Lesson Plan
Social Status
2018

Purpose
This lesson and activity is based on an article that describes research on the impact of relative social status within one isolated society on the stress levels of individuals in that society. It encourages students to consider relative and absolute social status as separate determinants of health.

This is one of four lesson plans in a teaching pack on “Social Determinants of Health.” Other lessons in this teaching pack include:

- “Comparing and Applying Frameworks”
- “Social Determinants in Data and Pictures”
- “When Words Break Bones, Without Sticks and Stones”

Each of the lessons may be taught independently, or sequentially as a complementary module. Additional companion materials in the pack include an instructor’s note, a teaching guide titled “Brief Introduction to the Social Determinants of Health,” an annotated bibliography, and a glossary of terms.

Learner Level
High School, Undergraduate

Time
Four components, totaling one hour and 30 minutes

Required Pre-Reading


Optional

- Von Rueden C. Why We Want Status. TEDxUniversity of Richmond 2016; Apr 5.
  https://www.youtube.com/watch?v=aizcz3Go_fg.
Case Summary

The article assigned for this lesson describes what researcher Christopher von Rueden and his colleagues learned investigating the impact of social status (independent of income and similar socioeconomic factors) on health. To isolate the effect of status from other potentially confounding socioeconomic factors, they explored this relationship in a village community in Bolivia where there are no drastic variations in income or socioeconomic status, and no formal authority structures. In their study, they found that higher levels of social status were associated with less stress and thus better outcomes, demonstrating how health may not just be a function of one’s socioeconomic status in an absolute sense (e.g. relating to income or education), but also in a relative sense (e.g. relating to one’s place in the social hierarchy). The optional TEDx video provides an overview and visual summary of the research concepts outlined in the article, with added preliminary details about status among women in the same Bolivian communities, and the implications of these findings for our own society.

Learning Goals

1. To examine the impact of relative social status (separate from absolute social status) on health within a population.
2. To compare the social determinants of health in a remote, isolated society to those in a more integrated society.

Procedure

Part 1: Warm Up (20 minutes)

Students should come to class familiar with the assigned reading; the instructor may choose to ask students to quickly review the reading in the first five minutes of class.

1. Write down the “who, what, when, where, and why” of the assigned reading for today’s lesson.
   - Who: Researchers Christopher von Rueden and colleagues studied the Tsimane forager-horticulturalists.
   - What: Main finding from article: “We found that Tsimane men with less political influence had higher levels of the stress hormone cortisol, which has many important physiological functions.” Importantly, the researchers contend that this phenomenon happens even when the people in question have the same levels of material resources (access to food, living space and conditions, etc.).
   - When: 2014 and few preceding years
   - Where: Amazonian Bolivia
   - Why: The researchers pose the question “Why might low status cause such stress for the Tsimane?” and offer the following hypotheses: “One possibility is that status offers a greater sense of control. Another is that status acts as a form of social insurance. Influential Tsimane men have more allies and food-production partners, who can be helpful in mitigating conflict, sickness and food shortage. The relative lack of such support may cause psychosocial stress.”

2. Who exactly did the researchers measure and analyze?
   - They studied the social status of all of the men in four Tsimane villages, totaling just under 200 men between the ages of 18 and 83.
Part 2: Critical Thinking (20 minutes)

Next, divide the class into small groups and have them consider the following questions:

1. Think of a situation in your own life in which you were made to feel inferior. Without revealing any private details or identifying information related to the situation, think about how aspects of the situation made you feel. Did you feel stress? Do you think that repeated amounts of this stress could lead to negative health outcomes? What sorts of health outcomes could it lead to?

   This question is designed to encourage students to imagine how a social factor could lead to a health outcome that could personally affect them. Teachers can point out that social factors can affect everyone in different ways, but in the study conducted by the researcher, the average finding is that there is an effect on cortisol levels, a biological indicator of stress in the body. Students may say that situations that make a person feel inferior could lead them to become depressed or highly stressed to the point that they cannot be productive, or could even cause someone to fall physically ill since higher levels of stress can weaken the immune system.

2. What strategies could be implemented in the Tsimane society to mitigate the negative health effects of unequal social status?

   Students could suggest a number of reasonable responses to this research finding, which could include:
   - Take measures to keep everyone’s self-esteem high outside of the meetings.
   - Establish small community support groups that periodically met to check on everyone and discuss important issues.

   Instructors can choose to have groups report out the main points of this discussions to the larger class, or simply have groups continue on with the lesson plan as follows.

Part 3: Group Discussion (50 minutes)

Before posing questions for discussion with the larger group, instructors should review the difference between absolute and relative social status, and reinforce that in this case study, researchers were interested in the latter. The following chart can be used to help illustrate the concept of absolute status:

<table>
<thead>
<tr>
<th>Rich</th>
<th>Very high level of material wealth (much of which is saved or invested) and access to resources of all kinds, potential strong political connections, high insulation from economic shocks such as losing a job, and the highest potential for excellent health outcomes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle</td>
<td>Adequate access to resources and stable living conditions, stable employment and livelihood, high levels of education, decent health outcomes.</td>
</tr>
<tr>
<td>Poor</td>
<td>Low access to resources (good food, water, housing, hygiene), high volatility in day-to-day living conditions, high economic instability, low education, high potential for poor health outcomes.</td>
</tr>
</tbody>
</table>

Individuals in the category of “poor” live in the least favorable social conditions and therefore will have the worst health, while those in the “rich” category will have the best health outcomes. However, the study conducted by von Rueden and colleagues was interested in disentangling the impact of relative status, which meant looking at differences in health within a single one of these three categories.
The following table illustrates the concept of relative differences within the absolute gradient provided above:

<table>
<thead>
<tr>
<th>Rich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among the rich themselves, some people will be more powerful/influential and others will be less. This is called relative social status. Do the more influential rich people have better health than the less influential rich people, even though they are all rich?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Middle</th>
</tr>
</thead>
<tbody>
<tr>
<td>As is true for the rich people above, if we look only at the people in the middle group within the population, will we find that the people in stronger social positions have better health than those in weaker positions?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>And as we asked with the rich and middle categories, if we look only at the poor people in our society and look at differences within that population of poor people, will we find differences in health outcomes that are correlated to differences in social status?</td>
</tr>
</tbody>
</table>

The researchers found that when you ask the questions summarized in the boxes above, you find that low social status is correlated with higher levels of cortisol, which is known to lead to negative health outcomes. The next important question to ask is: Even though they found this correlation, how do we know that low social status is causing higher stress levels? What if it is just a coincidence that lower-status people are more stressed for some other reasons? That is why the researchers pointed out that they controlled for other factors that might cause this outcome, like age, body size, and personality that could possibly affect social status and stress levels. By controlling for these factors and only making these fair, “apples to apples” comparisons, the researchers can contend that it was the social status differences alone that caused the differences in stress hormone levels.

After reviewing the key concepts relating to the study as described above, instructors can pose the following questions for group discussion:

1. Were you surprised to learn that status differences within a single social group in a society could still affect people’s health?

This is a simple question to get discussion started. Teachers should gauge student reactions and then use this as a launching point to discuss social determinants more broadly and the mechanisms through which they function, eventually having an effect on health. Teachers could even ask students to hypothesize about this causal pathway from upstream to downstream:

Low social status → high stress → inability to perform work well → not enough food/money → malnutrition and weak immune system → infectious diseases
2. How should we be thinking of inequality within societies and the health consequences they can have?

Remember that there are two types of inequalities at play here, those between absolute social levels (such as the differences between the rich and the poor) and relative social levels (such as the differences between the high and low status individuals within one of the absolute groups). It is important to note that this and other research has found that both of these types of social inequality have implications for health. It may also be helpful to remind students that not every rich person is automatically healthy, nor is every poor person certain to have poor health; instead, both absolute and relative social inequalities can contribute to increased health risks.

3. Given these results, what do you think is the best action that can be taken to maximize population health? How should policymakers respond to this finding?

The social determinants approach dictates that it is more useful to target social factors that lead to poor health rather than directly targeting health outcomes. For example, it is better to invest in health education (teaching people how to be healthy) than it is to invest in health care (doctors and medicines to treat existing health problems or problems that develop because of an unchanged social factor). Students could have differing opinions about how to approach social inequality. Some may feel that it is most important to have programs that lift the poor out of poverty and focus on their material conditions, rather than addressing social status or mental well-being. Others may feel that social mechanisms or programs that improve people’s social status and self-esteem within their existing socioeconomic category is worthwhile. The students could even be organized into a debate in which each side had to argue for one of these two approaches (under the realistic constraint that doing both is not feasible).

4. Lastly, instructors could create a Venn diagram (see the example below) to compare the social factors that affect health for students in their own society with those that affect health of those in Tsimane society. A Venn diagram uses intersecting circles to compare logical relationships between two or more groups. Instructors might ask students to write factors from their own society into the sections of the diagram. Alternatively, instructors might provide the following list of social determinants and ask students to sort them into categories using the diagram below:

- Employment/income
- Expenses
- Debt
- Medical bills
- Social support
- Housing
- Transportation
- Safety
- Neighborhood quality
- Education
- Literacy
- Access to nutritious food
- Social integration
- Discrimination
- Access to doctors and medicines
As they create the diagram as a class, students can discuss and debate what should go into which section and why. Instructors should note that the social determinants of health perspective would dictate that for the overwhelming majority of these social factors, the social determinants of health for each society should be quite similar.

**Summary**

In this lesson, students learned about social life and stress levels within one bounded society to understand how social hierarchy can have an impact on health. They also were exposed to the details of the study and its findings, to help give them an understanding of how a researcher may go about studying social factors that influence health within one small population. Finally, students had the opportunity to juxtapose the social determinants of health in the Tsimane society with those in their own society. This helps to illustrate how many social determinants are universal while others may be unique to particular groups and cultures.