



This World of Humans: Episode #8

Guide for Educators

Hate Crimes and Suicide in LGBT Adolescents

These activities address specific Cross-Cutting Concepts and Science and Engineering Practices (see page 6). Many are also suitable for courses designated as "Writing-Intensive."

About the Article

This article describes a study youth in the Boston Public School system and whether incidences of hate crimes on LGBT individuals can be correlated with suicidal ideation and/or suicide attempts among LGBT youth. Findings identify a relationship between hate crime incidences and suicidal ideation and/or attempts with LGBT youth, but not heterosexual youth.

About the interview

In this interview, Dr. Duncan discusses the origin of this research, its methodologies, and its findings.

Both the article and the interview can be found here: www.visionlearning.com/en/twoh#ep8

Recommended: pair these materials with the following Visionlearning modules: *Comparison in Scientific Research*, and, for students new to scientific research, *The Practice of Science*. (www.visionlearning.com)

Use in the Classroom

These materials are useful for exploring ways in which social scientists use public data to answer public health questions. They also assist in building understanding of how to reach social science research articles. The article itself is reading-level appropriate for a wide variety of audience, though students may benefit from listening to the interview before reading the article.

1. **Pre-reading and pre-listening activities** are provided to prompt prior knowledge and help students make connections between their own lives and the research they are learning about. Materials may be used in the classroom to generate discussion, or as homework if the article or interview will be read/listened to in-class. Having students write before speaking helps focus discussions and reading.
2. The **worksheets** are explicitly designed to walk students through the process of reading a scholarly paper, as well as building disciplinary vocabulary. They serve as excellent homework assignments (if the article is read outside of class) and will direct students toward identifying important information about the research. While the answers provided can be used to check student reading, it is really an opportunity to assist students in how to read scientific material. Completed worksheets are excellent for small group discussions, allowing students to solve any discrepancies themselves, or as a debrief with the entire class.
3. **Post-reading and -listening activities** are designed to extend student thinking and engage them more deeply with the text and interview. These questions are great for small groups, for large class discussions, or for short-answer writing assignments.

Pre-reading and –listening activities

1. **Vocabulary preparation:** Provide students with the Vocabulary Worksheet and ask them to offer definitions. Clarifying terminology as a class is recommended. This worksheet is suitable for a 20-minute in-class activity if students have access to dictionaries or the internet. Many of the terms are specific to social psychology, thus *context* is critical to reinforce when assigning this activity.
2. **Affinity Mapping and Analysis:** Affinity mapping, like brainstorming, helps individuals get ideas out of their head and onto paper without too much over-thinking or editing. In this activity, students first generate immediate responses to the question: "What are the psychological impacts of hate crimes on minority communities?" (This question is intentionally vague regarding the term "minority" – students can brainstorm with references to race, gender, socioeconomic class, sexual orientation, etc.) Once enough responses have been generated, students group the answers by theme and then discuss (in small groups) how they might design a study to answer such a question. Sticky-notes and a blank wall or chart are required for this activity.

Instructions to students:

We are going to do an exercise called 'affinity mapping'. This is a brainstorming activity that helps you generate a large amount of answers to a specific question without editing your answers. Here are our steps:

1. *You are each going to receive some sticky-notes. Write responses to the following question (one response per note): What are the psychological impacts of hate crimes on minority communities?*
2. *Place each sticky-note on the board/chart when you are done.*

The second phase of this activity is to have students group the notes by theme. When that is complete, break students into groups and assign themes. Ask students to design a research project that could answer the question(s). This activity prepares students for thinking about data collection and how the study authors constructed their project ethically.

3. **Data Mining:** The authors in the article use a method called 'geo-coding' to correlate hate crime incidences with data collected from youth. In this activity, students will use open data from the U.S. government to try to geo-code. This activity is meant to orient students to the methodology so that they can learn about what type of data is publicly available, attempt to code it specific areas, and understand the *limitations* and *challenges* this methodology presents. The final result could be formal class presentations, maps, or other forms of visual presentation. This is an activity that will take multiple sessions in class, or can be assigned as a graded assignment.
 - Have students visit www.data.gov or www.bls.gov/cew/ to identify what types of data are freely available.
 - Divide into groups. As groups, ask students to select a form of data and identify what level of information they can parse based on geography. Depending on the data, this could be at the state, county, or town level.
 - Student should then attempt to code this data to specific geographic locations.
 - Ask students to present their findings to the class (see above for how this might be accomplished).

Post-reading and –listening activities

1. **Revisiting vocabulary:** Using the vocabulary sheet students completed at the start, clarify as a group/class how the authors used the terms. Were they used the same? Differently? Explain.
2. **Short writing assignments:** Using short, expository writing assignments can help students work through their understanding of what they have read and heard, particularly research methodologies and findings. Use either/both of these prompts to help students engage with the research article and articulate what they have learned. If used as a graded assignment, assessment should be based on clarity of thought, justification of claims, and understanding of the research article. Do not assess for grammar/mechanics.

Prompt 1: In *Comparison in Scientific Research*, Carpi and Egger note:

Similar to experimentation, comparison seeks to decipher the relationship between two or more variables by documenting observed differences and similarities between two or more subjects or groups. In contrast to experimentation, the comparative researcher does not subject one of those groups to a treatment, but rather observes a group that either by choice or circumstance has been subject to a treatment. Thus comparison involves observation in a more "natural" setting, not subject to experimental confines, and in this way evokes similarities with description.

In 500 - 800 words, explain how Duncan and Hatzenbuehler's study fits, or doesn't fit, the description of comparative research above. Use examples from the research article to support your claims.

Prompt 2: Comparative methods are often used in research when it would be unethical to conduct an experiment on research participants. Consider the research design Duncan and Hatzenbuehler used. In what ways did they *avoid* causing harm to the research participants? How does their study design reflect their consideration of the participants' care and safety? Use examples from the article to support your claims. (Approximately 500 words.)

Prompt 3: Drawing on the article and the interview, explain how suicide and suicidal ideation can be considered a public health issue. What evidence do the authors provide to support this claim? (Approximately 350 words.)

Extension activities

Vocabulary Worksheet

Below are a list of terms and phrases that you will encounter while reading the article and listening to the interview. Using a dictionary, provide definitions for each term or phrase. If you cannot find a formal definition, write down what you *think* the term or phrase might mean. Keep in mind that the meanings of these terms *in social science* may be different from the way we used them in common speech.

Most likely definitions provided in blue.

Spatial Epidemiology

The examination of health-related issues through a lens of geography. It is focused on geographic variations with regard to specific health concerns.

Correlation

Demonstrating a connection between two or more things. Correlation suggests a relationship, but not causality.

Geo-coding

A methodology that involves the coding of data (e.g., occurrences of hate crimes) by geographical location (e.g., neighborhood).

Hate Crime

A crime perpetrated on an individual who has been targeted because of their membership within a group (i.e., race/ethnicity, gender, sexual orientation).

LGBT

An acronym to refer to individuals who identify as being lesbian, gay, bisexual, or transsexual. .

Suicidal Ideation

An unusual preoccupation with killing oneself; thinking about committing suicide.

Reading Guide and Worksheet

Use this worksheet to guide your reading of the primary article. As you read, answer the questions in your own words. Whenever possible, make notes as to where in the text you found your answer (e.g., in the Methods section, in the fifth paragraph on page 112).

1. Who are the authors of the article? What information can you find about them in the article directly?
We can assume that the authors are both researchers/sociologists (ScD and PhD) because of their institutional affiliations. These affiliations are noted in the "About the Authors" section on page 277.
2. What specific problem is this research attempting to address? (Another way to think of this: What reasons do the authors give for conducting this research?)
The authors are attempting to examine whether suicidal ideation and/or suicide attempts among Lesbian, Gay, Bisexual, and Transgender (LGBT) youth are more common in neighborhoods with higher incidences of LGBT hate crimes. They are trying to make clearer connections between social environment and risk factors that may influence LGBT youth.
3. What group(s) of people does the research focus on?
The authors focus the data collection on LGBT youth (9-12 grades) in the Boston Public School system who had participated in the Boston Youth Survey. Students with severe disabilities, those who had been incarcerated, and those who had been suspended were omitted from the study. (See page 273, Method section)
4. What were the specific research questions the study attempted to answer? (Another way to think of this is: What were the researchers' hypotheses? What were they trying to find out?)
"The objective of the present study was to examine whether suicidal ideation and suicide attempts among sexual-minority adolescents are more common in neighborhoods with a higher prevalence of hate crimes targeting LGBT individuals" (p. 273).
5. List the methods the researchers used to collect data.
This project drew on survey data to make comparisons between groups. Surveys collected information about:
 - 1) *Sexual orientation*
 - 2) *Suicidal ideation and attempts**This data was then geo-coded (based on participant addresses) with LGBT hate crime incidents.*
6. What did the researchers find? Summarize the key points.
p. 274-275: Overall, the research revealed that there is a higher rate of suicidal ideation among LGBT youth than their heterosexual peers (almost 33% compared to 9.43%). Similarly, nearly 17% of LGBT youth reported attempting suicide in the prior year compared to 2.43% of heterosexual peers.
Importantly, LGBT youth who reported suicidal ideation and/or attempts were more likely to reside in neighborhoods with higher rates of LGBT assault hate crimes. There was no statistically significant correlation for heterosexual students reporting ideation/suicide attempt with hate crimes.
7. What questions were raised in your reading of the article?
Open response.

Targeted NGSS, Cross-Cutting Concepts, and Science and Engineering Practices

The activities in this guide can be used to address the following standards, concepts, and practices.

Science and Engineering Practices	
Asking Questions and Defining Problems	<ul style="list-style-type: none"> • Ask questions that arise from careful observation of phenomena, or unexpected results, to clarify and/or seek additional information. • Ask questions to determine relationships, including quantitative relationships, between independent and dependent variables
Obtaining, Evaluating, and Communicating Information	<ul style="list-style-type: none"> • Critically read scientific literature adapted for classroom use to determine the central ideas or conclusions and/or to obtain scientific and/or technical information to summarize complex evidence, concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
Planning and Carrying Out Investigations	<ul style="list-style-type: none"> • Select appropriate tools to collect, record, analyze, and evaluate data.
Cross-Cutting Concepts	
Cause and Effect: Mechanism and Prediction: Events have causes, sometimes simple, sometimes multifaceted. Deciphering causal relationships, and the mechanisms by which they are mediated, is a major activity of science and engineering.	<ul style="list-style-type: none"> • Empirical evidence is required to differentiate between cause and correlation and make claims about specific causes and effects. • Systems can be designed to cause a desired effect. • Cause and effect relationships can be suggested and predicted for complex natural and human designed systems by examining what is known about smaller scale mechanisms within the system.
Patterns: Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them	<ul style="list-style-type: none"> • Empirical evidence is needed to identify patterns. • Different patterns may be observed at each of the scales at which a system is studied and can provide evidence for causality in explanations of phenomena.