

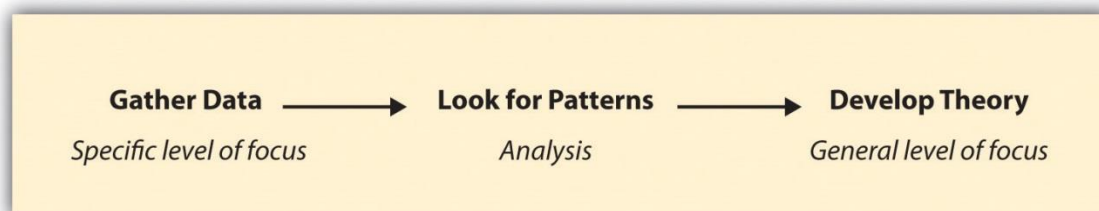
## Inductive or Deductive? Two Different Approaches

Theories structure and inform sociological research. So, too, does research structure and inform theory. The reciprocal relationship between theory and research often becomes evident to students new to these topics when they consider the relationships between theory and research in inductive and deductive approaches to research. In both cases, theory is crucial. But the relationship between theory and research differs for each approach. Inductive and deductive approaches to research are quite different, but they can also be complementary. Let's start by looking at each one and how they differ from one another. Then we'll move on to thinking about how they complement one another.

### Inductive Approaches and Some Examples

In an inductive approach to research, a researcher begins by collecting data that is relevant to his or her topic of interest. Once a substantial amount of data have been collected, the researcher will then take a breather from data collection, stepping back to get a bird's eye view of her data. At this stage, the researcher looks for patterns in the data, working to develop a theory that could explain those patterns. Thus when researchers take an inductive approach, they start with a set of observations and then they move from those particular experiences to a more general set of propositions about those experiences. In other words, they move from data to theory, or from the specific to the general. [Figure 2.5 "Inductive Research"](#) outlines the steps involved with an inductive approach to research.

*Figure 2.5 Inductive Research*



There are many good examples of inductive research, but we'll look at just a few here. One fascinating recent study in which the researchers took an inductive approach was Katherine Allen, Christine Kaestle, and Abbie Goldberg's study (2011). To understand this process, Allen and her colleagues analyzed the written narratives of 23 young men in which the men described how they learned about menstruation, what they thought of it when they first learned about it, and what they think of it now. By looking for patterns across all 23 men's narratives, the researchers were able to develop a general theory of how boys and young men learn about this aspect of girls' and women's biology. They conclude that sisters play an important role in boys' early understanding of menstruation, that menstruation makes boys feel somewhat separated from girls, and that as they enter young adulthood and form romantic relationships, young men develop more mature attitudes about menstruation.

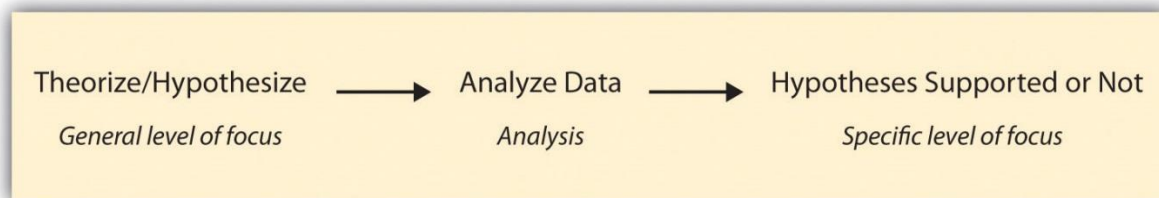
In another inductive study, Kristin Ferguson and colleagues (Ferguson, Kim, & McCoy, 2011) analyzed empirical data to better understand how best to meet the needs of young people who are homeless. The authors analyzed data from focus groups with 20 young people at a homeless shelter. From these data they developed a set of recommendations for those interested in applied interventions that serve homeless youth. The researchers also developed hypotheses for people who might wish to conduct further investigation of the topic. Though Ferguson and her colleagues did not test the hypotheses that they developed from their analysis, their study ends where most deductive investigations begin: with a set of testable hypotheses.

## **Deductive Approaches and Some Examples**

Researchers taking a deductive approach take the steps described earlier for inductive research and reverse their order. They start with a social theory that they find compelling and then test its implications with data. That is, they move from a more general level to a more specific one. A deductive approach to research is the one that people typically associate with scientific investigation. The researcher studies what

others have done, reads existing theories of whatever phenomenon he or she is studying, and then tests hypotheses that emerge from those theories. Figure 2.6 "Deductive Research" outlines the steps involved with a deductive approach to research.

*Figure 2.6 Deductive Research*



While not all researchers follow a deductive approach, as you have seen in the preceding discussion, many do, and there are a number of excellent recent examples of deductive research. We'll take a look at a couple of those next.

In a study of US law enforcement responses to hate crimes, Ryan King and colleagues (King, Messner, & Baller, 2009) hypothesized that law enforcement's response would be less vigorous in areas of the country that had a stronger history of racial violence. The authors developed their hypothesis from their reading of prior research and theories on the topic. Next, they tested the hypothesis by analyzing data on states' lynching histories and hate crime responses. Overall, the authors found support for their hypothesis.

In another recent deductive study, Melissa Milkie and Catharine Warner (2011) studied the effects of different classroom environments on first graders' mental health. Based on prior research and theory, Milkie and Warner hypothesized that negative classroom features, such as a lack of basic supplies and even heat, would be associated with emotional and behavioral problems in children. The researchers found support for their hypothesis, demonstrating that policymakers should probably be paying more attention to the mental health outcomes of children's school experiences, just as they track academic outcomes (American Sociological Association, 2011).

## References

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\*This article is adapted from [https://saylordotorg.github.io/text\\_principles-of-sociological-inquiry-qualitative-and-quantitative-methods/s05-03-inductive-or-deductive-two-dif.html](https://saylordotorg.github.io/text_principles-of-sociological-inquiry-qualitative-and-quantitative-methods/s05-03-inductive-or-deductive-two-dif.html)

