

BSSR FAQs

Note: These FAQs are based on the NIH definition of behavioral and social sciences research, with additional content developed to elucidate the definition by members of the OppNet Coordinating Committee.

What is the NIH definition of basic behavioral and social sciences research (b-BSSR)?

Behavioral and social sciences research at NIH is divided into basic and applied research. Basic behavioral and social sciences research (b-BSSR) is defined as follows:

Basic research in the behavioral and social sciences is designed to further our understanding of fundamental mechanisms and patterns of behavioral and social functioning relevant to the Nation's health and well-being, and as they interact with each other, with biology and the environment. As is the case with basic biomedical research, basic behavioral and social sciences research does not address disease outcomes per se. Rather, it is designed to elucidate knowledge about underlying mechanisms and processes, knowledge that is fundamental to improving the understanding, explanation, observation, prediction, prevention, and management of illnesses, as well as the promotion of optimal health and well being.

By contrast, applied research in the behavioral and social sciences is designed to predict or influence health outcomes, risks, or protective factors. It is also concerned with the impact of illness or risk for illness on behavioral or social functioning.

How was this definition developed?

When the United States Congress created the Office of Behavioral and Social Sciences Research (OBSSR) at the National Institutes of Health, it mandated that the Office develop a standard definition of the field to assess and monitor funding in this area. This definition of health-related behavioral and social sciences research was developed in 1996 in consultation with behavioral and social scientists and science organizations.

The definition developed in 1996 has been updated periodically to improve clarity and to add specific examples that reflect developments in the behavioral and social sciences. Every effort has been made to retain the meaning and scope of the original definition.

What is considered basic BSSR under this definition?

Basic behavioral and social research is divided into three categories: (A) research on behavioral and social processes; (B) Interactions between biology, behavior and social processes; and (C) research on methodology and measurement in the behavioral and social sciences.

Research on behavioral and social processes involves the study of human or animal functioning at the level of the individual, small group, institution, organization, community, or population. At the individual level, this research may involve the study of behavioral factors such as cognition, memory, language, perception, personality, emotion, motivation, and others. At higher levels of aggregation, it includes the study of social variables such as the structure and dynamics of small groups (e.g. couples, families, work groups, etc.); institutions

and organizations (e.g. schools, religious organizations, etc.); communities (defined by geography or common interest); and larger demographic, political, economic, and cultural systems. Research on behavioral and social processes also includes the study of the interactions within and between these two levels of aggregation, such as the influence of sociocultural factors on cognitive processes or emotional responses. Finally, this research also includes the study of environmental factors (both natural and human created) such as climate, noise, environmental hazards, residential and other built environments and their effects on behavioral and social functioning.

Interactions between biology, behavior and social processes involves the study of the interactions of biological factors with behavioral or social variables and how they affect each other.

Research on methodology and measurement encompasses the development of new approaches to research design, data collection, measurement, and data analysis. This research is designed to develop research tools that could be used in the behavioral and social sciences or in biomedical research or their interaction.

Examples of these categories of research are provided in the full definition.

What do the terms “behavior” and “social” mean?

For purposes of this definition, the term “behavioral” refers to overt actions; to underlying psychological processes such as cognition, emotion, temperament, and motivation; and to biobehavioral interactions. The term “social” encompasses sociocultural, socioeconomic, and sociodemographic status and processes; biosocial interactions; and the various levels of social context from small groups to complex cultural systems and societal influences.

If my research aims incorporate behavioral and/or social variables, does the project qualify as b-BSSR?

Many types of research have implications for understanding behavior and social processes or use behavioral and social factors as outcome variables. However, if the research lacks a major and explicit focus on the understanding of basic behavioral or social mechanisms or processes, it is not considered b-BSSR.

How can we distinguish basic from applied BSSR?

The NIH definition states that “applied research in the behavioral and social sciences is designed to predict or influence health outcomes, risks, or protective factors. It is also concerned with the impact of illness or risk for illness on behavioral or social functioning.”

The definition acknowledges that it is difficult to identify firm boundaries between basic and applied research. Indeed, many studies have both basic and applied components, and the same study may be used to address both basic and applied questions.

By definition, an intervention study is applied research. However, basic BSSR can be conducted within the context of an intervention, as when the focus is explaining behavioral or social mechanisms or processes underlying and intervention’s effects.

Based on this definition, the following two studies would be applied:

- A study of medical decision-making that sought to test the efficacy of a new technique for framing treatment choices on the quality of decision outcomes
- A study that examined how variations in framing treatments choices affected medical decision-making outcomes

The following two studies would be basic:

- A study that sought to understand the cognitive mechanisms linking the framing of choices to decision outcomes in general, even if conducted within a medical decision-making setting
- A study that used an experimental intervention to test hypotheses about how social mechanisms (e.g., social networks) frame choices and decision outcomes, even if conducted within a medical decision-making setting.

Can b-BSSR include research using model animals as well as humans?

Yes. Basic-BSSR can involve humans and/or animals. Research on animals is considered b-BSSR when it helps illuminate basic principles of human behavior and social function. The NIH definition of b-BSSR acknowledges that: Research on behavioral and social processes involves the study of human or animal functioning at the level of the individual, small group, institution, organization, community, or population. A component of b-BSSR involves the development of novel animal models of behavior or translation of existing models toward new problems.

Can b-BSSR be conducted in clinical settings and in studies with disease outcomes?

Yes. While b-BSSR does not address disease outcomes per se, as suggested above, b-BSSR can be conducted in a broad variety of settings, including general population and clinical samples. It can also be embedded within studies that include disease (or risk-factor) outcomes, as long as the focus of the study is on basic behavioral or social processes, basic biobehavioral or biosocial interrelationships, or methodology and measurement relevant to BSSR research.

Does b-BSSR include infrastructure investments, such as the development of interdisciplinary networks or projects that produce or organize data for basic behavioral and social sciences research?

Yes. Such investments are considered “basic” for the purposes of OppNet.