



ACTIVITY 5

Evidence of Well-Being

INVESTIGATION



Social scientists
often gather data
using surveys or
in-depth interviews
to study and observe
human behavior.



5 : EVIDENCE OF WELL-BEING

GUIDING QUESTION

How do scientists use evidence to evaluate causation?

INTRODUCTION

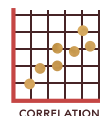
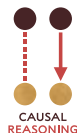
Studies have found that well-being can actually spread throughout a community. Inspired by these findings, the East Boston Social Centers in Massachusetts have a mission to support the health and overall well-being of local residents by spreading joy in the community. Mr. Justin Pasquariello, the center's director, explains that if a friend becomes happier, your own happiness is likely to increase too. "Happiness is more contagious than sadness," he says. Programs like the one he runs demonstrate that well-being doesn't just affect individuals—it shapes how people work together and support one another.

Understanding this connection helps researchers find ways to improve well-being for both individuals and society. But as you've learned, studying well-being is complicated. That's why researchers use careful methods to figure out what really affects well-being. When direct experiments aren't possible, scientists look for strong correlations, check the timing of events, and consider possible reasons one thing might cause another. Scientists also examine whether any of these types of evidence could have happened for other reasons, always looking for alternative explanations. In this activity, you will use these methods to evaluate the four well-being strategies that Salas High School is considering.



Programs like those at East Boston Social Centers (pictured) can boost individual and community well-being. "Generational Spirit" mural by Felipe Ortiz and Silvia López Chávez. COURTESY OF [HarborArts](#).

CONCEPTUAL TOOLS



MATERIALS LIST

FOR EACH STUDENT

STUDENT SHEET 5.1
(a, b, c, or d)
“Evaluating Indicators
of Causation”

PROCEDURE

PART A: EVALUATING INDICATORS OF CAUSATION

- 1 Your teacher will assign your group to one of the four topics corresponding to the four possible well-being strategies. Read the three studies for your strategy that are summarized in the “Evidence Statement” column on the version of Student Sheet 5.1 (a, b, c, or d), “Evaluating Indicators of Causation,” that your group received.
- 2 With your group, record the following for each of the three studies:
 - the type of indicator for causation: timing, association, or mechanism.
 - how strongly the Evidence Statement supports the cause-and-effect claim, on a scale from 0 (no evidence at all or irrelevant) to 5 (extremely strong evidence).
- 3 Together, brainstorm possible alternative explanations for each Evidence Statement. Think of a way the result could have come about that was not because of the cause-and-effect claim for your strategy.
 - a Identify at least one possible alternative explanation for one Evidence Statement and record it at the bottom of the student sheet.
 - b If your group discussion of alternative explanations makes you change your mind about the strength of the evidence, cross out your Strength of Evidence rating and record your new rating.



What does the evidence say about gratitude writing and other well-being strategies?

PART B: COMPARING THE WELL-BEING STRATEGIES

- 4 Follow your teacher's instructions to join a new group in which you are an expert on the strategy you investigated. Each student in a new group should be an expert about a different strategy, as indicated by the letter on their student sheet (a, b, c, or d).
- 5 In your new group, take turns sharing your evidence and conclusions from Part A.
- 6 As a group, use your discussion of the evidence to arrange the four student sheets (representing the four strategies) from weakest overall evidence to strongest overall evidence. For each strategy, evaluate the overall strength of the evidence. Consider Studies 1–3 and any possible alternative explanations. Discuss and record how sure you are of each strategy's evidence, using a scale of 0–5, where 0 means no relevant evidence and 5 means extremely strong evidence.
- 7 Share your results with the class and discuss which strategy had the most convincing evidence of its effectiveness.

BUILD UNDERSTANDING

- ① How does what you've learned about indicators of causation and alternate explanations influence your thoughts about the choice of the four well-being strategies for Salas High School?
- ② In Activity 3, you explored questions about cause and effect in everyday life. In this activity, you applied those questions about causation to research on well-being. What are similarities and differences in how these questions are used in everyday life and in scientific research?
- ③ How do alternative explanations impact the strength of a piece of evidence about cause and effect? Explain your reasoning.

CONNECTIONS TO EVERYDAY LIFE

- ④ After learning about each of the four well-being strategies and considering what you know about yourself, which one do you think would be most effective for improving your own well-being? Explain why you believe it would work best for you.



Individual needs and preferences play a big role in well-being.
Find what works best for you.