sources on student happiness (~150 words). Be sure to include references of the sources you consulted.

desearch notes on student happiness	



Sources
Guiding question - Part 5
What makes people happy – and students especially?
You are finally feeling ready to answer the question "what makes people happy?" (And maybe also ready to get back to Chris and Alex with your own ideas about happiness.) Using the space below, write a newspaper article (including a catchy title) in response to this question. Be sure to weave in the various elements of your research journey so far, including conceptions of happiness, ways it has been measured, things that may relate broadly to levels of happiness, and ways of fostering happiness among students.  Write your newspaper article in the space provided below (~250 words). As your audience is your fellow student readers of the newspaper, you will certainly want to support your ideas with specific data points when relevant, but you will also want to be sure to explain any data using language that even those without a quantitative methods background would understand.
Newspaper article on happiness

# References

Statistics Canada. Table 14-10-0335-01: Labour force characteristics by occupation, annual. Retrieved from https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410033501

